

## The Role of Human Development Index and Demographic Indices in Facing Global Trade Challenges

Fadli Rasam<sup>1\*</sup>, Wahyu Murti<sup>2</sup>, Muhammad Rozali<sup>3</sup>

Universitas Borobudur Jakarta

**Corresponding Author:** Fadli Rasam [fadrasam@gmail.com](mailto:fadrasam@gmail.com)

---

### ARTICLE INFO

*Keywords:* Human Development Index, Demographics, Global Trade

*Received :* 3 October

*Revised :* 5 November

*Accepted:* 19 December

©2024 Rasam, Murti, Rozali: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

When there is world economic instability, innovation and change and adaptation are needed. In an era of rapidly changing global trade, countries with high HDI have a better ability to adapt to market and technological changes, which is important to remain competitive. The aim of this research is to determine the role of HDI and Demography in global trade. The article can also explain the factors that need to be considered in facing global trade in the future. The method used is the literature review method. The steps taken are identifying problems, collecting sources, extracting sources, selecting sources, analyzing sources and drawing conclusions. The important role of human development and demographic indices is labor productivity, the need for innovation and creativity in the quality of education. Labor availability also determines the readiness and supply of various needs and products. A large young population can provide sufficient labor to support the growth of industry and commerce. Countries with growing populations usually have larger labor forces, allowing them to increase production capacity. The government is advised to implement friendly and competitive trade and investment policies. Demography helps governments formulate policies that support trade

## INTRODUCTION

The Human Development Index (HDI) and demographics have a very important role in facing global trade challenges. Several important reasons why HDI and democracy are important factors in global trade include, - HDI is an indicator used to measure a country's development progress, which includes aspects of health, education and income (Permanyer & Smits, 2020). The higher a country's HDI, the better the quality of life of its residents, which leads to stronger competitiveness in global trade. Countries with high HDI tend to have an educated and healthy workforce, which can increase productivity and innovation in the trade sector (Conceição et al., 2021).

Demographic factors can also determine the role of global trade. Demography includes the study of population structure, including age, gender, population growth rate, and distribution. Demographic factors influence the labor market, demand for goods and services, and the potential for economic growth in a country. Countries with young and dynamic populations can leverage their workforce to support industry and trade, while countries with aging populations may face challenges in maintaining economic growth (Modiba, n.d.-a; Vernia & Senen, 2022).

Indonesia has been a country in the developing country category for a long time (Nurlela et al., 2023). Other countries are competing to create a more efficient investment climate and high economic competitiveness (Dima et al., 2024). Countries with high HDI are usually able to participate better in global trade, because they have policies that support education, health and welfare. Favorable demographics, such as a young population, can create a strong and innovative domestic market (Nurlela et al., 2023).

At a time of world economic instability, innovation and change and adaptation are needed. In an era of rapidly changing global trade, countries with high HDI have a better ability to adapt to market and technological changes, which is important to remain competitive. Demographics also play a role in this adaptation: young populations are more open to change and innovation, and thus can respond more quickly to the needs of global trade. Government policies in utilizing HDI and demographics can help create a conducive environment for trade, as can investment in education and health. Effective government policies in utilizing the Human Development Index (HDI) and demographics are essential to create a conducive environment for trade. The government needs to ensure that the entire population has access to good and affordable health services that can improve the quality of life and workforce productivity (Hatsopoulos et al., 1988).

Based on the description above, researchers want to explore further about the role of HDI and Demography in global trade. The aim of this research is to determine the role of HDI and Demography in global trade. The article can also explain the factors that need to be considered in facing global trade in the future.

## **LITERATURE REVIEW**

### **Human Development Index (HDI)**

The Human Development Index is a measure created by the United Nations to assess the overall well-being and quality of life in a country. It combines factors such as life expectancy, education levels, and income per capita to provide a more comprehensive view of a nation's development beyond just economic indicators.

Demographics refer to the statistical characteristics of human populations. This includes various factors that describe a group of people, such as age, gender, race, ethnicity, income, education level, marital status, and occupation. Demographic data is crucial for understanding population trends, social patterns, and economic behaviors, which are essential for policy-making, business planning, and social research. Penjelasan teori disini

### **Facing Global Trade Challenges**

Facing Global Trade Challenges refers to the complex task of navigating and addressing the various obstacles, issues, and uncertainties that arise in the international trade landscape. This concept encompasses dealing with a wide range of factors that can impact global commerce, including economic fluctuations, political tensions, regulatory changes, technological disruptions, and environmental concerns. It involves businesses, governments, and international organizations working to overcome barriers such as tariffs, trade wars, supply chain disruptions, and differing standards across countries. The process requires adaptability, strategic planning, and diplomatic efforts to maintain and enhance trade relationships while balancing national interests with global economic integration. Successfully facing these challenges is crucial for fostering economic growth, maintaining competitiveness, and promoting sustainable development in an increasingly interconnected world economy.

## **METHODOLOGY**

The method used is the literature review method. This method consists of several steps. Started Identifying the importance of human development and demographic indices in the context of global trade. Then formulate research questions that will be answered through a literature review. The next step is collecting library sources. This stage is carried out by searching for articles, books, journals, research reports and other documents relevant to the topic. Focus on sources that discuss HDI, demographics, and international trade. Excavating research sources and databases is required using academic databases such as Google Scholar, JSTOR, ProQuest, and others to obtain credible and up-to-date literature.

Selection of source criteria is also necessary, so that the source is appropriate to the research topic. Presents empirical data, theory and related analysis, articles published in the last 5-10 years to ensure the information obtained is up to date. This step is necessary so that the source is written by a writer or institution that is competent in its field.

Analyzing and synthesizing sources is the fourth step. This step consists of categorization by grouping library sources based on themes or subtopics such as, the meaning and importance of HDI, the relationship between HDI and global trade, demographic analysis and its implications for trade and then synthesizing

all relevant source information to provide a comprehensive picture of how HDI and demography role in global trade. The final step is to provide conclusions and recommendations. Compile and conclude the results of a literature review regarding the role of HDI and demography. This methodology can be adapted to the specific needs of the research and the broader context. All the steps above aim to provide a systematic approach in analyzing and understanding the role of HDI and demographics in global trade.

## RESEARCH RESULT

The Human Development Index (HDI) is a tool used to measure and compare the level of human development in various countries based on three main dimensions: health, education, and income. The role of HDI in the context of demographics and trade performance is very important, especially in facing global trade challenges. If you look at the HDI aspect, it has various criteria, such as the quality of human resources. Countries with high HDI tend to have more skilled and educated populations. This helps increase labor productivity, which in turn can increase competitiveness in the global market. The need for innovation and creativity in the quality of education.

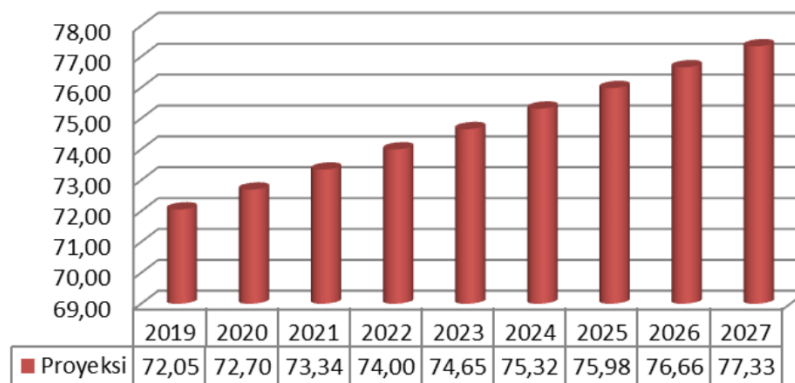


Figure 1. Indonesia's HDI Projection for 2019 – 2027

In Figure 1, it can see a graph of the projected value of the Human Development Index (HDI) in Indonesia for 2019 to 2027. In 2019 the projected value of the Human Development Index (HDI) was 72.05 or an increase of 0.66 compared to the original data in 2018 which was 71.39. In 2020, the projected value of the Human Development Index (HDI) is 72.70 or an increase of 0.65 compared to the 2019 projection data which was 72.05. In 2021, the projected value of the Human Development Index (HDI) is 73.34 or an increase of 0.64 compared to the 2020 projection data which was 72.70. In 2022 the projected value of the Human Development Index (HDI) is 74.00 or an increase of 0.66 compared to the projected data for 2021 which is 73.34. In 2023 the projected value of the Human Development Index (HDI) is 74.65 or an increase of 0.65 compared to the projected data for 2023 which is 74.00. In 2024 the projected value of the Human Development Index (HDI) is 75.32 or an increase of 0.67 compared to the projected data for 2023 which is 74.65. In 2025 the projected value of the Human Development Index (HDI) is 75.98 or an increase of 0.66 compared to the projected data for 2024 which is 75.32. In 2026 the projected value of the Human

Development Index (HDI) will be 76.66 or an increase of 0.68 compared to the projected data for 2025 which is 75.98. In 2027 the projected value of the Human Development Index (HDI) is 77.33 or an increase of 0.67 compared to the projected data for 2026 which is 76.66. Thus, the average increase in the Human Development Index (HDI) value based on projection data is 0.66. Based on the graph shown in Figure 3, the trend in the Human Development Index (HDI) value tends to increase, but the value is not too large.

A good level of education encourages innovation and creativity. Countries with high HDI are often able to create better products and services, which can improve their position in international trade. Equal public health can boost product productivity. Good health is an important component of HDI. A healthy population is more effective and productive. Countries with good health services can reduce costs associated with health problems that can disrupt trade. An even HDI requires social stability. High HDI can contribute to social stability. Stable countries tend to be more attractive to foreign investors and have better business environments, which are important for international trade (Wang et al., 2018). Growing market demand and demographics, including age structure and population growth, influence demand for goods and services. Countries with large young populations may have higher demand for certain products, which can influence trade patterns (Suprpto et al., 2022).

### **The Role of Demography in Facing Global Trade**

Demography plays a crucial role in dealing with global trade, because the characteristics of a country's population can influence various aspects of the economy and trade strategy. For several reasons, according to a literature review and research of several articles, it can be seen that the availability of labor determines the readiness and supply of various needs and products (Croes & Kubickova, 2013). A large young population can provide sufficient labor to support the growth of industry and commerce. Countries with growing populations usually have larger labor forces, allowing them to increase production capacity (Gryshova et al., 2020).

The availability of skilled workers who have education appropriate to the work industry needs to be adjusted. Demographics influence education policy (Yeh & Ni, 2024). Countries with educated populations tend to have a workforce that is more competent in facing the demands of the global market. Good quality education also supports innovation and competitiveness (Kozielec et al., 2024).

The large population has created various needs that must be met. The emergence of market demand requires product fulfillment. The age and gender structure of the population influences consumption patterns and demand for goods and services. For example, young populations tend to have different consumption habits than older populations (Ito Harrison & Philosophy, n.d.-b). This can guide companies in designing appropriate products and marketing strategies for local and international markets.

Increasing the middle class is the goal of increasing the welfare of the population. Significant demographic growth, especially in developing countries, could create a larger middle class, potentially increasing demand for products and services, both domestic and foreign (Suprpto, 2022). Facing global trade requires strong economic competitiveness. Younger populations generally adapt more quickly to new technology, innovation and changes in the way business is done. This allows the country to adapt quickly to global market changes. Abundant population and high numbers of young people often correlate with the rate of entrepreneurship. Innovation and creation of new businesses can increase the country's competitiveness in the international trade arena.

The factor that must be considered in the role of demography is the instability caused by demography itself. Inequalities in demographic distribution, such as high levels of unemployment among the younger generation, can trigger social instability that has a negative impact on trade and investment. On the other hand, stable and balanced demographics help create a more conducive business climate. Dense population requires high migration and mobility. Population movements, both international and internal migration, can influence labor markets and trade dynamics. Countries that can manage migration effectively can often improve workforce skills and fill gaps in certain sectors

The government needs friendly and competitive trade and investment policies. Demography helps governments formulate policies that support trade. For example, countries with older populations may need to focus on healthcare-oriented sectors, while countries with younger populations may focus on technology and innovation (Estes, 2009a). Countries with attractive demographics can more easily attract foreign direct investment, which can support the growth of industrial and trade sectors.

Countries with large and dynamic populations are often seen as attractive markets for investment (Modiba, n.d.-b). This provides opportunities for involvement in global supply chains. Demography also influences cooperation between countries in the field of trade. For example, countries with similar demographics could form trade alliances to strengthen their bargaining position in global markets.

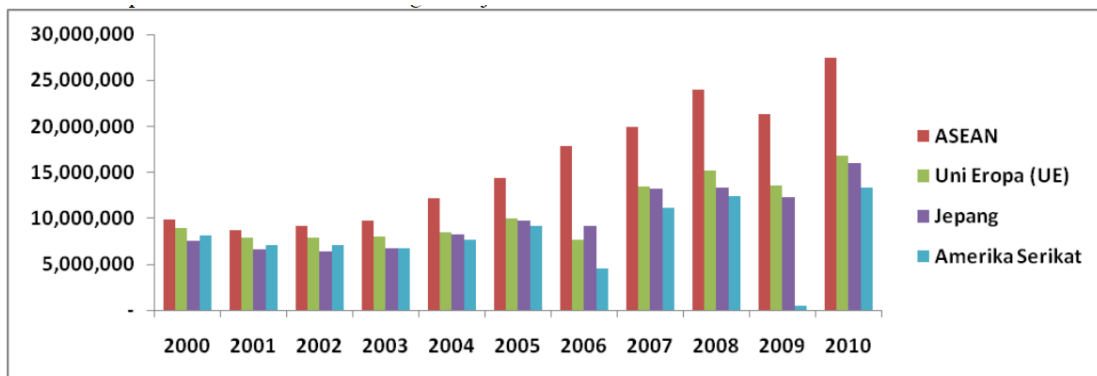


Figure 2. Indonesian Exports by Destination Country

The European Union is one of the economic powers in the world that has relations close trade with Indonesia. Data from Indonesian Economic and Financial Statistics (SEKI) shows that until 2010 the European Union was consistently a region Indonesia's export destination ranks second, below exports to ASEAN countries, and more higher than Indonesia's exports to Japan and the United States, two important partners others in the field of trade. Although there were no substantial changes in the first half of the 2000-s and experienced a decline in 2006, Indonesia's exports to the European Union increased relatively sharp in 2007, namely around 75%.

Exports to the European Union, as well as exports to other countries, experienced a decline in 2009 as a result of the global crisis, however increased again in 2010. Self-efficacy has three dimensions that are magnitude, the level of task difficulty a person believes she can attain; strength, the conviction regarding magnitude as strong or weak; and generality, the degree to which the expectation is generalized across situations. Indonesia's exports to ASEAN are ranked 1st, followed by the European Union, Japan and the United States Eksport.

Table 1. Product of Export Commodities

Destination Country	Product	Country
Asean	Paim Oil	Thailand
	Textiles and Apparel	Singapore
	Coffee, rubber, agriculture	
European Union	Palm Oil, paper, Wood,	
Japan	Textiles, sea food, rubber	
USA	Textiles and Apparel	
	Footwear	
	Palm Oil, Wood	

Indonesia's export strategy focuses on leveraging its abundant natural resources while strengthening trade relationships with important regional and global partners(Hugo Aries Suprpto, 2021). Each of these markets offers unique opportunities and challenges for Indonesian exporters, shaping the trends in the country's trade activities. The dynamics of each market present both opportunities for growth and challenges that require strategic planning and adaptation(Permanyer & Smits, 2020). By leveraging its strengths and addressing these challenges, Indonesia can enhance its export performance and capitalize on emerging global trade trends(Estes, 2009b). Maintaining flexibility and a keen awareness of market changes will be key for Indonesian exporters looking to thrive internationally(Ito Harrison & Philosophy, n.d.-c).

## CONCLUSIONS AND RECOMMENDATIONS

The Human Development Index and demographics are interrelated and play an important role in helping countries face global trade challenges. By paying attention to these two factors, countries can design more effective policies to increase competitiveness and economic growth in the international trade arena. The role of the Human Development Index in dealing with global trade is

very significant. A high HDI not only reflects the welfare of society, but also provides various strategic advantages for the country in actively and competitively participating in international trade. By increasing HDI, countries can create a conducive environment for sustainable economic growth and trade. Demography has a significant role in facing global trade challenges, from providing a skilled workforce to creating strong market demand. By understanding and exploiting demographic characteristics, countries can develop more effective strategies to compete in international markets, increase their economic competitiveness, and achieve sustainable growth. Indonesia's export strategy focuses on leveraging its abundant natural resources while strengthening trade relationships with important regional and global partners. Each of these markets offers unique opportunities and challenges for Indonesian exporters, shaping the trends in the country's trade activities. The Human Development Index and demographics are interrelated and play an important role in helping countries face global trade challenges. By paying attention to these two factors, countries can design more effective policies to increase competitiveness and economic growth in the international trade arena. The role of the Human Development Index in dealing with global trade is very significant. A high HDI not only reflects the welfare of society, but also provides various strategic advantages for the country in actively and competitively participating in international trade. By increasing HDI, countries can create a conducive environment for sustainable economic growth and trade. Demography has a significant role in facing global trade challenges, from providing a skilled workforce to creating strong market demand. By understanding and exploiting demographic characteristics, countries can develop more effective strategies to compete in international markets, increase their economic competitiveness, and achieve sustainable growth. Indonesia's export strategy focuses on leveraging its abundant natural resources while strengthening trade relationships with important regional and global partners. Each of these markets offers unique opportunities and challenges for Indonesian exporters, shaping the trends in the country's trade activities.

#### **FURTHER STUDY**

The integration of the Human Development Index and demographic insights is pivotal for countries aiming to enhance their global trade capabilities. For Indonesia, focusing on HDI improvement and understanding demographic dynamics can lead to more effective policies, ultimately promoting sustainable economic growth and a stronger presence in international trade. Future research could delve into specific case studies of successful export strategies in relation to HDI and demographics, providing further insights into best practices and lessons learned.

## REFERENCES

- Conceição, P., Kovacevic, M., & Mukhopadhyay, T. (2021). Human Development: A Perspective on Metrics. *Measuring Human Capital*, 83–115. <https://doi.org/10.1016/B978-0-12-819057-9.00007-X>
- Croes, R., & Kubickova, M. (2013). From potential to ability to compete: Towards a performance-based tourism competitiveness index. *Journal of Destination Marketing & Management*, 2(3), 146–154. <https://doi.org/10.1016/J.JDMM.2013.07.002>
- Dima, B., Dima, Ş. M., & Tudor, A. T. (2024). Societal sustainable development and long-run economic growth: How do we stand? *Sustainable Development*, 32(4), 4222–4249. <https://doi.org/10.1002/SD.2896>
- Estes, R. J. (2009a). DEVELOPMENT CHALLENGES AND OPPORTUNITIES CONFRONTING ECONOMIES IN TRANSITION.
- Estes, R. J. (2009b). DEVELOPMENT CHALLENGES AND OPPORTUNITIES CONFRONTING ECONOMIES IN TRANSITION.
- Gryshova, I., Kyzym, M., Khaustova, V., Korneev, V., & Kramarev, H. (2020). Assessment of the industrial structure and its influence on sustainable economic development and quality of life of the population of different world countries. *Sustainability (Switzerland)*, 12(5), 1–25. <https://doi.org/10.3390/su12052072>
- Hatsopoulos, G. N., Krugman, P. R., & Summers, L. H. (1988). U.S. competitiveness: Beyond the trade deficit. *Science*, 241(4863), 299–307. <https://doi.org/10.1126/SCIENCE.241.4863.299>
- Hugo Aries Suprpto, B. (2021). THE INFLUENCE OF DIGITAL LITERACY AND INNOVATION ON ENTREPRENEURIAL INTEREST IN VOCATIONAL SCHOOL STUDENTS IN DEPOK CITY. In Online) *Journal of Educational and Language Research (Vol. 1, Issue 3)*. <http://bajangjournal.com/index.php/JOEL>
- Ito Harrison, M., & Philosophy, in. (n.d.-a). The Human Development Index: a search for a measure of human values.
- Ito Harrison, M., & Philosophy, in. (n.d.-b). The Human Development Index: a search for a measure of human values.
- Kozielec, A., Piecuch, J., Daniek, K., & Luty, L. (2024). Challenges to Food Security in the Middle East and North Africa in the Context of the Russia–Ukraine Conflict. *Agriculture (Switzerland)*, 14(1). <https://doi.org/10.3390/agriculture14010155>
- Modiba, T. (n.d.-a). The effects of the level of industrialisation on human development in Sub-Saharan Africa.
- Modiba, T. (n.d.-b). The effects of the level of industrialisation on human development in Sub-Saharan Africa.
- Nurlela, N., Fuad, M., Brastoro, B., Arfa, F. F., Hamama, F., & Widiyanto, S. (2023). Pengembangan Kecakapan Finansial melalui Buku Literasi OJK pada Siswa TK. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(6), 6631–6640. <https://doi.org/10.31004/obsesi.v7i6.5376>

- Permanyar, I., & Smits, J. (2020). Inequality in Human Development across the Globe. *Population and Development Review*, 46(3), 583-601. <https://doi.org/10.1111/PADR.12343>
- Suprpto, H. A. (2022). The Influence of Household ... (Hugo Aries Suprpto.) | 211 Madani. *Jurnal Ilmiah Multidisipline*, 1(1), 211-216. <https://doi.org/10.5281/zenodo.10446303>
- Suprpto, H. A., Sumaryoto, & Saleh, S. (2022). The Role Community Consumption, Inflation and Human Development Index On Economic Growth In West Java. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(4), 579-584. <https://doi.org/10.11594/ijmaber.03.04.10>
- Vernia, D. M., & Senen, S. H. (2022). Work-Family Conflict, Emotional Intelligence, Work-Life Balance, and Employee Performance.
- Wang, Z., Danish, Zhang, B., & Wang, B. (2018). Renewable energy consumption, economic growth and human development index in Pakistan: Evidence form simultaneous equation model. *Journal of Cleaner Production*, 184, 1081-1090. <https://doi.org/10.1016/J.JCLEPRO.2018.02.260>
- Yeh, K.-H., & Ni, G. (2024). From Bonus to Onus: Taiwan's Demographic Transition and Economic Development from 1950 to 2020. *Public Governance, Administration and Finances Law Review*, 9(1), 105-127. <https://doi.org/10.53116/pgafmr.7294>