Influence Indonesia'S Economic Growth, Inflation, And Exports

Selvi Putri Dwi Ismania[1]

[1] Faculty of Economics and Business, Jember University, Indonesia

Abstract

Indonesia's economic growth is influenced by several factors, including inflation and exports. In this study, we have reviewed data from 2000 to 2020. We use autoregressive vector data analysis which can be used to determine the relationship between Indonesia's economic growth variables and inflation and exports. This basis is used to analyze economic growth, inflation, and exports in Indonesia with reference to data from the world bank and international transparency. We find that economic growth in Indonesia can increase due to several factors including in terms of the performance of human resources, technology, and international trade on exports. Economic growth in Indonesia will also decrease if there is a lot of unemployment by the Indonesian people themselves and the government. Carry out a monetary policy so that Indonesia's economic growth will increase.

Keywords : Growth Economy , Inflation , Exports

JEL Classification: C31, E22, O40, Q10.

Background

The topic of Indonesia's growth economy is inclusion from finance to growth in the Indonesian economy (Ozili, Ademiju, Rachid, 2022). This journal shows a long-term relationship between economic growth and public health (Mahir, Yassin, Matthew, Shafie, Mohammad, 2022). Estimates also show that from a production and export perspective, high technology has a positive effect on economic growth and does not meet technical principles (Minviel, Bouheni 2022). Growth is also sustainable economic development, namely having good and stable economic growth with social costs and a low ecological level of economic activity (Bogoviz, Varlamov, Misvhenko, Pochestnev, Talismanov 2019).

Economic growth and development when a crisis occurs determines what causes the crisis, the crisis that occurs creates an environment in the social economy by strengthening cooperation between countries and encouraging people to be more active in the business world (Ermolina, Manukyan, Podbonova, 2019). The occurrence of inflation in the inflation estimate has a score of 1.23 percent every year where in economic growth gains by maximizing the economy or reducing losses in economic growth, economic actors can avoid inflation, namely with technology and urban areas but high inflation will have a negative impact on economic growth (Phiri, 2020).

Inflation period long caused by an increase amount that money circulating prolonged , however if increase in money supply no prolonged no influence happening inflation in time period short. Growth economy in period long occur if development of the bond market and development of the investment market share have level rising real interest , p this as pusher happening growth economy in period Keep going continuously (Pradhan, Arvin, Norman, Bahmani, 2019). Besides inflation in connection period long that is occur in exports and growth economics , in results

studies response to growth an economy driven by exports in income-producing countries low or standard.

Economic growth driven by export sales is not implemented by low-income developing countries (Odhiambo, 2022). High-income and middle-income countries will benefit from investment strategies in various instruments by reducing export risk, in high-income and high-income countries and above have good human performance with their distribution of export labor (Markakkaran, Sridharan 2022).

When this economic growth has entered a phase of instability, to overcome this problem a policy monster is needed in an Indonesian economic country (Adityara, 2020). In accelerating economic growth, the government needs to create investments with inflation goals to increase investor interest in investing in Indonesia (Madani, Widiastuti, 2021). The State of Indonesia carries out monetary policy to regulate the rate of growth and circulation of money in a country, this can respond to inflation problems that occur unemployment (Amrial, Mikail, Arundina, 2019).

The number of SMEs has quite a lot of influence on economic growth, especially in developing countries, namely Indonesia, research also reveals that entrepreneurship has quite an influence both directly and indirectly on the performance of small companies. Education is one of the influences on economic growth, especially in developing countries, the system of implementing assistance programs for students has not reached the best condition because the program does not cause problems and certainly improves education (Kurniawan, Shafira, 2022). To assess the monetary policy made by the government from performance to control inflation on economic growth, namely when an issue occurs, for the initial step, namely the initial substance of thinking about human resources (Warjiyo, Juhro, 2019). This study aims to determine the influence of various factors on economic growth in Indonesia.

Literature Review

High trade technology, foreign direct investment, and the stock of physical capital which is the income to determine the output produced in the economy, are statistically significant determinants of economic growth. This innovation must exist to support or reduce the impact of high industrial technology on economic growth (Stievany, Jalunggono 2022).

Contributions are given as input as well as evaluation for the government in taking government policies to be able to produce policies that are more targeted in an effort to reduce unemployment rates, especially for Regional Governments in Indonesia which aim to promote prosperous economic growth (Alrakhman, Susetyo, Taufiq, Azwardi 2022). Affecting economic growth, namely human resources, namely educational mechanisms have a positive effect, increasing human and technological resources. Being an important factor for increasing Indonesia's economic growth and from a development perspective is improving the quality of human resources and developing technology with the knowledge capability to develop it (Widarni, Bawonono, 2021).

If developed countries follow a law, the potential for rising countries will be unbalanced and have an impact on world inflation. In addition, developed countries are relatively higher in international trade for most trade, with most of it as a statement of inflation (Esquierro, Silva, 2022). The inflation rate remains on output growth in government for all countries including Indonesia (Valera, Holmes, Hassan, 2018).

Actions in technical and innovative decision-making to increase export success in international markets encouragement in competition development of positive connections between technical skills and export performance do not do the development of the relationship of innovation skills of export performance (Zhang, Jedin, 2022). Capability in Skills in production output for the

performance of a company is very important including the ability for production and ability in marketing, competition in marketing is in the structure and intensity that has experienced developments in export economic activity (Cakir, Adiguzel, Zehir, C. Zehir, 2022).

Research methods
We use secondary data from the world bank, this model is used to determine economic growth, inflation and exports in Indonesia. In this study, it was conducted from 2000 to 2020 or for 20 years. This study uses the "autoregressive vector" analysis method to describe the relationship between one variable and another. This research article uses a multivariate regression approach to analyze economic growth, inflation, and exports. With the following equation

$EG_t = \beta_0 + \beta_1 IFL_{t1} + \beta_2 ESP_{t2} + e_t$ fma 1
$IFL_t = \beta_0 + \beta_1 EG_t + \beta_2 ESP_{t2} + e_t$ fma 2
$ESP_t = \beta_0 + \beta_1 EG_t + \beta_2 IFL_{t2} + e_t$ fma 3

Information :
EGs : Economic Growth
IFL : Inflation
ESP : Export
e : erroneous title
t : time sequence
β : degree in terms of causation influence
fma: formulas
Penjelasan tentang variabel deskripsi yang akan kami Gunakan, Kami sajikan pada tabel 1.

Table 1. Description of Variable

Variables	Description	Source	Unit Analysis
Growth (EG)	Growth the economy in 2020 is predicted occur enhancement as big 5.1-5.5%.	World Bank	percent
Inflation (IFL)	Inflation is increase price that is have score of 1.23 percent and the year-on-year inflation rate .	World Bank	percent
Export (ESP)	In 2020 Indonesia's export value will have score as big 163,191.8 million US dollars, and it happened a decrease of 2.68 percent compared to last year with year before .	World Bank	percent

This study uses vector calculations, where each regression relationship is combined so that each variable simultaneously becomes the independent variable and the dependent variable. The concept of zero from Dickey-Fuller, derived from PP analysis, with the formula p=1 and Δyt = (ρ

– 1)yt-1 + ut, while Δ – This is the first experiment, various operations are used. For the "unit root test", the following equation is used in this study:

$$\Delta Y1 = \alpha0 + \beta0T + \beta1Yt\text{-}1 + \sum\_(i\text{-}1)^q \alpha1\Delta Yt\text{-}1 + et$$

Information:

Y is the unit root variable check.

The variable T "linear pattern" is represented, and "differs in lag" is Yt1, 0 is shown as "single equation," also with "t" as an indication of "time trend". The null hypothesis (h0) and the following are several alternative unit root test hypotheses:

H0 : $\alpha=0$

H1 : $\alpha\neq0$

Result and Discussion

On the table second as step beginning perform the stationarity test used for knowing is something stationary data set or no . Term error analysis is used for determine is row the stationary or no , as well a number of possibility when in line table the no show stationary . Table 2 show stationarity in each variable with a number of results experiment on trial as following this .

Table 2. Tests for economic growth, exports and inflation in Indonesia

Variables	Unit Root	Includes in the examination Equation	Statistics for the ADF Test	5% Critical Value	Description
Economic Growth	Levels	Intercepts	-3.186445	0.0369	Stationary
export	Levels	Intercepts	-1.000046	0.7283	
	First Diff	Intercepts	-5.157557	0.0008	Stationary
Inflation	Levels	Intercepts	-1.097154	0.6931	
	First Diff	Intercepts	-6.724061	0.0000	Stationary

On results testing table two on that the growth variable data economy , exports , and inflation in the country of Indonesia namely first with use variable growth economy with the unit root level statistic for the adf test showing -3.186445 with a 5% critical value of 0.0369 things this show that data stationary. On export and inflation variables with unit root first diff with using the include in the examination equation intercept, shows stationary result because the resulting number on it not enough from 0.005.

Viewed from the root test on third the variable table shows the stationary level certain. At stage second that is perform the optimal lag test for show how long does the reaction take a variable against how many others.

Table 3. The test of Optimum Lag

lag	LogL	LR	FPE	AIC	SC	HQ
0	-113.3679	NA	416.8996	14.54599	14.69085	14.55341

1	-99.29225	21.11347	228.2354	13.91153	14.49097	13.94120
2	-92.15944	8.024416	337.3455	14.14493	15.15895	14.19686
3	-79.43583	9.542704	335.2442	13.67948	15.12808	13.75366
4	-21.45896	21.74133*	2.650609*	7.557370*	9.440555*	7.653805*

From this test, we chose lag 4, because it is the most different and clear . In table 3 above optimum lag testing on LR , FPE, AIC, SC and HQ values at lag 0 to with 4 can concluded that variable growth economy , inflation and exports is in the fourth lag i.e. LR, FPE, AIC, SC and HQ as selected and different lags from other lags .

Table 4. Vector Analysis

|	INFLATION	EXPORT	ECONOMIC_GROWTH
INFLATION	-0.292765	-0.331400	-0.260770
	(0.11340)	(0.22063)	(0.46546)
	[-2.58160]	[-1.50207]	[-0.56024]
EXPORT	0.058408	1.017527	0.369494
	(0.22459)	(0.43694)	(0.92183)
	[0.26006]	[2.32874]	[0.40083]
ECONOMIC_GROWTH	-0.273445	-0.419730	-0.101087
	(0.13991)	(0.27220)	(0.57427)
	[-1.95438]	[-1.54198]	[-0.17603]
C	4.809860	22.49088	-4.078769
	(5.81982)	(11.3224)	(23.8871)
	[0.82646]	[1.98640]	[-0.17075]
R-squared	0.995634	0.973645	0.500335
Adj. R-squared	0.978169	0.868223	-1.498325
Sum sq. Resids	1.748640	6.618533	29.45845
SE equation	0.763466	1.485321	3.133605
F-statistics	57.00687	9.235751	0.250335
Likelihood logs	-4.993016	-15.64130	-27.58615
Akaike AIC	2.249127	3.580162	5.073269
Schwarz SC	2.876855	4.207890	5.700997
Mean dependent	6.952769	23.50632	4.892198
SD dependent	5.167119	4.091675	1.982530

vector analysis table on inflation have score negative that is as big -0.331400
on export . Whereas export have score positive for all three namely inflation _ with score positive 0.058408 , on inflation 1.017527 and on export have score coefficient
The influential 0.369494 positive to something variable . Value on growth economy to inflation , exports , and growth economy have score negative .

Table 5. Granger Causality

Null Hypothesis:	Obs	F-Statistics	Prob.

EXPORT does not Granger Cause INFLATION	16	2.69422	0.1196
INFLATION does not Granger Cause EXPORT		0.76710	0.5791
ECONOMIC_GROWTH does not Granger Cause INFLATION	16	2.27496	0.1614
INFLATION does not Granger Cause ECONOMIC_GROWTH		0.66737	0.6347
ECONOMIC_GROWTH does not Granger Cause EXPORT	16	0.76901	0.5781
EXPORT does not Granger Cause ECONOMIC_GROWTH		0.95617	0.4864

Table 5 shows the results of the Granger Causality test in Indonesia which has score probability show connection causality is Exports on inflation , growth economics on inflation , and growth economy to export . So, there is a number of variable that has connection causality and some variable that is not have connection causality .
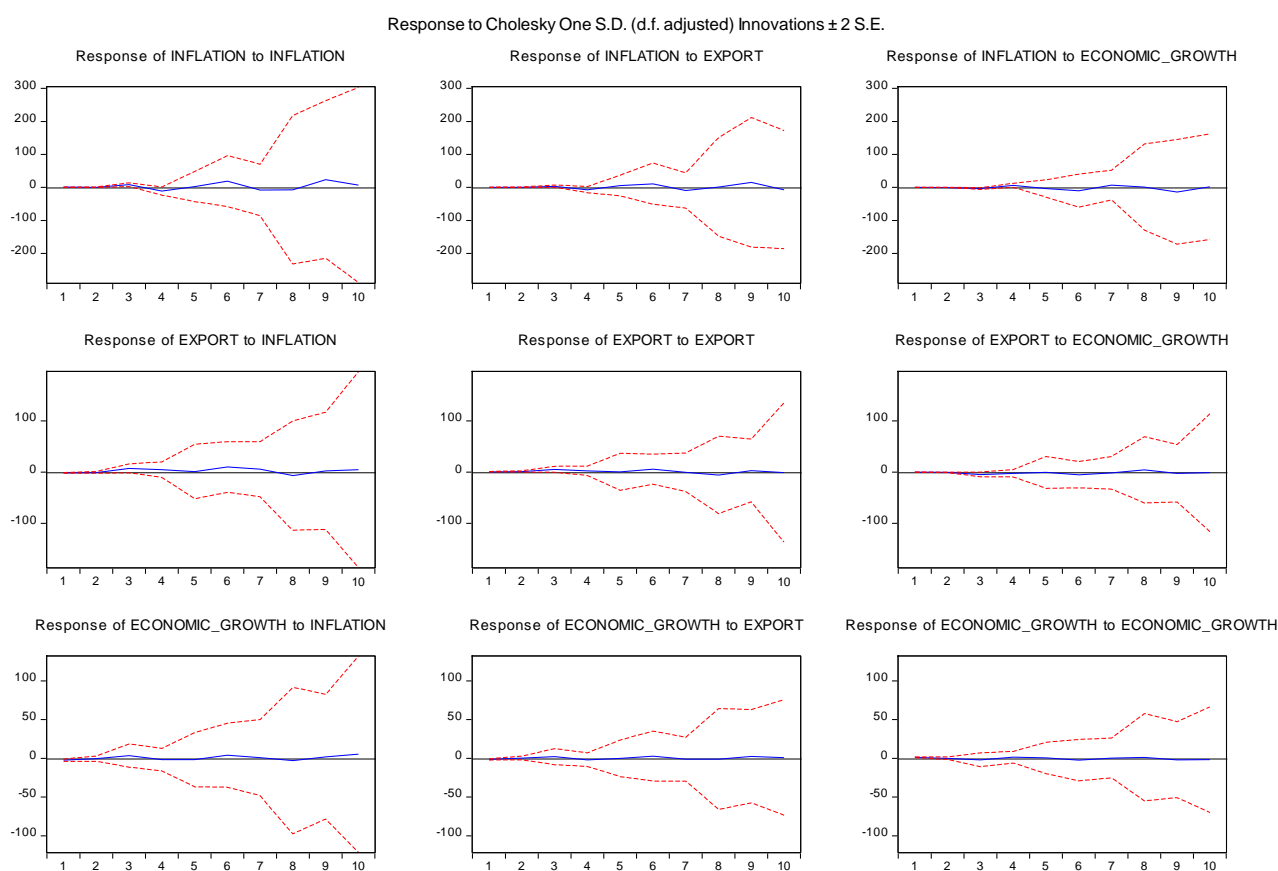
Figure 1. Impulse Responses

On the picture chart, response inflation to inflation has scored stable and in period seven experienced an increased increase. From picture chart two, response inflation to export scored stable, and in the period seven experienced an increase then occur decrease in the period ten. The third picture chart that is response to inflation to growth economy shows chart have score stable until period four and experience increase increased in the seventh period . on the chart response export to inflation that is have score stable then experience enhancement each period. For picture chart response export to export show score stable until the fourth period and it happened enhancement each period. In figure 6 response exports on growth economy that is have score

stable and happening enhancement then occur decrease , for a period of nine experience increase again. Response growth economy to inflation that is score stable until period 2 ago occur increase on the chart until the eighth period . Period eight occur decline then the ninth period chart show occur increase .

Graphic image on response growth economy to export that is beginning have score stable, happens a little increase until the sixth period then occur drop and chart experience period increase seven . Final tre picture chart response growth economy to growth economy have score stable and experienced period increase seven.

Conclusion

Growth Indonesia 's economy when experience crisis determined reason from crisis such , with effect to growth economy will impact on Indonesian society . deep Indonesian growth economy driven by exports and inflation because in export alone cause a country has standard income _ or high . Important thing in a country that is at the source power man about skills and technology Becomes factor important for increase growth Indonesian economy , With reduce number unemployment Public whose purpose the Indonesian state is experiencing development in activity exports and inflation.

References

Adityara, R.(2020). Determinant Factors on Indonesia Economic Growth. *EkBis: Jurnal Ekonomi dan Bisnis*, *3*(1), 252-260. https://doi.org/10.14421/EkBis.2019.3.1.1179

Alrakhman, D., Susetyo, D., Taufiq, T., & Azwardi, A. (2022). Effect of Economic Growth on Unemployment Rate in Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 5(2), 10132-10141. https://doi.org/10.33258/birci.v5i2.4811

Amrial, Mikail, A. and Arundina, T. (2019), "Implementation of dual monetary policy and its relevance to inflation and unemployment in the Phillips curve context in Indonesia", *International Journal of Islamic and Middle Eastern Finance and Management*,12(5),680-697. https://doi.org/10.1108/IMEFM-11-2018-0398

Bawono, S. (2021). Human capital, technology, and economic growth: A case study of Indonesia. *Journal of Asian Finance, Economics and Business*. https://doi:10.13106/jafeb.2021.vol8.no5.0029

Bogoviz, A.V., Varlamov, A.V., Mishchenko, V.V., Pochestnev, A.A. and Talismanov, Y.L. (2019). "Stagnating Socio-economic Systems", Popkova, E.G. (Ed.) "Conflict-Free" Socio-Economic Systems, Emerald Publishing Limited, Bingley, 219-225. https://doi.org/10.1108/978-1-78769-993-920191025

dan Disagregat, P. A. (2022). High Technology Trade, Innovation and Economic Growth: Evidence from Aggregate and Disaggregate Trade Products. *Jurnal Ekonomi Malaysia*, *56*(1), 15-31. http://dx.doi.org/10.17576/JEM-2022-5601-02

Doan Van, D. (2020). "Money supply and inflation impact on economic growth", *Journal of Financial Economic Policy*,12(1),121-136. https://doi.org/10.1108/JFEP-10-2018-0152

Ermolina, L.V., Manukyan, M.M. and Podbornova, E.S. (2019). "Contradiction of Influence of Crises on Growth and Development of Socio-economic Systems", Popkova,

E.G. (Ed.) *"Conflict-Free" Socio-Economic Systems*, Emerald Publishing Limited, Bingley,119-126. https://doi.org/10.1108/978-1-78769-993-920191014

Esquierro, L. and Da Silva, S. (2022)."Granular inflation spillovers", *Journal of Economic Studies*. https://doi.org/10.1108/JES-03-2022-0140

Kurniawan, G.I. and Shafira, A.L. (2022). "The Impact of School Operational Assistance Fund and Regional Gross Domestic Product to Education", Sergi, B.S. and Sulistiawan, D. (Ed.) *Modeling Economic Growth in Contemporary Indonesia* (*Entrepreneurship and Global Economic Growth*), Emerald Publishing Limited, Bingley, 25-32. https://doi.org/10.1108/978-1-80262-431-120221002

Lee, J. (2004). "Trade, Knowledge Spillover and Economic Growth - A Theoretical Implication from the Knowledge-driven Economic Growth Model –", *Journal of International Logistics and Trade*,1(2), 55-63. https://doi.org/10.24006/jilt.2004.1.2.55

Leonard Lam, F. L., Law, S. H., Azman-Saini, W. N. W., Khair-Afham, M. S. M., & Goh, L. T. (2022). High Technology Trade, Innovation and Economic Growth: Evidence from Aggregate and Disaggregate Trade Products. *Jurnal Ekonomi Malaysia*, *56*(1), 15-31.http://dx.doi.org/10.17576/JEM-2022-5601-02

Madani, A., & Widiastuti, T. (2021). The Impact of Islamic Monetary Operations and Aggregate Financing on Economic Growth in Indonesia (2010-2020). *JEBIS (Jurnal Ekonomi dan Bisnis Islam)*/ *JOURNAL OF ISLAMIC ECONOMICS AND BUSINESS*, *7*(2), 185-209. https://doi.org/10.20473/jebis.v7i2.26085

Markakkaran, S. and Sridharan, P. (2022). "Impact of export diversification on economic growth: a system GMM approach", *International Journal of Development Issues*,21(2).309-320. https://doi.org/10.1108/IJDI-10-2021-0210

Matahir, H., Yassin, J., Marcus, H.R., Shafie, N.A. and Mohammed, N.F. (2022), "Dynamic relationship between energy efficiency, health expenditure and economic growth: in pursuit for SDGs in Malaysia", *International Journal of Ethics and Systems*, ahead-of-print. https://doi.org/10.1108/IJOES-12-2021-0239

Minviel, J.-J. and Ben Bouheni, F. (2022). "The impact of research and development (R&D) on economic growth: new evidence from kernel-based regularized least squares", *Journal of Risk Finance*, 23(5),583-604. https://doi.org/10.1108/JRF-11-2021-0177

Odhiambo, N.M. (2022). "Is export-led growth hypothesis still valid for sub-Saharan African countries? New evidence from panel data analysis", *European Journal of Management and Business Economics*, 31(1), 77-93. https://doi.org/10.1108/EJMBE-06-2020-0156

Ozili, P.K., Ademiju, A. and Rachid, S. (2022), "Impact of financial inclusion on economic growth: review of existing literature and directions for future research", *International Journal of Social Economics*, ahead-of-print. https://doi.org/10.1108/IJSE-05-2022-0339

Phiri, A. (2020). "Endogenous monetary approach to optimal inflation–growth nexus in Swaziland", *African Journal of Economic and Management Studies*,11(4), 559-571. https://doi.org/10.1108/AJEMS-07-2018-0217

Pradhan, R.P., Arvin, M.B., Norman, N.R. and Bahmani, S. (2020). "The dynamics of bond market development, stock market development and economic growth: Evidence from the G-20 countries", *Journal of Economics, Finance and Administrative Science*, 25(49),119-147. https://doi.org/10.1108/JEFAS-09-2018-0087

Sonmez Cakir, F., Adiguzel, Z., Yesilot Zehir, S. and Zehir, C. (2022). "Examination of export and production performances of textile companies making export-focused production on the return to normal life from pandemic", *Kybernetes*. https://doi.org/10.1108/K-05-2022-0656

Stievany, G. M., & Jalunggono, G. (2022). ANALYSIS OF THE EFFECT OF INFLATION, EXPORTS AND IMPORTS ON INDONESIA'S ECONOMIC GROWTH. *Marginal: Journal of Management, Accounting, General Finance and International Economic Issues*, *1*(3), 1-14. https://doi.org/10.55047/marginal.v1i3.140

Valera, H.G.A., Holmes, M.J. and Hassan, G.M. (2018). "Does inflation targeting matter for the behavior of inflation and output growth? Some regime-based evidence for Asian economies", *Journal of Economic Studies*, 45(5), 932-955. https://doi.org/10.1108/JES-01-2017-0023

Warjiyo, P. and Juhro, S.M. (2019). "Inflation Targeting Framework: Implementation in Indonesia", *Central Bank Policy: Theory and Practice*, Emerald Publishing Limited, Bingley, 261-288. https://doi.org/10.1108/978-1-78973-751-620191013

Zhang, M. and Jedin, M.H. (2022). "Firm innovation and technical capabilities for enhanced export performance: the moderating role of competitive intensity", *Review of International Business and Strategy*. https://doi.org/10.1108/RIBS-01-2022-0015

Widarni, E. L., & Bawono, S. (2021). The comparison of foreign financial investment and human investment effect on economic in indonesia base on macro economic point of view. Studies of Applied Economics,39,(12).1-14. https://doi.org/10.25115/eea.v39i12.6006