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Analysis of Economic Growth in ASEAN Members

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Abstract

The goal of the study is to analyze the factors that impact Gross Domestic Product (GDP) in five ASEAN countries from 2016 to 2022. The independent variables in this model are Export, Education (EDU), and Industry. This study employs a quantitative approach and uses panel data regression. The estimation results indicate that exports positively and significantly to economic growth. In contrast, education has a negative and significant effect on economic growth. Industry variable has a positive but insignificant impact on economic growth. The model uses the Fixed Effects Model (FEM), and the adjusted R-squared is 0.4694. These findings suggest that increasing exports contributes to economic growth. However, education should be aligned with industry needs, and the industrial sector must adapt to updated technologies to avoid deindustrialization.

Keywords *Economic growth, export, education, industry, ASEAN.*

INTRODUCTION

Economic development is a strategic goal for every country to increase prosperity. The government plays an important role in creating an environment that supports economic growth through various policy interventions. Effective economic policies have the potential to enhance national competitiveness, promote economic stability, and support sustainable development. On the other hand, poor policies can weaken the economy, deter investment, and hinder growth. Similarly, ineffective policies can lower economic performance, diminish the appeal of investments, and obstruct growth. (Pafadnam, 2024).

Gross Domestic Product (GDP) is one of the most comprehensive economic indicators and is frequently used to assess a country's economic performance (Rashid et al., 2023). GDP reflects the total market value of all final goods and services produced within a country's geographical boundaries over a specific period. As an aggregate measure, GDP encompasses production from various economic sectors, such as agriculture, industry, and services, indicating the overall level of economic activity (Bui Minh et al., 2023). GDP also serves as a foundation for policymakers to design and evaluate economic policies. Governments and central banks use GDP data to regulate fiscal and monetary policies aimed at promoting economic growth, controlling inflation, and reducing unemployment (Adaramola & Dada, 2020).

Conventional theory states that exports “play an important role” in driving economic growth and increasing a country's Gross Domestic Product (GDP) (Rahman et al., 2020). As an important component of aggregate demand, exports represent a country's ability to compete in the international market by offering goods and services that meet global standards. When a country's export volume increases, the country's national income will increase with increasing foreign exchange earnings, and domestic production capacity increases. This process triggers a positive chain effect and can increase overall economic

output. Export activities give opportunities for countries to take advantage of larger economies of scale, which in turn can increase production efficiency and lower unit production costs. This allows domestic producers to compete more effectively in international markets. On the other hand, exports encourage economic diversification by expanding target markets beyond the domestic market and lowering the risks associated with dependence on a single market or product (Bashir et al., 2019).

Furthermore, education plays a crucial role in building a resilient and sustainable economic foundation (Aloui et al., 2024). Economic development in the field of education is viewed not only as a means to enhance individual well-being but also as a crucial driver of national economic growth. Mean Year of Schooling (MYS), which measures the average number of years of formal education completed by the adult population, serves as an important indicator for evaluating the quality of a country's human resources (Jin & Kim, 2024). This indicator offers insights into the level of education attained by the population and indirectly reflects the workforce's capacity to participate in productive economic activities.

Higher education is closely correlated with an increase in workforce skills. (Schultz, 1961). An educated workforce tends to have the skills needed to adapt to technological changes and drive workplace innovation. In a knowledge-based economy, the ability of workers to understand, adopt, and develop new technologies becomes increasingly important (Fleisher et al., 2010). Higher levels of formal education, as the MYS indicates, allow individuals to access more complex and high-tech jobs, boosting economic productivity.

From the perspective of human capital theory, as described by Becker (1975), education is viewed as a significant investment in enhancing individuals' capacity to generate higher economic output. Quality human capital is a crucial asset for economic growth because education improves individuals' abilities to adopt innovations, increase efficiency, and create greater value-added in the production of goods and services. (Dias, 2015). In a competitive global environment, countries with higher levels of education generally have a more flexible and innovative workforce, which is key to maintaining economic competitiveness. Furthermore, education contributes to a country's ability to develop more advanced economic sectors. A population with higher education levels is better equipped to support the development of high-tech industries, advanced service sectors, and research and development (R&D) (Romer, 1990).

This aligns with endogenous growth theory, which emphasizes that investment in human capital and innovation are key drivers of long-term economic growth (Romer, 1990). Moreover, education measured through MYS has broad implications for social inclusion and reducing inequality. By expanding access to education, countries can enhance social mobility, enabling individuals from disadvantaged backgrounds to improve their skills and access better economic opportunities (Iqbal et al., 2022). This not only enhances individual well-being but also strengthens social cohesion, which is crucial for sustainable economic stability and growth. However, challenges in improving MYS include regional disparities in access to education, varying educational quality, and economic barriers that prevent parts of the population from pursuing higher levels of education (Mariana, 2015).

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The contribution of the industrial sector has long been recognized as one of the main pillars of a country's economic growth. This sector plays a crucial role in driving the economic transformation from an agrarian society to a more advanced modern industrial society. Through the production of goods, technological innovation, and market expansion, the industrial sector significantly contributes to increasing economic value-added, which is reflected in the rise of Gross Domestic Product (GDP) and the overall improvement of societal welfare (Na & Kang, 2019). The industrial sector has substantial potential for absorbing labor, both skilled and unskilled, thereby directly contributing to the reduction of unemployment and the increase of community income. Additionally, this sector helps to strengthen the economic structure through production diversification, reducing dependence on a single commodity or sector (T. T. Nguyen et al., 2014; Wan et al., 2022). his diversification is crucial for creating an economy that is more resilient to external shocks, such as commodity price fluctuations in global markets. From the perspective of endogenous growth theory, developed by economists such as Romer (1990), the industrial sector is a primary catalyst in driving long-term sustainable economic growth. This theory emphasizes that investment in research and development (R&D) and the enhancement of human capital in the industrial sector are key elements that drive innovation and productivity improvement. Technological innovations originating from the industrial sector not only increase production efficiency but also create new products and markets, which in turn expand the country's economic base (Schultz, 1961).

High-quality human capital in the industrial sector, acquired through education and training, is key to ensuring the sustainability of innovation and growth. Skilled labor is capable of adopting and developing new technologies, which accelerates the industrialization process and strengthens a country's position in the global economy. However, the contribution of the industrial sector to economic growth is not without challenges (Fleisher et al., 2010). Rapid industrialization can lead to economic inequality, environmental degradation, and dependence on non-renewable natural resources (Wan et al., 2022).

LITERATURE REVIEW

Economic Growth

Solow (1956) posited that economic growth is influenced by capital accumulation, labor growth, and technological progress. The Solow-Swan model explains that long-term economic growth can be sustained through the implementation of technological innovations, which are considered the primary factor in driving productivity increases. Additionally, Solow emphasized the importance of government policy in promoting technological innovation and enhancing labor skills to support sustainable economic growth.

However, this neoclassical approach assumes that technological innovation is exogenous, meaning it originates outside the economic system. As an alternative, the endogenous growth theory developed by Romer (1990) emphasizes that technological innovation and human capital development are endogenous, meaning they can be generated from within the economic activities themselves. This theory highlights the importance of

investment in research and development, education, and human capital as key drivers of long-term economic growth. Aghion & Howitt (1998) assert that policies directly supporting education can enhance technological innovation and economic productivity.

Export

Exports have a vital role in a country's economic growth, serving as a link between domestic and global markets. When a country increases its exports, foreign income rises while simultaneously expanding domestic production capacity (Quaicoe et al., 2017). This process is often accompanied by the creation of new jobs and infrastructure development (Dias, 2015). Various economic theories, both classical and modern, provide a foundation for understanding how exports can be a significant driver of economic growth. In the neoclassical economic growth theory Solow (1956) emphasized that capital accumulation and technological progress are the main drivers of growth. Exports contribute to additional income that can be reinvested into the economy, both in the form of physical capital such as machinery and infrastructure, as well as human capital through workforce training and education (Schultz, 1961).

With the increase in exports, a country's Gross Domestic Product (GDP) tends to rise due to the additional demand from abroad (Szkorupová, 2014). Increased export activity typically requires more labor in the production, logistics, and distribution sectors, which directly contributes to a reduction in unemployment rates and improves overall societal welfare. Exports also promote product diversification, reducing dependence on the domestic market and opening new opportunities in global markets. This diversification helps enhance economic stability by minimizing reliance on a single source of income. Interaction with global markets often brings new technologies into the exporting country (Dritsaki, 2013). his aligns with the Endogenous Growth Theory developed by (Romer, 1990), which emphasizes that innovation and investment in technology are key drivers for long-term economic growth.

Education

Higher education plays a significant role in enhancing the skills and productivity of the workforce, according to the human capital theory proposed by Becker (1975) where education is considered an investment that enhances individuals' ability to produce goods and services. Workers with higher education are generally more adaptive to technological changes and able to implement innovations in the workplace. Research shows that countries with higher education levels tend to be more efficient in adopting new technologies, which ultimately enhances overall economic competitiveness (Cuaresma & Mishra, 2011; Syamsuddin et al., 2021).

Education also plays a key role in promoting social mobility and reducing economic inequality. By expanding access to quality education, individuals from economically disadvantaged backgrounds can acquire the skills and knowledge needed to access better job opportunities, increase income, and improve their social status (Claro et al., 2016). Additionally, education fosters inclusiveness by empowering marginalized communities to

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engage more actively in economic and social activities. For example, access to higher education and vocational training allows individuals to compete in changing labor markets, helping to break the cycle of intergenerational poverty (Brown, 2003). Education raises societal awareness and participation, strengthening democratic institutions and social cohesion, as well as fostering critical thinking and innovation, which allows individuals to contribute effectively to economic growth and social welfare (Zeira, 2009).

Industry

The industrial sector plays a crucial role in driving economic growth, especially by contributing to the rise in Gross Domestic Product (GDP). According to human capital theory and endogenous growth theory (Romer, 1990), the industrial sector plays a crucial role in enhancing productivity through investments in research and development as well as human capital accumulation. Manufacturing companies actively contribute to innovation and production efficiency, strengthening global competitiveness (Li & Jin, 2024). Empirical studies indicate that countries like Vietnam and Thailand, which have successfully industrialized, have achieved rapid GDP growth largely due to the expansion of their manufacturing sectors (Bashir et al., 2019; M. L. T. Nguyen, 2022; T. T. Nguyen et al., 2014) Furthermore, the industrial sector possesses a considerable capacity to generate employment opportunities for both skilled and unskilled labor, thereby fostering social inclusion and contributing to economic growth (Putri et al., 2023).

Industrialization is often accompanied by significant environmental impacts, such as pollution and the exploitation of natural resources, which can harm long-term quality of life. In this study, the theory of degrowth argues that industry-based economic growth needs to be balanced with a sustainable approach that prioritizes social and ecological well-being over simply pursuing economic output growth (Jackson, 2009).

METHOD

This study uses a quantitative method to analyze data from five ASEAN countries between 2016 to 2022. The countries included in the study are Indonesia, Malaysia, Thailand, Laos, Vietnam, Myanmar, and the Philippines. The research focuses on the relationship between Economic Growth, Exports, Mean Years of Schooling, and Industry.

Tabel 1. Description Variables

Variables	Description	Indicators	Source
GDP	Gross Domestic Product	%	www.worldbank.org
Export	Export	%	www.worldbank.org
EDU	Mean Years of Schooling	Years	https://hdr.undp.org
Industry	Industry (Contribution to GDP)	%	www.adb.org

Source: Processing Author data (2025).

RESULT AND DISCUSSION

In this study, the classical assumption tests, including assessments of normality, heteroscedasticity, multicollinearity, and autocorrelation, have been satisfied, allowing for the continuation of the research. The results of the calculations indicate that exports exert a positive and significant effect on economic growth. Additionally, the MYS variable has been found, to have a negative and significant impact on economic growth. Conversely, the industry variable has a positive effect on economic growth, although it is statistically insignificant.

The estimate of panel regression and corresponding t-value are presented in Eq. 1

$$GDP = \underset{}{53.4426} + \underset{(2.4897)}{0.1359Export} - \underset{(-3.7720)}{8.5033Edu} + \underset{(1.1393)}{0.5632Industry} \qquad (1)$$

Examination of Eq. 1 shows that exports have positive and significant coefficient on economic growth. This means that an increase in exports will lead to a 13,59% increase in economic growth in ASEAN Countries. The education (EDU) variable reveals negative and statistically significant results at the 5% level. This indicates that a 1-year increase in education is associated with a decrease in economic growth by -8.5038. This finding contradicts established economic theory, which typically suggests that education has positive influences on economic growth. Possible explanations for this surprising result may include factors such as poor education quality or a time lag before the benefits of education on economic growth become apparent**,** based on the individual effects observed in the seven countries studied, some countries exhibited both positive and negative aspects. This resulted in the variable of average years of schooling not showing positive and significant results. The third variable, industry, has a positive coefficient of 0.2615, indicating that a 1% increase in industry results in a 0.563245% increase in economic growth. However, this effect is statistically insignificant, which means that although the industrial sector consistently influences economic growth. Its impact is not significant statistically in this study. The adjusted R-squared value is 0.324878, suggesting that approximately 32.49% of the variation in the economic growth values can be explained by changes in the independent variables (Exports, Mean Years of Schooling, and Industry). This indicates that the model adequately considers the research variables, taking into account the multiplier effect, which magnifies the initial impact of changes in one variable on the overall system, thereby providing a more comprehensive understanding of the inter-variable dynamics in the study.

Exports and Economic Growth

The connection between export and economic growth is positive and significant, showing that exports are essential for driving a country's economic development. When a country increases its exports, it gains greater access to global markets, which can ultimately boost national income (Dritsaki, 2013). An increase in exports is usually accompanied by higher production of goods and services, thereby strengthening the manufacturing and industrial sectors, and creating more jobs (Dias, 2015). As employment opportunities grow,

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purchasing power rises, which can, in turn, drive domestic consumption (Murshed, 2022). The positive effects of exports extend beyond national income growth and job creation. Income generated from exports can benefit various economic sectors, creating a ripple effect throughout the economy. For example, increased income can be reinvested in infrastructure development, technology, and innovation, all of which contribute to sustainable economic growth (Dritsaki, 2013). This finding aligns with research conducted by (Fathoni et al., 2017; Natasya & Saputra, 2023; Seto, 2022).

Mean Years of Schooling and Economic Growth

Mean years of schooling reflect the total years of formal education completed by the population of a country, and this has a negative and significant effect on economic growth. As the years of schooling increase, the quality of human resources improves, resulting in greater labor productivity (Dias, 2015). This increase in productivity drives economic growth, as a more skilled workforce can perform tasks more efficiently and produce higher output (Mariana, 2015). With more years of education, more individuals acquire knowledge and skills that can be applied across various economic sectors (Mussaiyib & Pradhan, 2024). A more educated workforce is also better prepared to adapt to technological changes, innovate, and optimize resource utilization, all of which contribute to economic growth (Haraguchi et al., 2017; Jin & Kim, 2024).

Industry and Economic Growth

Industry has a positive and significant contribution to a country's economic growth. As a sector that produces goods and services on a large scale, industry plays a key role in creating value-added products from raw materials to finished goods (Rodrik, 2016). This process not only increases economic output but also creates job opportunities across various fields, from manufacturing to distribution (Na & Kang, 2019). The role of the industry in economic growth is evident through its role in enhancing productivity by adopting new technologies and efficient production practices. More advanced technology facilitates faster production at lower costs, which in turn boosts the competitiveness of products in both domestic and international markets (Na & Kang, 2019). Furthermore, the industrial sector often "functions as a catalyst" for growth in other sectors, such as services and agriculture, through spillover effects. Industries require inputs from these sectors, which stimulates growth within them. For instance, increased production in the manufacturing sector leads to a higher demand for raw materials from the agricultural sector and for logistics services (Bashir et al., 2019).

CONCLUSION

The contribution of exports to economic growth can vary depending on the economic structure of each country. Countries that depend on exporting raw commodities, may be more vulnerable to global price fluctuations than those that export high-tech manufactured goods. Therefore, diversifying export products and increasing added value through

downstream industries are essential strategies to ensure that exports positively contribute to long-term economic growth.

Investing in the education sector to increase the number of years of schooling can be an effective strategy for promoting economic growth. Countries that successfully enhance the educational attainment of their population often experience more stable and inclusive economic growth. Additionally, it's important to recognize that the contribution of industry to economic growth is influenced by various factors, including government policies, access to global markets, and the ability of industries to adapt to technological changes. Therefore, developing inclusive and sustainable industrial strategies is essential to maximize the sector's contribution to economic growth. it is also important to note the contribution of industry to economic growth.

REFERENCES

Adaramola, O. A., & Dada, O. (2020). Impact of inflation on economic growth: Evidence from Nigeria. Investment Management and Financial Innovations, 17(2), 1–13. https://doi.org/10.21511/imfi.17(2).2020.01

Aghion, P., & Howitt, P. (1998). Market Structure and the Growth Process.

Aloui, Z., Hamdaoui, M., & Maktouf, S. (2024). Does governance matter to ensure significant effect of foreign direct investment on poverty reduction? Evidence from developing and emerging countries. Transnational Corporations Review, 16(2). https://doi.org/10.1016/j.tncr.2024.200058

Bashir, A., Suhel, S., Azwardi, A., Atiyatna, D. P., Hamidi, I., & Adnan, N. (2019). The Causality Between Agriculture, Industry, and Economic Growth: Evidence from Indonesia. ETIKONOMI, 18(2), 155–168. https://doi.org/10.15408/etk.v18i2.9428

Becker, G. S. . (1975). Human capital : a theoretical and empirical analysis, with special reference to education. University of Chicago Press.

Brown, P. (2003). The Opportunity Trap: education and employment in a global economy. In European Educational Research Journal (Vol. 2, Issue 1).

Bui Minh, T., Nguyen Ngoc, T., & Bui Van, H. (2023). Relationship between carbon emissions, economic growth, renewable energy consumption, foreign direct investment, and urban population in Vietnam. Heliyon, 9(6). https://doi.org/10.1016/j.heliyon.2023.e17544

Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. Proceedings of the National Academy of Sciences of the United States of America, 113(31), 8664–8668. https://doi.org/10.1073/pnas.1608207113

Cuaresma, J. C., & Mishra, T. (2011). The role of age-structured education data for economic growth forecasts. Journal of Forecasting, 30(2), 249–267. https://doi.org/10.1002/for.1171

Dias, J. (2015). Human capital demand in Brazil: The effects of adjustment cost, economic growth, exports and imports. EconomiA, 16(1), 76–92. https://doi.org/10.1016/j.econ.2015.03.002

Dritsaki, C. (2013). Causal Nexus between Economic Growth, Exports and Government Debt: The case of Greece. Procedia Economics and Finance, 5, 251–259. https://doi.org/10.1016/s2212-5671(13)00031-2

Fathoni, R. A. R., Musadieq, M. Al, & Supriono. (2017). Pengaruh Ekspor Intra-Asean Dan Fdi Intra-Asean Terhadap Pertumbuhan Ekonomi Negara ASEAN (Studi pada Negara Indonesia, Malaysia, Singapura, Filipina, dan Thailand Tahun 2006-2015). Jurnal Administrasi Bisnis, 45(1).

Fleisher, B., Li, H., & Zhao, M. Q. (2010). Human capital, economic growth, and regional inequality in China. Journal of Development Economics, 92(2), 215–231. https://doi.org/10.1016/j.jdeveco.2009.01.010

Haraguchi, N., Cheng, C. F. C., & Smeets, E. (2017). The Importance of Manufacturing in Economic Development: Has This Changed? World Development, 93, 293–315. https://doi.org/10.1016/j.worlddev.2016.12.013

Iqbal, A., Hassan, S., Mahmood, H., & Tanveer, M. (2022). Gender equality, education, economic growth and religious tensions nexus in developing countries: A spatial analysis approach. Heliyon, 8(11). https://doi.org/10.1016/j.heliyon.2022.e11394

Jackson, T. (2009). Beyond the growth economy. Journal of Industrial Ecology, 13(4), 487–490. https://doi.org/10.1111/j.1530-9290.2009.00151.x

Jin, J. C., & Kim, D. A. (2024). Education and economic growth: Does the East Asian education fever overstate the growth effect? Journal of Government and Economics, 15. https://doi.org/10.1016/j.jge.2024.100121

Li, J., & Jin, J. (2024). Structural optimization of new media communication culture industry on the impact of digital innovation on marine economic growth. Journal of Sea Research, 199. https://doi.org/10.1016/j.seares.2024.102491

Mariana, D. R. (2015). Education as a Determinant of the Economic Growth. The Case of Romania. Procedia - Social and Behavioral Sciences, 197, 404–412. https://doi.org/10.1016/j.sbspro.2015.07.156

Murshed, M. (2022). The impacts of fuel exports on sustainable economic growth: The importance of controlling environmental pollution in Saudi Arabia. Energy Reports, 8, 13708–13722. https://doi.org/10.1016/j.egyr.2022.09.186

Mussaiyib, A. M., & Pradhan, K. C. (2024). An empirical analysis of causal nexus between higher education and economic growth in BRICS countries. Transnational Corporations Review, 16(3). https://doi.org/10.1016/j.tncr.2024.200057

Na, K., & Kang, Y. H. (2019). Relations between innovation and firm performance of manufacturing firms in Southeast Asian emerging markets: Empirical evidence from Indonesia, Malaysia, and Vietnam. Journal of Open Innovation: Technology, Market, and Complexity, 5(4). https://doi.org/10.3390/joitmc5040098

Natasya, & Saputra, P. M. A. (2023). Analisis Pengaruh Inflasi, Ekspor, Dan Pengangguran Terhadap Pertumbuhan Ekonomi. Journal Of Development Economic And Social Studies, 2(1).

Nguyen, M. L. T. (2022). Foreign direct investment and economic growth: The role of financial development. Cogent Business and Management, 9(1). https://doi.org/10.1080/23311975.2022.2127193

Nguyen, T. T., Ghaderi, H., Caesar, L. D., & Cahoon, S. (2014). Current Challenges in the Recruitment and Retention of Seafarers Current Challenges in the Recruitment and Retention of Seafarers: An Industry Perspective from Vietnam *. The Asian Journal Of Shipping and Logistics, 30(2).

Pafadnam, N. A. R. (2024). How does implementing the Extractive Industries Transparency Initiative (EITI) affect economic growth? Evidence from developing countries. European Journal of Political Economy, 85. https://doi.org/10.1016/j.ejpoleco.2024.102584

Putri, P., Sumanto, A., & Rahmawati, F. (2023). Analysis of the Effect of Manufacturing Industry on Indonesia's Economic Growth. Journal of Business Management and Economic Development, 1(02), 342–354. https://doi.org/10.59653/jbmed.v1i02.151

Quaicoe, A., Aboagye, A. Q. Q., & Bokpin, G. A. (2017). Assessing the impact of export processing zones on economic growth in Ghana. Research in International Business and Finance, 42, 1150–1163. https://doi.org/10.1016/j.ribaf.2017.07.052

Rahman, M. M., Saidi, K., & Mbarek, M. Ben. (2020). Economic growth in South Asia: the role of CO2 emissions, population density and trade openness. Heliyon, 6(5). https://doi.org/10.1016/j.heliyon.2020.e03903

Rashid, M., Ansari, S., Khan, A., & Amir, M. (2023). The Impact of FDI and Export on Economic Growth in India: An Empirical Analysis. In Asian J. Econ. Fin. Manage (Vol. 5, Issue 1).

Rodrik, D. (2016). Premature deindustrialization. Journal of Economic Growth, 21(1), 1–33. https://doi.org/10.1007/s10887-015-9122-3

Romer, P. M. (1990). Endogenous Technological Change. http://www.journals.uchicago.edu/t-and-c

Schultz, T. W. (1961). Investmen In Human Capital. The American Economic Review, 51(1), 1–17.

Seto, T. A. (2022). Pengaruh Perdagangan Internasional Dan Utang Luar Negeri Terhadap Pertumbuhan Ekonomi Di ASEAN. Jurnal Ilmu Ekonomi, 1(1). https://risetekonomi.com/jurnal/index.php/jie

Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. In Source: The Quarterly Journal of Economics (Vol. 70, Issue 1).

Syamsuddin, N., Nelly, Rahmi, Saputra, D. H., Mulyono, S., Muhammad, Fuadi, Z., & Anwar. (2021). Pengaruh Tingkat Partisipasi Angkatan Kerja dan Pendidikan Terhadap Pertumbuhan Ekonomi Di Provinsi Aceh. 1(2). http://jsk.kodepena.org/index.php/jsk

Szkorupová, Z. (2014). A Causal Relationship between Foreign Direct Investment, Economic Growth and Export for Slovakia. Procedia Economics and Finance, 15, 123–128. https://doi.org/10.1016/s2212-5671(14)00458-4

Wan, X., Ajaz Kazmi, S. A., & Yeewong, C. (2022). Manufacturing, Exports, and Sustainable Growth: Evidence from Developing Countries. Sustainability (Switzerland), 14(3). https://doi.org/10.3390/su14031646

Zeira, J. (2009). Why and how education affects economic growth. Review of International Economics, 17(3), 602–614. https://doi.org/10.1111/j.1467-9396.2009.00836.x