Cuadernos de Economía (2022) 45, Issue 129 Page 40-47

Asociación Cuadernos de economía

Cuadernos de economía

www.cude.es

ARTÍCULO

The Role of Economic Factors on the Economic Growth: Evidence from the Indonesian Economy

Amirul Syah[1], Safrida[2], Khalik Pratama[3]

[1] *Fakultas Ekonomi dan Bisnis, Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia*
[2] *Fakultas Ekonomi dan Bisnis, Universitas Islam Sumatera Utara, Medan, Indonesia*
[3] *Fakultas Ekonomi dan Bisnis, Universitas Medan Area, Medan, Indonesia; amirulsyah@umsu.ac.id*

[*] *Correspondence: amirulsyah@umsu.ac.id*

Jel Codes:

M14; N14

Keywords: Exports, consumption, income inequality,government spending, investment, economic growth.

Abstract: Recently, extensive economic growth (EG) has become the foremost requirement all around the globe, and this aspect demands the researchers' and regulators' attention. Hence, the current research investigates the impact of economic factors such as exports, consumption, income inequality, government spending, investment, and unemployment on the EG in Indonesia. The researchers extracted the secondary data from the World Development Indicators (WDI) from 1981 to 2021. The researchers also applied the Dynamic Auto-regressive Distributed Lags (DARDL) to test the association between the variables. The outcomes exposed those exports, consumption, government spending, and investment have a positive linkage with EG in Indonesia. The results also uncovered that income inequality and unemployment have a negative linkage with EG in Indonesia. The research provides guidelines to the policymakers in making the policies regarding to achieve extensive EG using high exports, consumption, government spending, and investment.

Author Correspondence: amirulsyah@umsu.ac.id

https://doi.org/10.32826/cude.v1i129.805

1. Introduction

A country's EG has always been a topic of interest among researchers for its utmost significance to the country. It brings stability to its financial position and social, economic, political, and diplomatic conditions and, therefore, determines the country's overall development and people's well-being (Mardani et al., 2019). The rise in EG increases wealth (materials or resources in possession) for the economy, increases the earnings for the government through taxes or duties from domestic and foreign sources, increase initiatives for infrastructure development, and growth of the equity market increases investment into the country. So, the economy may keep on performing in the future and secure its financial position (Hysa et al., 2020). The rising EG improves the communication system, builds relations among domestic people and foreigners, reduces poverty, overcomes crime or corruption rate, brings political stability, and creates peace in the country. In an economically growing economy, there is an ecological improvement, the creation of jobs, and the production of goods and services in abundance with better quality. It may add to people's well-being who may enjoy environment preservation, higher living standard, contented lives, and can better participate in their social and economic lives. Thus, EG improves a country's strength and is worth learning (Wang et al., 2019).

EG improves economic conditions, and it is influenced by economic conditions. Exports, unemployment, income inequality, government spending, investment, and consumption are some of the economic factors affecting EG. Export is a type of international trade where goods or services are sold to people outside the country. Exports provide a way to create marketing for the products and services produced inland, improve relations and knowledge about economic strategies applied by foreigners, and bring foreign exchange into the country. Thus, increased exports give birth to a stable economy (Mania & Rieber, 2019; Tanjung et al., 2022; Utami et al., 2019). Unemployment is the economic situation when individuals do not have jobs or any source of earning. Unemployment increases the poverty level, wastes human capital, cause less use of available resources, and may also increase excessive demand for basic need, which exceeds supply. This creates economic issues and lower production, leading to a decrease in EG (B. Khan, 2020; Mujiatun et al., 2022; Pratami et al., 2022; Tambunan et al., 2022).

Similarly, income inequality, which is the unjust distribution of incomes among country people with respect to their social level and economic status, is a barrier to optimal use of resources, economic management, and sustainable production. It reduces EG (B. Khan, 2020). Government spending is the act of government to make expenditures using the revenues and available resources. Government priorities while spending money always affect economic conditions. The responsible use of resources and priority to country development and human welfare leads to the EG of the country (Gurdal et al., 2021; Pratama et al., 2019; Pratami, et al., 2021; Tambunan et al., 2022). Investment is to use the money to make more money or create wealth. The investment into some constructive, developmental, welfare, and infrastructure projects starts and facilitates business practices leading to an increase in EG (Dinh et al., 2019). Consumption patterns of individuals and firms determine the effective use of resources, facility to economic practices, and increase in the production outcomes. Accordingly, effective consumption patterns increase EG (Hakimah et al., 2019; Sibuea et al., 2022, Usman et al., 2021; Utami et al., 2019).

The current article examines the EG of Indonesia. The Indonesian economy is the largest one in Southeast Asia. It is an emerging middle-income economy and part of the G20 association, being a newly industrialized state. The nominal GDP of the country, $1.38 trillion, places the country at 17 number in the world, whereas it is the 7th largest economy with a GDP (PPP) of $4.37 trillion estimated for 2023 (Erlando et al., 2020). Indonesian online economy is thought to cross US$135 billion by 2025. The Indonesian economy is largely dependent on inland marketing, government spending, and a number of state-owned firms, that is, 141 enterprises. The price management for the variety of basic products and services is critical to marketing in the Indonesian economy. Since the 1990s, the Indonesian economy has been dominated by inland and foreign companies. In 2012, Indonesia competed successfully against India, exceeded it, and got the second-fastest-emerging G-20 economy after China. For a long, there has been a fluctuation of 5% in annual growth. Well, in 2020, the country faced a recession. Covid-19 brought a great fall in the economy, and it collapsed to -2.07%. In 2022, GDP expanded and grew by 5.31% when there was an end to COVID-19 restrictions. The country recorded high exports and gained large profits (Salman et al., 2019; Silitonga et al., 2020).

Though Indonesia is succeeding in recovery from crises after covid-19 attack, it is still the lower middle economy and has a fear of not sustaining EG in the future. A need arises for the country to learn about the ways how to accelerate and sustain EG. The present study meets this need with its focus on EG. The objective of the study is to explore the influences of exports, unemployment, income inequality, government spending, investment, and consumption on EG.

The subject of EG has been taken from previous literature. Still, the current study makes a significant contribution to the literature. First, numerous studies have addressed the issues related to the nexus among exports, unemployment, income inequality, government spending, investment, consumption, and EG. But there are fewer studies in the existing literature that individually check the relationship of these economic factors with EG. The current study examines one by one the relationship between exports, unemployment, income inequality, government spending, investment, and consumption with EG. Second, in the previous studies, even though they have recorded the role of economic factors in EG, they have given short and vague detail on the topic. The present article, which is a detailed record of the relationship among exports, unemployment, income inequality, government spending, investment, consumption, and EG, adds to the literature. Third, this article is an exception in the literature because of its analysis of the relationship between the above-mentioned economic factors and EG, especially for the Indonesian economy.

The study is divided into six parts. The second part is the review of the literature in the struggle to discuss the relationship among factors. The third part is a detail of the methods applied for research. The fourth part examines the data and finds exact relations. The results are explained, and their validity is checked in light of studies having similar findings. It ends with the study's implication, conclusion, and limitations

2. Literature Review

Since the beginning, counties have been bound to compete in the international markets, as well as meet domestic requirements for products and services and need to improve public well-being. If a country has sustainable EG reflected by the country products, size of the economic products, possession for wealth, and scope of economic sectors, succeed the country, in the international market, meets the demand for production and public welfare (Nguyen et al., 2020). The EG itself is influenced by prevailing economic conditions within the country. Economic factors like exports, unemployment, income inequality, government spending, investment, and consumption, determine EG. The rise in exports, employment,

investment, and government spending, improvement in consumption patterns, and removal of income inequality encourage effectiveness in economic practices. It brings a rise in EG (S. A. R. Khan et al., 2020). There is ample literature on the nexus among these factors, and current studies review this literature below.

The exports from a country allow it to bring foreign exchange inland, drives the large market for finished and semi-finished products and resources of different nature, and develops communication with foreign economic actors. This improves the financial development and investment level encourages the productivity of things to be exported and helps employ effective business techniques. So, the economy grows consistently (Rasool et al., 2021). A study was conducted by Edo et al. (2020), to examine the relationship between exports and external debt with EG. The data for external debt, exports, and EG were arranged from Sub-Saharan African countries for the time of 2005-2017. ARDL model and econometric techniques like the granger causality test, cointegration test, MG, and PMG techniques were employed to check the relationship. The study posits that when a country continues to export products at reasonable foreign exchange, it can reduce external debt and increase inland investment. Thus, it increases EG. Sultanuzzaman et al. (2019), investigates the relationship among natural resources exports, financial development, and EG. The authors checked the secondary data from the selected Next-11 countries over the years from 1996 to 2016 for exports of natural resources, financial development, and GDP. Nonlinear panel data methodology was used by the authors in the research. The study claims that when a country, instead of wasting the excessive natural resources in its possession, shares with foreigners in exchange for money, it improves financial development within the country and leads it towards expansion in EG.

Unemployment prevailing in the economy causes poverty, financial issues, and social distress for jobless persons. The period of employment is full of anxiety and adversely affects in intelligence and physical health of people. As a result, the country losses human capital and faces a collapse in economic expansion (Adelowokan et al., 2019). Pasara et al. (2020), examines the association between unemployment, gross capital formation, and EG. The time series data throwing light on research variables were collected from South Africa for the time from 1980 to 2018. Under Vector Autoregressive (VAR) framework, the causal relationship among unemployment, gross capital formation, and GDP was analyzed through Augmented Dickey-Fuller (ADF) unit root test, Granger Causality Test, and regression analysis. The study implies that unemployment freezes the wealth creation process within the country. The decreases in the material, assets, and other resources cause a decline in EG. (Al-Sawaiea, 2020), conducted research to integrate the relationship between unemployment with EG. The annual panel data denoting the unemployment rates and the real GDP growth rate were collected from the Central Bank in Jordan as well as the Department of Statistics for the years between 1976 and 2018. The study employed ARDL co-integration analysis to assess the relationship among variables included in the research. The results showed that it stops the flow of money during the time of unemployment. So, there is a break in EG. In countries, sometimes monetary, fiscal, and many economic policies create income inequality in the country for firms and individuals in society. If there is income inequality within the country, the firms having lower profits are unable to adopt innovative and value-adding business techniques, and income inequality in individuals results in their inefficiency. So, EG is weak (Amar et al., 2020). Hasparyk et al. (2023), makes an assessment of the relationship between labor income inequality and EG. Three databases, WDI, PWT, and The Global Labor Income Share and Distribution, were used to collect data regarding labor income inequality and EG from 189 countries for the time from 2004 to 2017. Fixed and Random Effects, Pooled OLS, and GMM were adopted. The study revealed that the labor income inequality reduces employees' efficiency, lower production, and shows poor EG. Hailemariam et al. (2020), identifies the relationship between income inequality, CO2 emissions, and EG. The cross-country panel data related to income inequality, CO2 emissions, and EG were sought out from statistical documents of 17 OECD countries, and the data covered the years from 1945 to 2010. Researchers adopted panel co-integration analysis, and CCEMG estimators confer results. The authors focus on the fact that the firms which are the victim of income inequality are unable to afford eco-friendly changes in business models and inner functioning. The increase in CO2 emissions does not allow to attain sustainable EG.

The government of a country collects revenues by applying different taxes, duties, charges, or creating a money supply through monetary policies, etc., and uses these revenues to spend on different programs for public well-being. When government spending is mostly directed to public well-being, it improves economic conditions as well within the country. That is why government spending is a critical factor in EG (Zhang et al., 2021). The study of Najmuddin et al. (2022), was an investigation of the impacts of government spending on EG. The quantitative information for government spending and EG was collected from Maluku Utara (Orwig, 2021). This study uses the I-O table impact analytical technique along with panel data regression analysis. The study implies that if a country's government is aware of the public issues, shows concern for them, and spends money accordingly, and they remove ecological, infrastructure, and financial issues of the public. This, creates an environment contributes to EG. Zakaria et al. (2019), investigates the impacts of government spending on terrorism control and EG. The results of GMM, using data from Pakistan showed that government spending has a positive role in terrorism control and EG.

The investment on the part of individuals from the public at different portfolios, firms' owners, government, and foreigners into different economic projects, infrastructure, education, and medical services to the public, and economic regulations. The rise in investment increases the physical capital and human resources efficiency making a considerable contribution to literature (Hanif et al., 2019). Yang et al. (2021), examines the relationship between health investment and population aging with EG. A broad Mankiw–Romer–Weil model (MRW) was employed, and cross-country panel data came from OECD countries during the period from 2000 to 2016. This study used TSLS and LSDV methods for empirical analysis. The study implies that investment in public health matters in an economy because human resources come from the public, and their efficiency is linked to their health. The investment in humans' health provides quality human resources that efficiently carry out economic functions and improve EG. Muhammad et al. (2021), identifies the relation between investment from foreign sources and EG. The study posits that when there is an inflow of huge investment, there may be the improvement in financial development within the country and a rise in EG.

The consumption pattern employed by organizations and common people to fulfill their needs affect the different forms of resources to the economy, environment, and economic functions. The EG is influenced accordingly (Shahbaz et al., 2020). Chen et al. (2020), is about the role of energy consumption patterns in EG. A threshold model was applied with the empirical quantitative data from a large sample of 103-country the period of 1995-2015. The study implies that when business organizations apply an eco-friendly consumption

pattern and utilize renewable energy resources, they can overcome the emission of hazardous materials, gases, and toxic wastes from business operations like production and transportation. The environmental preservation and protection of natural resources ensure improvement in EG. Mutumba et al. (2021), checks the relationship between consumption patterns in energy resources and the EG of a country. The meta-analytic technique for investigation was applied, and the duration of research was from 1974-2021. The study reveals that consumption affects EG. The environmental protection and quality resources as result of effective consumption patterns lead to the economy to demonstrate a higher growth.

3. Research Methods

The research investigates the impact of exports, consumption, income inequality, government spending, investment, and unemployment on the EG in Indonesia. The researchers extracted the secondary data from the WDI from 1981 to 2021. The research developed the equation given below:

$$EG_t = \alpha_0 + \beta_1 EXP_t + \beta_2 UEM_t + \beta_3 INIQ_{it} + \beta_4 GS_t + \beta_5 INV_t + \beta_6 CON_t + e_t \quad (1)$$

Where;

EG = Economic Growth
t = Time Period
EXP = Export
UEM = Unemployment
INIQ = Income Inequality
GS = Government Spending
INV = Investment
CON = Consumption

The researchers used EG as the dependent variable proxies as GDP growth (annual percentage). In addition, the researchers used six economic factors as the independent variables such as exports proxies as exports of goods and services (% of GDP), unemployment proxies as unemployment total (% of the total labor force), income inequality proxies as Gini index, government spending proxies as government health expenditures (% of GDP), investment proxies as net investment in non-financial assets (% of GDP) and consumption proxies as government final consumption expenditures (% of GDP). These proxies are mentioned in Table 1.

Table 1. Variables with Measurements

S#	Variables	Measurement	Sources
01	Economic Growth	GDP growth (annual percentage)	WDI
02	Export	Exports of goods and services (% of GDP)	WDI
03	Unemployment	Unemployment total (% of the total labor force)	WDI
04	Income Inequality	Gini index	WDI
05	Government Spending	Government health expenditures (% of GDP)	WDI
06	Investment	Net investment in non-financial assets (% of GDP)	WDI
07	Consumption	Government final consumption expenditures (% of GDP)	WDI

The researchers used descriptive statistics to check the variables' details. In addition, the researchers also used a correlation matrix to check the correlation among variables. Moreover, the researchers also used the PP and ADF tests to check the unit root, and the equation is mentioned below:

$$d(Y_t) = \alpha_0 + \beta t + YY_{t-1} + d(Y_t(-1)) + \varepsilon_t \quad (2)$$

In addition, the researchers also used the (Westerlund et al., 2008) approach to check the co-integration among variables, and the equations are mentioned below:

$$\mathrm{LM}_{\varphi}(\mathrm{i}) = \mathrm{T}\hat{\varphi}_{\mathrm{i}}\,(\hat{\mathrm{r}}_{\mathrm{i}}/\hat{\sigma}_{\mathrm{i}}) \quad (3)$$

$$\mathrm{LM}_{\tau}(\mathrm{i}) = \hat{\varphi}_{\mathrm{i}}/\mathrm{SE}(\hat{\varphi}_{\mathrm{i}}) \quad (4)$$

In the above equations (3) and (4), the scalar polynomial with L lag length is represented by $\boldsymbol{\varphi i\,(L) = 1 - \sum \varphi_{ij} L^j}$.

Moreover, the researchers used the ARDL model to test the association among variables. It provides the short and long-run association among variables (Zaidi et al., 2018). It effectively deals with heteroscedasticity and autocorrelation. It is suitable when variables have no unit root at the level and first difference (Nazir et al., 2018). The equation is mentioned below:

$$\Delta EG_t = \alpha_0 + \sum\delta_1 \Delta EG_{t-1} + \sum\delta_2 \Delta EXP_{t-1} + \sum\delta_3 \Delta UEM_{t-1} + \sum\delta_4 \Delta INIQ_{t-1} + \sum\delta_5 \Delta GS_{t-1} + \sum\delta_6 \Delta INV_{t-1} + \sum\delta_7 \Delta CON_{t-1} + \varphi_1 EG_{t-1} + \varphi_2 EXP_{t-1} + \varphi_3 UEM_{t-1} + \varphi_4 INIQ_{t-1} + \varphi_5 GS_{t-1} + \varphi_6 INV_{t-1} + \varphi_7 CON_{t-1} + \varepsilon_t \quad (5)$$

The researchers also applied the DARDL to test the association between the variables. It is an effective approach established by Jordan et al. (2018). It covers all shortcoming that exists in the ARDL. The equation is mentioned below:

$$\Delta EG_t = \alpha_0 + \sum\delta_1 \Delta EG_{t-1} + \sum\delta_2 \Delta EXP_t + \sum\delta_3 \Delta EXP_{t-1} + \sum\delta_4 \Delta UEM_t + \sum\delta_5 \Delta UEM_{t-1} + \sum\delta_6 \Delta INIQ_t + \sum\delta_7 \Delta INIQ_{t-1} + \sum\delta_8 \Delta GS_t + \sum\delta_9 \Delta GS_{t-1} + \sum\delta_{10} \Delta INV_t + \sum\delta_{11} \Delta INV_{t-1} + \sum\delta_{12} \Delta CON_t + \sum\delta_{13} \Delta CON_{t-1} + \varepsilon_t \quad (6)$$

4. Findings Results

The researchers used descriptive statistics to check the variables' details. The results uncovered that the EG mean figure was 4.599 percent, EXP was 27.934 percent, UEM was 5.167 percent, and INIQ was 45.807 percent. In addition, the outcomes also uncovered that the GS mean figure was 0.801 percent, INV was 3.108 percent, and CON was 8.443 percent. These figures are mentioned in Table 2.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
EG	31	4.599	3.810	-13.127	8.220
EXP	31	27.934	7.402	17.271	52.968
UEM	31	5.167	1.526	2.620	8.060
INIQ	31	45.807	17.121	13.844	67.371
GS	31	0.801	0.359	0.246	1.422
INV	31	3.108	1.846	1.166	8.376
CON	31	8.443	1.077	5.694	9.749

In addition, the researchers also used a correlation matrix to check the correlation among variables. The outcomes exposed those exports, consumption, government spending, and investment have a positive linkage with EG in Indonesia. The results also uncovered that income inequality and unemployment have a negative linkage with EG in Indonesia.

These figures are mentioned in Table 3.

Table 3. Matrix of Correlations

Variables	EG	EXP	UEM	INIQ	GS	INV	CON
EG	1.000						
EXP	0.515	1.000					
UEM	-0.076	0.461	1.000				
INIQ	-0.138	-0.381	0.217	1.000			
GS	0.086	-0.547	0.014	0.892	1.000		
INV	0.051	0.340	-0.289	-0.894	-0.728	1.000	
CON	0.429	-0.811	-0.413	0.385	0.446	-0.221	1.000

Moreover, the researchers also used the PP and ADF tests to check the unit root. The outcomes indicated that the EG, EXP, UEM, INV, and CON have no unit root at the level, and INIQ and GS have no unit root at the first difference. These figures are mentioned in Table 4.

Table 4. Unit Root Test

	ADF		PP	
Series	Level	First difference	Level	First difference
EG	-2.109***	------	-2.309***	------
EXP	-2.891***	------	-2.893***	------
UEM	-2.773***	-----	-2.398***	------
INIQ	------	-4.102***	------	-5.442***
GS	------	-4.351***	------	-5.754***
INV	-2.383***	------	-3.102***	------
CON	-3.101***	------	-3.288***	------

In addition, the researchers also used the (Westerlund et al., 2008) approach to check the co-integration among variables. The outcomes uncovered that the p-values are less than 0.05 and the t-values are larger than 1.96. These outcomes uncovered that the co-integration exists. These figures are mentioned in Table 5.

Table 5. Co-integration Test

Model	No Shift		Mean Shift		Regime Shift	
	Test Stat	p-value	Test Stat	p-value	Test Stat	p-value
LM_{τ}	-3.749	0.000	-4.392	0.000	-4.389	0.000
LM_{φ}	-3.299	0.000	-4.388	0.000	-4.756	0.000

The outcomes exposed those exports, consumption, government spending, and investment have a positive linkage with EG in Indonesia. The results also uncovered that income inequality and unemployment have a negative linkage with EG in Indonesia. These figures are mentioned in Table 6.

Table 6. Dynamic ARDL Model

Variable	Coefficient	t-Statistic	Prob.
ECT	-3.774***	-5783	0.000
EXP_{t-1}	2.198***	4.391	0.000
EXP	1.289**	2.991	0.032
UEM_{t-1}	-2.101***	-3.881	0.001
UEM	-1.288***	-4.361	0.000
$INIQ_{t-1}$	-3.209***	-4.372	0.000
INIQ	-0.372***	-5.492	0.000
GS_{t-1}	1.288**	2.210	0.044
GS	2.291**	2.371	0.041
INV_{t-1}	0.673**	2.190	0.047
INV	1.287**	2.189	0.046
CON_{t-1}	2.192***	4.393	0.000
CON	1.289***	5.472	0.000
Cons	2.184**	4.747	0.000

R square = 60.231 Stimulation = 5000

5. Discussions

The results indicated that exports have a positive relationship with EG. These results are in line with Hu et al. (2020), which implies that the rise in the export level brings large foreign exchange into the country and strengthens the government's position to establish new economic facility centers, regulatory commissions, and country infrastructure. This builds a pavement to attain higher EG. These results also agree with Xu et al. (2019), which states that the exports increase determines marketing for domestic goods and services. It brings expansion in domestic industries through better management and larger production, leading to higher EG. The results showed that unemployment has a negative relationship with EG. These results are in line with Anderu (2021), which reveals that the employees are a very important part of an organization, a system, or a sector and enable it to act upon its production and marketing plans. And unemployment creates issues in EG. These results also agree with Bingilar et al. (2020), which reveals that unemployment shortens the work scope in the economy and causes a fall in resource abundance. This slows down the speed of EG.

The results indicated that income inequality has a negative relationship with EG. These results are in line with Adrián Risso et al. (2019), which shows that when there is income inequality within the country, many people don't have enough

opportunities even though they have high intelligence. The loss of human capital does not allow to give rise to EG as it must because there is a lack of production from industries. These results also agree with Aiyar et al. (2020), which reveals that when there is income inequality, the poor get poorer and can't afford the investment in innovation into the existing setups and launch startups imparting poor impacts on EG. The results indicated that government spending has a positive relationship with EG. These results are in line with Onifade et al. (2020), which highlights that if government forms its spending policy responsibly and in favor of public wellbeing, it clears the way for the people to actively participate in economic practices. It improves EG. These results also agree with Magdalena et al. (2020). This study posits that if the government forms its policies to separate the money from its earnings to spend on the infrastructure, it gives rise to trading and accelerates economic development.

The results indicated that investment has a positive relationship with EG. These results are in line with Ciftci et al. (2022), which states that the increase in investment into the economy brings betterment into economic practices like manufacturing, trading, construction, mining, and service, etc., leading to EG. These results also agree with Amin et al. (2022), which highlights that investment into the economy improves infrastructure building and develops pavement for sustainable EG. The results indicated that consumption has a positive relationship with EG. These results are in line with Mohsin et al. (2021), which indicates that if the firms do not hesitate to consume their resources and perform consumption practices effectively, they use resources optimally, and the competitive advantages help achieve economic development. These results also agree with Ivanovski et al. (2021), which implies that with the rise in the consumption level within the country, there is rising demand for the goods and services produced by the economy. This encourages the production of goods and services and, thereby, leads to EG.

6. Implications

The current article has directions for the researchers on how they must act in future research with its addition to the literature. The study examines the relation of economic factors like exports, unemployment, income inequality, government spending, investment, and consumption with EG. It makes a simultaneous analysis of the nexus between economic factors and EG. Moreover, the economy of Indonesia is the main focus of the research, and it examines the role of exports, unemployment, income inequality, government spending, investment, and consumption in the EG of Indonesia.

This study also has great importance to the policymakers of emerging economies on how to improve EG. The study guides that exports should be encouraged by policymakers in order to increase EG. There is a guideline for the government that the unemployment issues should be removed, and this enables the country to achieve EG. The article makes a suggestion that there should be equality in income distribution. It would create an economy making higher growth. The study also implies that government must increase its spending for economic and social well-being and makes the country increase EG. The study also has the direction that investment level must increase if the increase is required for EG. The research provides guidelines to the policymakers in making the policies regarding to achieve extensive EG using high exports, consumption, government spending, and investment. Moreover, the study conveys that the consumption level and consumption patterns should be managed effectively to accelerate EG.

7. Conclusion

The authors wanted to examine the role of economic factors like exports, unemployment, income inequality, government spending, investment, and consumption in EG. Following a quantitative research approach, secondary data for exports, unemployment, income inequality, government spending, investment, consumption level, and EG were collected from the Indonesian economy. The findings from data analysis showed a positive association between these economic factors and EG. The results showed that the exports rise increases marketing for domestic products and bring large foreign exchange. These contribute to EG. They also revealed that unemployment shows the inability of an economy to produce wealth, products, and services and has poor consequences for EG. Likewise, when there is income inequality within the country, it cannot make optimal use of human capital and other resources. Of this, the country is unable to make high EG. It's concluded that if the government spends on human well-being, infrastructure development, and economic projects, it opens new ways for the economy to grow. Authors found that the increase in investment into the different economic sectors, environmentally friendly programs, and country infrastructure leads to EG. The study also concluded that the rise in the consumption level increases demand for goods and services and improves production levels. Thus, it adds to EG.

8. Limitations

The study has several limitations and requires better attention from a scholar in future literature. The study checks only the impacts of economic factors like exports, unemployment, income inequality, government spending, investment, and consumption on EG. It doesn't pay attention to environmental conditions, country resources, and organizational performance for evaluating EG. Future researchers must broaden the scope of the study by paying attention to these factors as well. Moreover, the authors have only taken data from the Indonesian economy to check the relationship among these factors, and the findings are not likely to be general. Future researchers should examine the relationship among exports, unemployment, income inequality, government spending, investment, consumption, and EG by analyzing the statistics of more states to give general and more applicable findings.

References

Adelowokan, O. A., Maku, O. E., Babasanya, A. O., & Adesoye, A. B. (2019). Unemployment, poverty and economic growth in Nigeria. *Journal of Economics and Management*, *35*(1), 5-17. doi: https://doi.org/10.22367/jem.2019.35.01

Adrián Risso, W., & Sánchez Carrera, E. J. (2019). On the impact of innovation and inequality in economic growth. *Economics of Innovation and New Technology*, *28*(1), 64-81. doi: https://doi.org/10.1080/10438599.2018.1429534

Aiyar, S., & Ebeke, C. (2020). Inequality of opportunity, inequality of income and economic growth. *World Development*, *136*, 1051-1068. doi: https://doi.org/10.1016/j.worlddev.2020.105115

Al-Sawaiea, K. M. (2020). The relationship between unemployment and economic growth in Jordan: An empirical study using the ARDL approach. *International Journal of Innovation, Creativity and Change*, *14*(2), 1068-1083. Retrieved from https://www.researchgate.net/profile/Khaled-Sawaie-Phd-In-Business-Economics/publication/260479462

Amar, S., & Pratama, I. (2020). Exploring the link between income inequality, poverty reduction and economic growth: An ASEAN perspective. *International Journal of Innovation, Creativity and Change*, *11*(2), 24-41. Retrieved from https://d1wqtxts1xzle7.cloudfront.net/89281235/11202_Amar_2020_E_R-libre.pdf?1659674963

Amin, A., Anwar, S., & Liu, X. H. (2022). Outward foreign direct investment and economic growth in Romania: Evidence

from non-linear ARDL approach. *International Journal of Finance & Economics, 27*(1), 665-677. doi: https://doi.org/10.1002/ijfe.2173

Anderu, K. S. (2021). An empirical nexus between poverty and unemployment on economic growth. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah, 9*(1), 85-94. doi: https://doi.org/10.22437/ppd.v9i1.12005

Bingilar, P. F., Edoumiekumo, A. R., Kpolode, O. P., & Nkak, P. E. (2020). Accounting Implications of Oil Price, Exchange Rate and Unemployment on Economic Growth in Nigeria. *Journal of Business and Management, 22*(7), 01-06. doi: https://doi.org/10.9790/487X-2207030106

Chen, C., Pinar, M., & Stengos, T. (2020). Renewable energy consumption and economic growth nexus: Evidence from a threshold model. *Energy Policy, 139*, 111-127. doi: https://doi.org/10.1016/j.enpol.2020.111295

Ciftci, C., & Durusu-Ciftci, D. (2022). Economic freedom, foreign direct investment, and economic growth: The role of sub-components of freedom. *The Journal of International Trade & Economic Development, 31*(2), 233-254. doi: https://doi.org/10.1080/09638199.2021.1962392

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), 176-185. doi: https://doi.org/10.3390/jrfm12040176

Edo, S., Osadolor, N. E., & Dading, I. F. (2020). Growing external debt and declining export: The concurrent impediments in economic growth of Sub-Saharan African countries. *International Economics, 161*, 173-187. doi: https://doi.org/10.1016/j.inteco.2019.11.013

Erlando, A., Riyanto, F. D., & Masakazu, S. (2020). Financial inclusion, economic growth, and poverty alleviation: evidence from eastern Indonesia. *Heliyon, 6*(10), 235-249. doi: https://doi.org/10.1016/j.heliyon.2020.e05235

Hailemariam, A., Dzhumashev, R., & Shahbaz, M. (2020). Carbon emissions, income inequality and economic development. *Empirical Economics, 59*(3), 1139-1159. doi: https://doi.org/10.1007/s00181-019-01664-x

Hanif, I., Raza, S. M. F., Gago-de-Santos, P., & Abbas, Q. (2019). Fossil fuels, foreign direct investment, and economic growth have triggered CO2 emissions in emerging Asian economies: some empirical evidence. *Energy, 171*, 493-501. doi: https://doi.org/10.1016/j.energy.2019.01.011

Hasparyk, R. G., Ribeiro, R. S. M., & Bottega, A. (2023). Mind the wage gap: an empirical analysis of the impact of labour income inequality on economic growth. *Review of Keynesian Economics, 11*(1), 10-30. doi: https://doi.org/10.4337/roke.2023.01.02

Hu, M., Li, R., You, W., Liu, Y., & Lee, C.-C. (2020). Spatiotemporal evolution of decoupling and driving forces of CO2 emissions on economic growth along the Belt and Road. *Journal of Cleaner Production, 277*, 1232-1248. doi: https://doi.org/10.1016/j.jclepro.2020.123272

Hysa, E., Kruja, A., Rehman, N. U., & Laurenti, R. (2020). Circular economy innovation and environmental sustainability impact on economic growth: An integrated model for sustainable development. *Sustainability, 12*(12), 4831-4847. doi: https://doi.org/10.3390/su12124831

Ivanovski, K., Hailemariam, A., & Smyth, R. (2021). The effect of renewable and non-renewable energy consumption on economic growth: Non-parametric evidence. *Journal of Cleaner Production, 286*, 124-137. doi: https://doi.org/10.1016/j.jclepro.2020.124956

Jordan, S., & Philips, A. Q. (2018). Cointegration testing and dynamic simulations of autoregressive distributed lag models. *The Stata Journal, 18*(4), 902-923. Retrieved from https://journals.sagepub.com/doi/pdf/10.1177/1536867X1801800409

Khan, B. (2020). Unemployment and Economic Growth in Nigeria: A Time-Series Analysis. *Journal of Economics, Finance and Accounting Studies, 2*(1), 16-21. doi: https://doi.org/10.4337/roke.2023.01.02

Khan, S. A. R., Zhang, Y., Kumar, A., Zavadskas, E., & Streimikiene, D. (2020). Measuring the impact of renewable energy, public health expenditure, logistics, and environmental performance on sustainable economic growth. *Sustainable development, 28*(4), 833-843. doi: https://doi.org/10.1002/sd.2034

Magdalena, S., & Suhatman, R. (2020). The Effect of Government Expenditures, Domestic Invesment, Foreign Invesment to the Economic Growth of Primary Sector in Central Kalimantan. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 3*(3), 1692-1703. doi: https://doi.org/10.33258/birci.v3i3.1101

Mardani, A., Streimikiene, D., Cavallaro, F., Loganathan, N., & Khoshnoudi, M. (2019). Carbon dioxide (CO2) emissions and economic growth: A systematic review of two decades of research from 1995 to 2017. *Science of the Total Environment, 649*, 31-49. doi: https://doi.org/10.1016/j.scitotenv.2018.08.229

Mohsin, M., Kamran, H. W., Nawaz, M. A., Hussain, M. S., & Dahri, A. S. (2021). Assessing the impact of transition from nonrenewable to renewable energy consumption on economic growth-environmental nexus from developing Asian economies. *Journal of Environmental Management, 284*, 111-128. doi: https://doi.org/10.1016/j.jenvman.2021.111999

Muhammad, B., & Khan, M. K. (2021). Foreign direct investment inflow, economic growth, energy consumption, globalization, and carbon dioxide emission around the world. *Environmental Science and Pollution Research, 28*(39), 55643-55654. doi: https://doi.org/10.1007/s11356-021-14857-8

Mutumba, G. S., Odongo, T., Okurut, N. F., & Bagire, V. (2021). A survey of literature on energy consumption and economic growth. *Energy Reports, 7*, 9150-9239. doi: https://doi.org/10.1016/j.enpol.2020.111295

Najmuddin, Z., & Rizkiyani, A. (2022). Government Spending by Function and Economic Growth in Maluku Utara: IO Table and Panel Data Regression Analysis. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning, 6*(1), 64-80. doi: https://doi.org/10.36574/jpp.v6i1.254

Nazir, M. I., Nazir, M. R., Hashmi, S. H., & Ali, Z. (2018). Environmental Kuznets Curve hypothesis for Pakistan: Empirical evidence form ARDL bound testing and causality approach. *International Journal of Green Energy, 15*(14-15), 947-957. doi: https://doi.org/10.1080/15435075.2018.1529590

Nguyen, T. T., Pham, T. A. T., & Tram, H. T. X. (2020). Role of information and communication technologies and innovation in driving carbon emissions and economic growth in selected G-20 countries. *Journal of Environmental Management, 261*, 110-127. doi: https://doi.org/10.1016/j.jenvman.2020.110162

Onifade, S. T., Çevik, S., Erdoğan, S., Asongu, S., & Bekun, F. V. (2020). An empirical retrospect of the impacts of government expenditures on economic growth: new evidence from the Nigerian economy. *Journal of Economic Structures, 9*(1), 1-13. doi: https://doi.org/10.1186/s40008-020-0186-7

Orwig, M. L. (2021). Electrifying Transparency: The Role of Open Communication in Board Meetings. *International Journal of Instructional Cases, 5*. Retrieved from

http://www.ijicases.com/search/electrifying-transparency-case/

Pasara, M. T., & Garidzirai, R. (2020). Causality effects among gross capital formation, unemployment and economic growth in South Africa. *Economies, 8*(2), 26-43. doi: https://doi.org/10.3390/economies8020026

Rasool, H., Maqbool, S., & Tarique, M. (2021). The relationship between tourism and economic growth among BRICS countries: a panel cointegration analysis. *Future Business Journal, 7*(1), 1-11. doi: https://doi.org/10.1186/s43093-020-00048-3

Shahbaz, M., Raghutla, C., Chittedi, K. R., Jiao, Z., & Vo, X. V. (2020). The effect of renewable energy consumption on economic growth: Evidence from the renewable energy country attractive index. *Energy, 207*, 118-127. doi: https://doi.org/10.1016/j.energy.2020.118162

Sultanuzzaman, M. R., Fan, H., Mohamued, E. A., Hossain, M. I., & Islam, M. A. (2019). Effects of export and technology on economic growth: Selected emerging Asian economies. *Economic Research-Ekonomska Istraživanja, 32*(1), 2515-2531. doi: https://doi.org/10.1016/j.resourpol.2019.101559

Wang, Q., & Jiang, R. (2019). Is China's economic growth decoupled from carbon emissions? *Journal of Cleaner Production, 225*, 1194-1208. doi: https://doi.org/10.1016/j.jclepro.2019.03.301

Westerlund, J., & Edgerton, D. L. (2008). A simple test for cointegration in dependent panels with structural breaks. *Oxford Bulletin of Economics and statistics, 70*(5), 665-704. doi: https://doi.org/10.1111/j.1468-0084.2008.00513.x

Xu, S.-C., Li, Y.-W., Miao, Y.-M., et al. (2019). Regional differences in nonlinear impacts of economic growth, export and FDI on air pollutants in China based on provincial panel data. *Journal of Cleaner Production, 228*, 455-466. doi: https://doi.org/10.1016/j.jclepro.2019.04.327

Yang, Y., Zheng, R., & Zhao, L. (2021). Population aging, health investment and economic growth: Based on a cross-country panel data analysis. *International journal of environmental research and public health, 18*(4), 1801-1825. doi: https://doi.org/10.3390/ijerph18041801

Zaidi, S., & Saidi, K. (2018). Environmental pollution, health expenditure and economic growth in the Sub-Saharan Africa countries: Panel ARDL approach. *Sustainable Cities and Society, 41*, 833-840. doi: https://doi.org/10.1016/j.scs.2018.04.034

Zakaria, M., Jun, W., & Ahmed, H. (2019). Effect of terrorism on economic growth in Pakistan: an empirical analysis. *Economic Research-Ekonomska Istraživanja, 32*(1), 1794-1812. doi: https://doi.org/10.1080/1331677X.2019.1638290

Zhang, D., Mohsin, M., Rasheed, A. K., Chang, Y., & Taghizadeh-Hesary, F. (2021). Public spending and green economic growth in BRI region: mediating role of green finance. *Energy Policy, 153*, 1122-1137. doi: https://doi.org/10.1016/j.enpol.2021.112256