

# THE ROLE OF INVESTMENT ON NET EXPORT AND ECONOMIC GROWTH IN SIDOARJO DISTRICT, MODERATED BY STRUCTURAL TRANSFORMATION

# DENDY SETYAWAN<sup>1</sup>, H. UJIANTO<sup>2</sup> and TRI ANDJARWATI<sup>3</sup>

<sup>1, 2, 3</sup> Universitas 17 Agustus 1945 Surabaya, Indonesia.

1,2,3 Email: 1272000052@surel.untag-sby.ac.id, ujianto@untag-sby.ac.id, triandjarwati@untag-sby.ac.id

#### Abstract

Several variables drive economic growth, such as investment and international trade. However, obtaining the needed growth is complicated by various factors, including poor investment creation, variations in the contribution of investment to GDP, structural transformation, and the effects of international trade and the current account deficit on economic growth. This quantitative analysis used data from Sidoarjo Regency received from bps.go.id for 2012–2020. As a result, investment has a favorable contribution to net exports but a negative effect on economic growth. While Net Exports are beneficial to economic growth. Additionally, the structural transformation has barely any impact on the effect of net exports on economic growth.

Keywords: Investments, Nett Export, Economic Growth, Structural Transformation

JEL Classification Codes: E10, O140

## INTRODUCTION

Government economic development strategies have a major effect on the economic sector that runs in society. The level of economic change will lead to economic growth, which could indicate the success of the policies undertaken. The Harrod-Domar economic development model emphasizes the vital role of savings and investment in economic growth; as more capital is invested, the more rapidly the economy will grow. Because domestic savings tend to be the most effective source of capital formation, high economic growth can be achieved when the value of a positive investment for the ongoing survival of business actors rises. Investment activities generate investments that build up capital stocks, which in turn increase productivity, production capacity, and quality, which may foster economic growth and employment (Astuti, 2018). However, while domestic capital formation in Indonesia is low, exports and foreign investment remain vital (Aminda, 2018). Sukirno (2015) adds that Foreign Direct Investment (FDI) is still required to support development in various activities that have not been fully implemented with PMDN, particularly in industries that produce capital goods, raw materials, and components as import substitutes, semi-finished and finished goods to create business and employment opportunities.

As stated by Taufik (2014), investment and export factors will draw concentration from year to year, influencing economic growth. The contribution of investment to Indonesia's GDP went up by 0.13% from 2017 to 32.29 in 2018, and this trend was projected to continue through 2019. Unfortunately, investment contribution slipped to 31.73% in 2020.







The areas chosen for investment are likely to undergo structural transformations. Structural transformation is a shift in the regional economic structure that moves from what was once dominant in the agricultural, fishing, or mining sectors towards what has subsequently become dominant in the manufacturing, tourism, and industrial sectors, and so on (Szirmai, 2012).

The transformation of structures is an essential prerequisite for raising and sustaining economic growth, as well as a support for economic growth over the long run. Structural transformation is the process of shifting the economy's structure from the primary agricultural sectors to the secondary industrial sectors before progressing to the tertiary service sectors.

Ricardo (1817) pointed out how crucial foreign trade is to establishing a country's economy, as well as the advantages of specialization and international trade. The Gross Domestic Product (GDP), which is calculated using the expenditure technique, includes exports and imports. Exports have a significant effect on a country's economic growth; as indicated by Hecksher-Ohlin's theory, countries will export abundant products and low-cost production factors intensively. Net exports, commonly referred to as the trade balance, are referred to as exports minus imports. If the value of exports exceeds the value of imports, then this constitutes a positive net export, or a surplus, resulting in a rise in the country's income and implying an increase in GDP. Contrariwise, a negative net export balance means that the foreign trade balance falls into deficit, causing the country's income and GDP to decline. (Hady, 2001).

Between 2015 and 2019, the transaction deficit worsened. In 2015, Indonesia had a USD 17.5 billion deficit, which continued to fall to USD 30.4 billion in 2019. The drop in the manufacturing sector's percentage of GDP from 29% in 2001 to 19.9% in 2019 impacted Indonesia's international trade performance. Furthermore, commodity exports have dominated Indonesian exports so far, mirroring the state of affairs 40 years ago. Similarly, the ratio of exports to GDP declined from 41% in 2000 to 21% in 2018. With an expected deficit of USD 29.3 billion in 2024, the scenario will improve significantly. As a result, Indonesia still had a current account deficit of about 3% of GDP, despite the fact that some peer countries had surpluses. The tenacity of the deficit in current accounts has become an impediment to accelerating economic growth in the midst of a global economic recession. The trade balance is expected to be under pressure in 2020–2024, with an anticipated deficit of USD 30.4 billion in 2020 and an estimated deficit of USD 29.3 billion in 2024. This is because it is expected that real-term exports of products and services will increase by 4.7%–4.9% annually. The Ministry of Coordinating Economy issued a stimulus contained in Coordinating Minister for Economic Affairs Policy No. 13 of 2020 in order to promote economic development with all of the conditions experienced by each region in Indonesia.

Leading product, investment, trade balance strengthening, increasing domestic demand, and structural transformation indicators are viewed as essential factors in Indonesia's economic development. Sidoarjo Regency, with its economic potential and the Lapindo mudflow incident, which resulted in an upward trajectory of economic transformation that differs from Chenery's theory and economic changes in Indonesia in general, is ideal for investigating the relationship between indicators in the Coordinating Minister for Economic Affairs Policy No. 13 of 2020 on economic development.







Several studies have produced various conclusions about the relationship between trade balance and economic growth. According to the study results of Blavasciunaite et al. (2020), the influence of the trade balance on economic growth during a period of trade deficits was larger when the trade balance deteriorated with a significant trade deficit. On the other hand, Coupet (2020) employs the Johansen Vector Error Correction Model to examine the causal relationship between the US trade balance and GDP, claiming that the US trade balance does not lead to US economic growth in the short or long run.

This quantitative moderated regression analysis study exploiting secondary data tries to discover a link between nett export investment and economic growth. The addition of a structural transformation as a moderating element in the correlation between net exports and economic growth distinguishes this study. Researchers expect that this research would help the Sidoarjo Regency government develop investment strategies that will boost nett exports and regional economic growth.

#### LITERATURE REVIEW

#### **Investments**

In layman's terms, investment can refer to a wide range of initiatives such as saving money, acquiring property, saving gold, purchasing machinery, or holding various financial assets such as stocks or bonds. Tandelilin (2001) defines investment as an active commitment to a number of funds or other resources with the intention of gaining a number of future advantages. A study conducted by Sukirno (2015), investment activities can continually improve economic growth and job opportunities, national income, and social prosperity.

However, from a business standpoint, Samuelson (2011) defines investment as adding capital stock or goods to a country, such as establishing manufacturing tools and inventory items within one year. As defined by Jogiyanto (2003), investment is a delay in present consumption to be utilized in effective production for a specific period of time.

Nizar et al. (2013) defined investment activity as (1) one of the components of aggregate expenditure so that an increase in investment will increase aggregate demand, national income, and employment opportunities; (2) increase production capacity; and (3) increase technological development.

# **Net Export**

According to Pujoalwanto (2014), a trade balance is a record indicating the amount of data regarding a country's export and import activity. In a broader context, Levi (2009) frames the trade balance as a record of economic transactions generated by citizens of a country with the rest of the globe over a specific time period. As explained by Froyen (2002), trade balance elements are goods and/or services acquired by foreign purchasers, whereas imports are goods produced abroad and purchased by domestic buyers. Exports, according to Muchdie et al. (2018), are useful for understanding how to market products in international markets. Imports are the process by which a country purchases commodities or services from nations around the







globe. Imports are defined as the incapacity of a nation to supply its own needs. As noted by Thirafi (2020), net exports, or the gap between the total amount of a country's exports and imports, may illustrate the strength of a country's economy and commerce in the event of an economic downturn (Samuelson, 1992). When exports surpass imports, net exports are positive; when imports exceed exports, net exports are negative. Net exports indicate net international expenditure on our goods and services, which generates revenue for local businesses.

#### **Economic Growth**

According to Jhingan (2007:57), economic growth is a steady improvement in a region's ability to provide a variety of economic benefits to its residents. Adisasmita (2013) outlines economic growth from a different point of view as an attempt to increase production capacity with the objective of producing more output, as measured by GDP and GRDP in a region. Meanwhile, Sukirno (2015) interprets economic growth as an upsurge in output per capita over time. The focus is on three aspects: the process, production per capita, and the long term. Ibid. emphasizes that economic growth is a process, not a snapshot of the economy. As explained by Todaro (2000: 140), three aspects influence a society's economic growth: (1) capital accumulation, involving new investment in land, equipment, and human resources. This will occur if the current share and income are conserved and then invested in order to boost future output. (2) Population growth: associated with an increase in employment rates, it has traditionally been regarded as a positive factor in stimulating economic growth, implying that as more and more generation's work, the labor production factors will increase while the domestic market will expand. (3) Technological progress is caused by improved new and old ways of accomplishing traditional jobs, such as farming rice, making garments, and so on.

### **Structural Transformation**

Economic development is always characterized by a structural shift, with some sectors growing faster than others (Mecik & Afşar, 2014). Structural transformation is described as a transformation in economic structure from a traditional low-productivity sector to an innovative high-productivity sector (Szirmai, 2012).

Agriculture and mining have become primary sector groupings that rely on land production. In truth, nevertheless, a growing proportion of land is being exploited for non-agricultural purposes. As a consequence, even if all intensification efforts have been performed utilizing applied technology, total production cannot simply be raised. Unlike the secondary sector group, improved productivity can be supported if capital and technology can be delivered swiftly under normal economic conditions. Of course, assuming that the quantity of production orders continues to grow,

In this study, the tertiary sector's structural transformation is GRDP at current prices in the Sidoarjo district from 2012 to 2020.





#### RESEARCH METHODS

#### **Research Framework**

The hypothesis in this study was developed as a temporary solution to a particular issue or question that requires empirical testing grounded in theoretical studies and previous research.

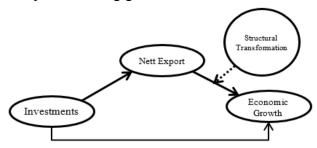


Figure 1: Conceptual Framework

As an outcome, we put forward the following hypothesis for this study:

H1 : Investment has a significant effect on Net Exports

H2 : Investment has a significant effect on economic growth

H3 : Nett Export has a significant effect on Economic Growth

H4 : Structural Transformation increases the influence of Net Exports on Economic

Growth

#### Research Method

In this quantitative study, secondary data has been incorporated with a purposive choices technique, in which the sample was chosen based on certain considerations or features (Sugiyono, 2011: 84). The sample for this study is Sidoarjo Regency data from 2012 to 2020 collected from bps.go.id:

Net Exports.

Total Household Final Consumption Expenditures.

Total Final Consumption Expenditures for Non-Profit Institutions Serving Households (LNPRT).

Total Final Consumption Expenditures.

Formation of Gross Fixed Capital (PMTB).

Gross Regional Domestic Product (GRDP).

GRDP at constant prices.

GRDP Based on Current Prices.

Furthermore, STATA will be used to process the data.





#### RESULTS AND DISCUSSION

# H1: Test Results of Investment on Net Export

Investment coefficient  $\beta$  value is 0.4724411 and the p-value = 0.003 indicates that Investment (X2) has a significant positive effect on Net Exports (Z1).

 $R^2$  value = 0.7304 indicates that Investment is able to explain the Trade Balance of 73.04%, while the rest - namely 26.96%; explained by other variables.

The findings indicate that improving investment in Sidoarjo Regency will lead to a trade balance surplus. Direct investment, capital investment, and portfolio investment are the three types of economic investments. Direct investment is referred to as a direct investment in which the direct investor is actively involved in business management operations and is directly liable in the event of a loss. Capital investment, on the other hand, can take the form of purchasing equipment, replacing old machines with new ones, implementing new technologies, building educational facilities, or expanding to other regions with an eye toward profit and efficiency. Meanwhile, a portfolio investment is a foreign financial venture in which investors purchase debt or securities with the expectation of profiting financially from the investment. Only direct investment and capital investment can have an indirect impact on exports and imports because the investment is physical in nature, which means that investment funds that enter the region can be used for various things that increase production and, in the end, the product can be exported.

Based on the findings of this study, plenty of businesses in Sidoarjo Regency have received sufficient investment (both direct and capital investment) to raise their manufacturing capacity to the point where the export value exceeds the import value. This was consistent with the statement expressed by the Indonesian Coordinating Minister for the Economy, who reminded the audience of the importance of export-based investment and import substitution in overcoming the trade balance deficit.

This conclusion is consistent with the findings of Wilamoski and Tinkler (1999), who discovered that US FDI in Mexico increased total US exports to and imports from Mexico. Increased FDI has had a modestly beneficial influence on the US trade balance with Mexico, although its contribution to exports and imports has been relatively moderate in comparison to other trade factors. And, according to the findings of Granger causality, impulse response analysis, and variance decomposition, there is no relationship between trade and FDI. Similar findings were found in Bruhn and Calegario's (2013) study of the behavioral relationship between FDI and exports and FDI and imports in Brazil between 1980 and 2000, concluding that FDI causes exports in the short and long run, but not in the long run. The results of Ramidi's (2014) research identified the contribution of gross FDI to domestic demand, economic growth, and exports in the Malaysian economy. FDI is still regarded as an important economic instrument in Malaysia for boosting exports, domestic demand, and economic growth. This result is consistent with Sabrie's (2023) research findings in Somalia.





#### **H2: Test Results of Investment on Economic Growth**

The  $\beta$  coefficient value of the Investment variable is -0.0001491 and the p-value = 0.003 indicates Investment (X2) has a significant negative effect on Economic Growth (Y).

The value of R2 = 0.7399 indicates that Investment is able to explain Domestic Demand by 73.99%, while the rest, namely 26.01%, is explained by other variables.

Our findings indicate that more capital being invested in Sidoarjo Regency will hinder economic growth in the region.

The indirect effect of direct and capital investment in a region is usually an increase in labor demand because both newly established manufacturing firms and the development of existing businesses require workers, both local and migrant. As the workforce grows, the corporation spends extra wages. The wages earned by this workforce will be used to meet both their basic and secondary needs, as well as their tertiary entertainment needs. As a result, the region's money circulation will boost, and the cost of consumption will be converted into an indicator of economic growth.

However, it appears that this is not the case in Sidoarjo Regency, where each increase in incoming investment is insufficient to boost economic growth. This means that incoming investment is more likely to be in the form of direct investment and capital investment, in which the funds do not generate new jobs but are more likely to be in the form of asset development or corporate effectiveness efforts, such as purchasing new land, better-performing machines, or utilizing new technology, such as production robots, and others, which are employed to boost productivity instead of increase production.

The findings of this study did not support Harrod-Domar's (1947) theory that new investments, in addition to capital stock, were required to increase the economy. Investment is regarded as vital since it can generate income and boost production capacity by growing the capital stock.

Harrod-Domar's idea should be reviewed for places that are still underdeveloped with challenging exit relations. Capital goods are frequently scarce in such circumstances, making it difficult to convert between capital goods and labor, which might have the same impact as in neoclassical theory. As a result, excessive production increases in sectors whose production results are not potential or profitable for export would end up resulting in products not being absorbed by the local market and price levels dropping significantly, harming producers. As a consequence, it is critical to control growth in diverse sectors in a balanced manner so that increases in production in one sector can be absorbed by other sectors that grow in a balanced manner (Tarigan, 2007:52).

The conclusions of this study contrast with the findings of Sial et al. (2010), who explored the influence of investment on Pakistani economic growth. In the long run, private investment has a greater beneficial impact on economic growth than state investment. Ramidi (2014) identifies the crucial role of gross FDI in stimulating economic growth in Malaysia. Chidoko and Sachirarwe (2015) discovered that investment had an advantageous impact on Zimbabwean economic growth. Similarly, Menshikov et al. (2015)'s studies conducted in Russia reveal that





one of the main contributors to economic growth is investment. Using 124 cross-country data sets spanning 1971 to 2010, Iamsiraroj (2016) investigated the connection between FDI growth and a simultaneous system of equations approach, indicating that FDI can increase the receiving country's economic growth. Additionally, Lin and Benjamin's (2018) study identified a two-way causal link between economic growth and FDI inflows in MINT (Malaysia, Nigeria, Indonesia, and Turkey). Per Quoc & Thi (2018), FDI is an essential source of money for economic growth in Vietnam. Yet studies such as Dinh et al. (2019), Srivastava & Talwar (2020), Nguyen & Nguyen (2021), Mohi & Dai (2022), Ocolisanu et al. (2022), Gaffar, Ujianto, and Andjarwati (2023), and Lapian, Walewangko, and Mangantar (2022) have determined that domestic and foreign investment has no role in economic growth.

# **H3: Test Result of Net Export on Economic Growth**

The Trade Balance variable has a beta coefficient of -0.0000694 and a p-value of 0.027, showing that net exports (Z1) have a significant positive impact on economic growth (Y).

The R2 value of 0.5251 implies that the trade balance can explain 52.51% of economic growth, while the remaining 47.49% is explained by other variables.

Our findings suggest that improving the export surplus in Sidoarjo Regency will contribute to the region's economic growth. The increase in the trade balance shows an increase in export activity, which will lead to increased production. Increased production and export volume will also boost economic growth.

The outcomes of this study are consistent with the findings reported by Blavasciunaite et al. (2020), Coupet Jr. (2020), and Izevbigie et al. (2020). The findings of this study, however, contradict what was found by Pacheco-López (2003), who discovered that an increase in the income elasticity of import demand adds to a deceleration of Mexico's long-run equilibrium growth rate. In addition, the finding is also contrary to the conclusions of Astuti's (2018) research.

While Alvarado et al. (2018) found that in high-income nations, exports are more essential than domestic demand in raising output, in middle- and upper-income countries, internal demand becomes more important.

# **H4: Test Result of Structural Transformation Moderation on the Relationship between Net Exports on Economic Growth**

Net Exports have a significant effect on Economic Growth with a p-value = 0.009, and Structural Transformation has a significant influence on Economic Growth with a p-value = 0.000.

The p-value of Structural Transformation as a moderating variable is 0.511 (> 0.05) and the beta coefficient value of Structural Transformation as a moderating variable is 0.0000188 indicating that Structural Transformation does not moderate the effect of Net Exports on Economic Growth.

These findings can be interpreted as a statement that the export market has such a broad demand







for goods that Sidoarjo Regency's economic sector is still not optimized to supply the demand for the export market. Regency governments must perform an inquiry to determine which sectors of the economy could possibly be improved in order to boost exports of superior products and economic growth.

This is feasible because the Ministry of Industry and Trade issued a regulation permitting an area to have five superior goods based on the One Village, One Product (OVOP) principle. The main purpose is to stimulate regional economic growth.

#### **CONCLUSION**

Based to the Harrod-Domar Investment Theory, which views capital formation as expenditure that increases an economy's ability to produce goods and or services, as well as expenditure that increases the effective demand of the entire society, the study's findings show that investment has a significant effect on increasing domestic demand. Harrod-Domar's idea should be examined for places that are still underdeveloped and have challenging exit relations. Capital goods are frequently scarce in such circumstances, making it difficult to convert between capital goods and labor, which might have the same impact as in neoclassical theory. As a consequence, excessive production increases in sectors whose production results are not possible or profitable for export would result in the product not being absorbed by the local market and the price level falling dramatically, harming producers. As a result, it is critical to manage growth in multiple sectors in a balanced manner so that increases in production in one area can be absorbed by other sectors that grow in a balanced manner.

This finding is also consistent with Samuelson's view, namely that investment is vital in economic development since it serves as a supporting component in raising production.

#### **SUGGESTION**

Based on the Harrod-Domar Investment Theory, which views capital formation as expenditure that will increase an economy's ability to produce goods or services, as well as expenditure that will increase the effective demand of the entire society, the study's findings show that investment has a significant effect on increasing domestic demand. Harrod-Domar's idea should be reviewed for places that are still developing and have challenging exit relations. Capital goods are frequently scarce in such circumstances, making it difficult to convert between capital goods and labor, which might have the same impact as in neoclassical theory. As a consequence, excessive production increases in sectors whose production results are not possible or profitable for export would result in the product not being absorbed by the local market and the price level falling dramatically, harming producers. As a result, it is critical to manage growth in multiple sectors in a balanced manner so that increases in production in one area can be absorbed by other sectors that grow in a balanced manner. This finding is also in accordance with Samuelson's theory, namely that investment is an important thing in developing the economy because it is needed as a supporting factor in increasing the production process.





#### LIMITATION

This study focused on one district; future researchers can do studies in other regions, both in Indonesia and in other nations. Or with a bigger study focus, such as the province or country.

#### References

- 1. Adisasmita, R. (2013) Teori-teori Pembangunan Ekonomi. Yogyakarta: Graha Ilmu.
- 2. Alvarado, R.; Ochoa-Jiménez, D. and García-Tinisaray, D. (2018) Effect Of Exports And Domestic Demand On Economic Growth In Latin America: An Analysis Using The Bulmer-Thomas Approach With Panel Data. Revista Investigacion Operacional, 39(2): 255-264
- 3. Aminda, R.S.A. & Rinda, R.T. (2018) Laju Investasi Bentuk Pertumbuhan Ekonomi Indonesia Tahun 2008-2017, Jurnal. Indonesia: Universitas Ibn Khaldun
- 4. Astuti, P.W. (2018), Analisis Pengaruh Investasi Terhadap Pertumbuhan Ekonomi Jurusan Ilmu Ekonomi Fakultas Ekonomi Dan Bisnis Universitas Brawijaya Malang (Studi Pada 33 Provinsi di Indonesia)
- 5. Blavasciunaite, D.; Garsviene, L. and Matuzeviciute, K. (2020) Trade Balance Effects on Economic Growth: Evidence from European Union Countries. Economies, 8(54) DOI:10.3390/economies8030054
- 6. Bruhn, N.C.P. and Calegario, C.L.L. (2013) Foreign Direct Investment Strategies Effects on the Brazil's Trade Balance: A Causality Analysis. Journal Globalization 7(1):73-87. DOI: 10.3232/GCG.2013.V7.N1.05
- 7. Chidoko, C. and Sachirarwe, I. (2015). An Analysis of the Impact of Investment on Economic Growth in Zimbabwe. Review of Knowledge Economy, 2(20): 93-98. DOI: 10.18488/journal.67/2015.2.2/67.2.93.98
- 8. Coupet Jr, E. (2020) What's the Big Deal about a Trade Deficit?: A VECM Analysis of Causality of U.S. Economic Growth and its Trade Balance. Journal of Applied Economics & Business Research, 10(3): 164-178.
- 9. 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.
- 10. Domar, E. (1946) Capital Expansion, Rate of Growth and Employment. Econometrica, 14 (2): 137-147.
- 11. Froyen, R. T. (2002). Macroeconomics Theories and Policies. Prentince Hall.
- 12. Gaffar, E.N.H., Ujianto, H. and Andjarwati, T. (2023) The Effect Of Domestic Investment, Foreign Investment And Government Spending On Economic Growth, Labor Absorption And Community Welfare In East Kalimantan Province. The Seybold Report, 18,(03): 1626-1638. DOI: 10.17605/OSF.IO/YD3E2
- 13. Hady, H. (2001). Ekonomi Internasional: Teori dan Kebijakan Keuangan Internasional. Jakarta: Ghalia Indonesia.
- 14. Harrod, Roy F. (1939) An Essay in Dynamic Theory. The Economic Journal, 49 (193): 14-33.
- 15. Iamsiraroj, S. (2016) The Foreign Direct Investment-Economic Growth Nexus. International Review of Economics and Finance, 42, 116-133. DOI: 10.1016/j.iref.2015.10.044
- 16. Izevbigie, J. N., Ighodaro, C. A., & Sowemimo, E. J. (2020). Comparative Analysis of the Effect of Remittances and Foreign Aid Inflows on Economic Growth in ECOWAS Sub Region. Management, 3(1), 66-80.
- 17. Jhingan, M.L (2007). The Economics of Development and Planning. 39th Edition. Delhi, Vrinda publication Ltd.
- 18. Jogiyanto (2003) Teori Portofolio dan Analisis Investasi. Edisi Ketiga. Yogyakarta: BPFE.







- 19. Lapian, A.L., Walewangko, E.N. and Mangantar, M. (2022) The Effect Of Domestic Investment (Di) And Foreign Investment (Fdi) On Economic Growth In North Sulawesi Province. The Seybold Report, 17(07: 1-10. DOI: 10.5281/zenodo.6836024
- 20. Levi, M. D. (2009). International Finance: The Markets and Financial Management of Multinational Business (5th ed.). McGraw-Hill.
- 21. Lin, B. and Benjamin, I.N. (2018) Causal relationships between energy consumption, foreign direct investment and economic growth for MINT: Evidence from panel dynamic ordinary least square models. Journal of Cleaner Production, 197(1): 708-720. DOI: 10.1016/j.jclepro.2018.06.152.
- 22. Meçik, O. and Afşar, M. (2014) The Effects of Structural Transformations in Economy on Labor Markets: The Case of OECD Countries. International Journal of Business and Science, 5(9): 230-237.
- 23. Menshikov, A.V., Kalabashkina, Y.V. and Zverev, S.A. (2015) Investment as a Factor of Economic Growth. Mediterranean Journal of Social Sciences, 6(3). DOI: 10.5901/mjss.2015.v6n3s7p259
- 24. Mohi, M., & Dai, S. I. (2022). The Effect of Investment and Labor on Economic Performance in Indonesia. European Journal of Research Development and Sustainability, 3(1), 19-22.
- 25. Muchdie, M., Ulza, E., & Setiawan, E. (2018). Sector and Country Balance of Trade Analysis Based on World Input-Output Database: Indonesian Economy. Ekuilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi, 13(2), 109. DOI: 10.24269/ekuilibrium.v13i2.1133
- 26. NguyenN, K. T., & Nguyen, H. T. (2021). The Impact of Investments on Economic Growth: Evidence from Vietnam. The Journal of Asian Finance, Economics and Business, 8(8), 345–353. DOI: 10.13106/JAFEB.2021.VOL8.NO8.0345
- 27. Nizar, C. Hamzah, A. dan Syahnur, S. (2013) Pengaruh Investasi Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Serta Hubungannya Terhadap Tingkat Kemiskinan Di Indonesia. Jurnal Ilmu Ekonomi Pascasarjana Universitas Syiah Kuala, 1 (1), 56-63.
- 28. Ocolişanu, A., Dobrotă, G., & Dobrotă, D. (2022). The Effects of Public Investment on Sustainable Economic Growth: Empirical Evidence from Emerging Countries in Central and Eastern Europe. Sustainability, 14(14), 8721.
- 29. Pacheco-López, P. (2003). The Impact of Trade liberalisation on the Trade Balance, the Balance of Payments and Economic Growth: the Case of Mexico. European Trade Study Group.
- 30. Pujoalwanto, B. (2014). Perekonomian Indonesia Tinjauan Historis, Teoritis, dan Empiris. Surabaya: Graha Ilmu.
- 31. Ramidi, N. (2014) Analyzing and forecasting the gross foreign direct investment towards domestic demand and export in Malaysia economy. Masters thesis, Universiti Teknologi MARA
- 32. Ricardo, D. (1817). On the principles of political economy and taxation. London :John Murray,
- 33. Sabrie, H.O. (2023) The Main Determinants Of Trade Balance "Empirical Evidence Somalia". The Seybold Report, 18(01): 1039-1056.
- 34. Samuelson, P. (2011) The Collected Scientific Papers of Paul Samuelson, vol 6. Massachusetts: MIT Press Books
- 35. Sial, M.S., Cherian, J., Álvarez-Otero, S., Comite, U., Shabbir, M.S., Gunnlaugsson, S.B. and Tabash, M.I. (2022) Retracted Article: Nexus between sustainable economic growth and foreign private investment: evidence from emerging and developed economies. Journal of Sustainable Finance & Investment, 12:2, I-XXI, DOI: 10.1080/20430795.2021.1990834
- 36. Sugiyono. (2011). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Afabeta.





#### DOI 10.17605/OSF.IO/JVP58

- 37. Sukirno, S. (2015) Makroekonomi Teori Pengantar. Jakarta: PT. Raja Grafindo Persada.
- 38. Srivastava, S., & Talwar, S. (2020). Decrypting the dependency relationship between the triad of foreign direct investment, economic growth and human development. The Journal of Developing Areas, 54(2).
- 39. Szirmai, A. (2012). Industrialisation as an engine of growth in developing countries, 1950–2005. Structural Change and Economic Dynamics, 23(4): 406-420.
- 40. Tandelilin, E. (2001) Analisis Investasi dan Manajemen Risiko Edisi Pertama. Yogyakarta: BPFE.
- 41. Tarigan, R. (2007). Ekonomi Regional, Teori dan Aplikasi, cetakan ke empat. Jakarta: PT. Bumi Aksara.
- 42. Taufik, M. (2014), Pengaruh Investasi Dan Ekspor Terhadap Pertumbuhan Ekonomi Serta Penyerapan Tenaga Kerja Provinsi Kalimantan Timur, Jurnal Ekonomi Kuantitatif Terapan, 7(2)
- 43. Todaro, M.P. (2000) Pembangunan Ekonomi di Dunia Ketiga Edisi Ketujuh, Terjemahan Haris Munandar. Jakarta: Penerbit Erlangga.

