# The Impact of International Trade on Economic Growth of Developing Countries

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## ABSTRACT

International Trade has an undeniable influence on the economic progress of all nations. It focuses on how resources are allocated among countries. Everyone worldwide can access the benefits of skilled manufacturing at competitive prices and high quality. International trade creates a more favorable environment for customers, sellers, and countries. Moreover, it raises the chances of an increase in global living standards. In this study, the paper utilizes various variables such as trade, per capita GDP, employment, inflation, exchange rate, HDI, imports, exports, and foreign direct investment (FDI). The objectives of the paper are to examine the impact of international trade on economic growth, explore the contribution of international trade, and examine the accuracy of different functions for a sample of 10 developing nations by analyzing time series data from 1991 to 2018. After a methodical analysis of the objectives, the study concludes that the effects of globalization and liberalization on international trade are distinct. In conclusion, this research underscores the importance of various factors in influencing international trade between developing countries.


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Policymakers and business leaders can use this research to inform strategies that boost international trade and economic development in their respective countries.

***Keywords:*** *Economic Growth, International Trade, FDI, GDP, Inflation, Globalization and Liberalization.*

## 1. INTRODUCTION

International trade gets people together worldwide, along with organizations and governments. The development of conveyance and communication technology has paved the way to accelerated international trade since the 18th century. International trade intensifies interaction between nations and leads to international trade growth, which also helps share the boundaries knowledge and culture. International trade includes the process of economic activities and is related to socio-cultural aspects. International trade impacted all aspects of the economy, including goods, services, capital, technology, and data[1]. The process of international trade liberalizes global markets and increases economic activities, including exchanging products and services. The elimination of trade obstacles across borders helps form realistic global marketplaces. Advancements in the transport sector and massive infrastructural advancements in the telecommunication sector have played a crucial part in international trade. They have generated further interdependence of economic and cultural activities worldwide[2].

The international trade process also leads to reorganizing the business activities at all levels, i.e., sub-national, national, and international levels.

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[1] Albrow, Martin; King, Elizabeth (1990) Globalization, Knowledge and Society. London: Sage. ISBN 0- 8039-8323-9.

[2] Wolf, Martin (September 2014) Shaping Globalization, Finance and Development, International Monetary Fund,Vol. 51(3), pp. 22–25.

International trade influences the market and society through multilateralism and microeconomic activities like global business competitiveness. The changes in the production pattern have affected the class structure, labour, technology, and capital. The expansion of business activities will not automatically bring higher employment. Instead, it provides higher remuneration for money because of its higher mobility than labour.

Economically, the term “globalization “is an old process resulting from various innovations of humans and progress in technological aspects. It integrates the economies globally, especially the movement of capital, goods and services across borders. Sometimes the term refers to the flow of labour and technology between various nations. There are also wider political, cultural and environmental features of international trade. The term "globalization" became popular and used from1980s onwards. Technological developments simplify the process and carry out global transactions in no time. It is expanding the market forces out of national borders that functioned for more than a century of human economic activity at all levels – urban industries, village markets and financial centers. A vital part of international trade is the extension of multinational trade by removing or reducing the barriers in trade, such as tariffs on imports. More imports offer consumers various goods at a competitive price and provide better incentives for domestic players to maintain their competitiveness. Exports, in general, are considered a source of the development of the economy for developing nations, which creates more jobs and increases the level of competitiveness.

The growth in global markets helps promote labour efficiency by way of competition. It provides a better opportunity for people to exploit more diversified and extensive global markets. It results in better access to technology and capital and a better and more competitive environment for global trade. However, ensuring the benefits of the high-efficiency level of markets in all nations is unnecessary. Countries should adopt new policies when needed, especially for under-developing nations, and may expect support from the international community as they do so. International trade provides its helping hand in sharing the knowledge and information that was unavailable at that time. Scientists can develop the ideas implemented successfully in one place or nation and tailor them to suit their country or region. Just as important, they can avoid that failure in other areas.

### 1.1 International trade and the Developing Countries

International trade has a substantial and crucial role in developing nations. It significantly impacts developing nations' day-to-day lives and brings new opportunities. It brings some crucial benefits like economic progress, technological advancement, influences on political activities, development of health care, and social and environmental factors. Still, it is not true in all aspects because international trade greatly damages the ecological elements of developing nations. The overall volatility in commercial and financial markets creates inequality among countries.

"Developing nations depend on developed nations for the inflow of resources and technology. However, the developed nations depend greatly on developing nations for food, raw materials, oil, and markets for their industrial outputs and services." International trade helps to transport people and goods in a faster way. It increased the pace of free trade among the nations, decreasing the threat of war. Even though many developing nations reaped the benefit of international trade, they still lag behind other developed nations. China and India have recorded the highest poverty rates in the last twenty years. Rural China which has not yet tapped into global markets, also suffers from high poverty.

## 2. REVIEW OF LITERATURE

**Sangmoon Kim and Em-Hang Shin (2015)**[3] analyzed longitudinal data on international commodity trade using the social network approach. The study found that the structure of the world trade network became decentralized over time, a change that provides more significant support for neoclassical economic theory than for world-system/dependency theory. Moreover, both intraregional and interregional density increased significantly between 1959- 1996. The study indicates that the flow of world trade became regionalized, and that globalization and regionalization are not contradictory processes. **Will Martin (2001)**[4] examined the substantial reductions in the trade policy and other barriers inhibiting developing country participation in world trade. Associated with a dramatic shift in the pattern of growing country trade, with a shift away from dependence on commodity exports to much greater reliance on manufactures and services, and significantly increased importance of exports to other developing countries. While the national level remains the principal focus of trade policy, developing countries have become increasingly involved in regional and multilateral trade negotiations. **Mariana Dubravska and Elena Sira (2015)**[5] analyzed factors concerning the international trade process that have influenced the growth of international trade in the Slovak Republic. The study focused on the last decade, the period after the entry of the Slovak Republic into the

[3] Sangmoon Kim and Em-Hang Shin (2015) A Longitudinal Analysis of Globalization and Regionalization in International Trade: A Social Network Approach, Social Forces, The University of North Carolina Press, Vol. 81(2), pp. 445-468.

[4] Will Martin (2001) Trade Policies, Developing Countries, and Globalization, Development Research Group, World Bank, pp. 1-35.

[5] Mariana Dubravska and Elena Sira (2015) The Analysis of The Factors Influencing The International Trade of The Slovak Republic, Procedia Economics and Finance, Vol. 23, pp. 1210-1216

European Union. The study used scientific-cognitive methods, i.e. issue analysis, gained data synthesis, comparison, and deduction of chosen factors influencing the international trade of the Slovak Republic reviewed. The study found a place for improvement in all searched fields considering the strategic location of the Slovak Republic - in the Centre of Europe.

**Shrivastava Namrata (2016)**[6] argued that Foreign Direct Investment (FDI) plays an important role in promoting export and economic growth of an economy. It is argued that Foreign Direct Investment promotes exports of the host countries by increasing the productivity and productive capacity of the host country by increasing capital stock, transfer of technology, managerial skills and upgrading the skills of the local workforce through training. However, the role of Foreign Direct Investment in promoting export is a controversial topic and basically depends upon the motive for such investment. If the motive for Foreign Direct Investment is to bypass the trade barriers (high tariff) of the host countries, to gain access to large overseas market and to reap the benefits of economies of scale, this may not promote export. India has also witnessed growth of Foreign Direct Investment inflow since the eighties and particularly since the nineties with the liberalization of the economy. **Dilyara I. Makhmutova and Askar N. Mustafin (2017)**[7] analyzed the process of integrating countries into international trade and its impact on the development of nations. The study also investigated the economic trends for 2015-2016, which significantly impacted China, the United States, Russia and Germany. Thus, the latest trends in the world economy, studied by a team of authors, allowed

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[6] Shrivastava Namrata (2016), "Relationship Between FDI Inflows and Exports in India ", International Journal of Social Science & Management Studies (Reviewed / Refereed Research Journal) (I.J.S.S,M.S.), Vol :02,No.:2, Page No-63-68.

[7] Dilyara I. Makhmutova, Askar N. Mustafin (2017) Impact of International Trade on Economic Growth, International Journal of Scientific Study, Vol. 5(6), pp. 140-144.

proposing their ranking of countries in the order of importance of foreign trade in their economies Germany, China, the United States, and Russia. The study concluded the significance and the possibility of applying the results for scientific and practical purposes.

**Shrivastava Namrata (2017)**[8] investigated the determining factors of foreign direct investment (FDI) inflow in India from 1980-81 to 2014-2015 using econometric modeling. During this period, nation went through major economic reforms, which began in 1991 in India. The study is based on a linear regression analysis. This analysis used macroeconomic indicators that affect FDI inflow, such as market size, trade openness, and inflation etc... Ordinary least squares analysis approach was applied to obtain regression results. The study reveals that, FOREX, EXTDEBT, TRADEOPEN and EXT as % of GDP is an important factor. Also, play an important role in attracting FDI, while in the case of India; it is policy reforms that play a crucial role in attracting FDI. **Shrivastava Namrata (2018)**[9] identified how the causal factors affected to FDI inflow. The study is based on the secondary data collected for thirty five years since 1980-81 to 2014-15. The collected data was analyzed by using linear and log linear regression analysis. A significant relationship was found between FOREX, INFRAINDEX, GOVEXP, TRADEOPEN, REER, and EXTDEBT these variables were positively related in linear analysis. TRADEOPEN, IIP, REER and INFLATION are significant positive variables in log linear analysis. The equations were analyzed using regression analysis and found to be a good fit to predict the foreign direct investment inflows. The purpose of the study was to see the impact of variables on FDI inflows and enhance

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[8] Shrivastava Namrata (2017),"Factors AffectingFDI Inflows in India", International Journal of Comprehensive Research in Economics (IJCRE), Bhopal, INDIA, VOL-03, Page No—01-08.

[9] Shrivastava Namrata (2018), "FDI Inflows and Causal Factors: An Econometric Analysis", Scholarly Research Journal for Interdisciplinary Studies,(SRJIS), Peer Reviewed & Referred, VOL-6 ISSUE-34 , Page No—88-93

more FDI into India with the help of government policy and political stability.

### 2.1 RESEARCH GAP

The past considers fundamentally utilized conventional measures like GDP and trade rates to evaluate globalization's impacts, which are constrained in scope. To investigate proposes a new approach to address this, joining human improvement markers, expansion, and business into the assessment. This all-encompassing point of view offers a more comprehensive understanding of globalization's impact on a nation's financial execution and its population's by and large quality of life.

## 3. OBJECTIVES OF THE STUDY

The following objectives are:

1. To study the growth and trend of international trade in selected developing nations.
2. To analyses the relationship between international trade and economic growth in the era of globalization.
3. To identify the factors influencing international trade.

## 4. METHODOLOGY

The methodology includes countries taken for analysis, a description of the data requirements, data sources, study period, analytical framework, and econometric modelling used in the study based on secondary data. The study attempts to test the validity of the various functions for the 40 sample countries using the time series data. The essential data for the study are collected from the International Financial Statistics year book, published by the IMF, Washington D.C., USA. The study adopted the Ordinary Least Squirts (OLS) method to measure the regression parameters. Period of study will cover 27 years, from 1991 to 2018.

**4.1 Impact of International Trade on Economic Growth in the Developing Countries**

The study espoused the multiple linear regression models to find the impact of international trade on economic growth in middle-income countries, viz., Bangladesh, Bhutan, Egypt, India, Indonesia, Nigeria, Pakistan, Philippines, Vietnam and Zimbabwe.

**Table 1: International Trade of the Developing Countries during 1991-2018 Period**

| **Countries** | **β0** | **Exports** | **Imports** | **R2** | **Adjusted R2** |
|---|---|---|---|---|---|
| Nigeria | 7.7 | 0.70*** (0.07) | -0.204** (0.08) | 0.95 | 0.94 |
| Pakistan | 6.7 | 0.23** (0.10) | 0.295 (0.15) | 0.95 | 0.94 |
| Philippines | 5.7 | 0.75*** (0.10) | -0.177 (0.09) | 0.93 | 0.92 |
| India | 6.1 | -0.808 (0.394) | -1.51*** (0.48) | 0.96 | 0.95 |
| Indonesia | 7.8 | 0.20 (0.14) | 0.28 (0.17) | 0.91 | 0.89 |
| Bangladesh | 6.8 | 0.25** (0.12) | 0.23 (0.11) | 0.98 | 0.98 |

| | | | | | |
|---|---|---|---|---|---|
| Bhutan | 4.9 | 0.24***<br>(0.07) | 0.22**<br>(0.08) | 0.90 | 0.89 |
| Egypt | 6.5 | 0.59***<br>(0.09) | -0.08<br>(0.08) | 0.95 | 0.94 |
| Vietnam | 7.7 | 0.13***<br>(0.04) | 0.48***<br>(0.04) | 0.99 | 0.99 |
| Zimbabwe | 7.2 | -0.163<br>(0.111) | 0.48**<br>(0.20) | 0.18 | 0.12 |

*** Significance at 1 per cent level ** Significance at 5 per cent level

Table1 shows the results of the post-reform period, Vietnam's exports and imports found that the regression coefficients are statistically significant at a one per cent level. Bhutan, Egypt, Nigeria and the Philippines exports are statistically significant at a one per cent level, and the $R^2$ is very high. Hence, exports and imports also influence economic growth in low-income countries. The exports of Bangladesh and Pakistan found that the regression coefficients are statistically significant at a five per cent level. The imports of the above countries do not influence economic growth. The imports of India are statistically significant at one per cent level. The imports of Bhutan, Nigeria, and Zimbabwe found that the regression coefficients are statistically significant at a five per cent level. The exports and imports of Indonesia found that the regression coefficients are statistically insignificant, and the value of Adjusted $R^2$ is 0.898. The above countries have no impact on international trade on economic growth in the post-reform period. Bangladesh use the international trade era and its exports become significant. Whereas its imports are insignificant. Bhutan, Egypt, Nigeria, Pakistan, Philippines, Vietnam and Zimbabwe gained due to the international trade era and performed well in their exports. Indian imports became significant whereas its exports became negative and insignificant.

### 4.2 Correlation Analysis of International Trade on Developing Countries

Table 2 shows the relationship between international trade and FDI, GDP, GDP per capita, Exchange rate, HDI, Inflation and Labour Force in the lower middleincome Countries. The Correlation coefficient between international trade FDI, GDP, GDP per capita, Exchange rate, HDI, Inflation and Labour Force is positive.

**Table 2: Correlation Analysis of International Trade on Developing Countries**

| **Variables** | **Trade** | **FDI** | **GDP** | **GDP per capita** | **Exchange Rate** | **HDI** | **Inflation** | **Labour force** |
|---|---|---|---|---|---|---|---|---|
| Trade | 1 | 0.84 | 0.97 | 0.33 | 0.33 | -0.14 | 0.20 | 0.90 |
| FDI | 0.84 | 1 | 0.82 | 0.31 | 0.25 | -0.06 | 0.17 | 0.74 |
| GDP | 0.97 | 0.82 | 1 | 0.32 | 0.25 | -0.17 | 0.25 | 0.93 |
| GDP per capita | 0.33 | 0.31 | 0.32 | 1 | 0.05 | 0.27 | 0.07 | -0.04 |
| Exchange Rate | 0.33 | 0.25 | 0.25 | 0.05 | 1 | 0.13 | 0.17 | 0.29 |
| HDI | -0.14 | -0.06 | -0.17 | 0.27 | 0.13 | 1 | 0.25 | -0.27 |
| Inflation | 0.20 | 0.17 | 0.25 | 0.07 | 0.17 | 0.25 | 1 | 0.21 |
| Labour force | 0.90 | 0.74 | 0.93 | -0.04 | 0.29 | -0.27 | 0.21 | 1 |

In particular, the pairwise correlation between FDI, GDP, GDP per capita, Exchange rate, HDI, Inflation and Labour Force is high. The FDI is highly significant with GDP, GDP per capita, Exchange rate, HDI, Inflation, and Labour Force are significant with International Trade. The presence of the multicollinearity issue is displayed in the above table. The study removed the variable of FDI for further analysis.

### 4.3 Empirical Panel Regression Results

Table 3 explains the results of the panel regression model, fixed effect model and random effect model. The pooled regression model results suggest that the GDP, GDP per capita, and Labour force variables are statistically significant at a one per cent level. The results indicate that $R^2$ of the pooled regression is high; however, Durbin Watson is very low.

**Table 3: Panel Regression Model for International Trade in Developing Countries**

| Variables | Pooled Regression | Fixed Effect Model | Random Effect Model | Model |
|---|---|---|---|---|
| GDP | -0.45** (0.18) | -0.92*** (0.27) | -0.87*** (0.23) | -0.75*** (0.26) |
| GDP per capita | 1.50*** (0.18) | 1.88*** (0.27) | 1.85*** (0.22) | 1.75*** (0.24) |
| Exchange Rate | 0.0 2* (0.01) | 0.0204** (0.01) | 0.02** (0.01) | 0.02** (0.01) |
| Inflation | -0.03 (0.04) | 0.09*** (0.03) | 0.09*** (0.03) | 0.13*** (0.03) |
| HDI | 0.13 (0.14) | -0.08 (0.10) | -0.07 (0.09) | -0.05 (0.10) |
| Labour Force | 1.53*** (0.19) | 2.03*** (0.29) | 1.94*** (0.24) | 1.82*** (0.26) |

| | | | | |
|---|---|---|---|---|
| R2<br>Adjusted $R^2$<br>Durbin-Watson<br>Prob (F-Statistic)<br>Akaike Info Criterion | 0.95<br>0.95<br>0.17<br>0.00<br>1.32 | 0.98<br>0.98<br>0.56<br>0.00<br>0.26 | 0.92<br>0.93<br>0.52<br>0.00<br>- | 0.91<br>0.91<br>0.61<br>0.00<br>- |
| Hausman Test for Fixed effect model and Random effect model | 12.41<br><br>(0.05) | | | |

Note: *** Significant at 1 per cent level, ** Significant at 5 per cent level, * Significant at 10 per cent level

The results of the fixed effect model state that GDP, GDP per capita, Exchange rate, Inflation and Labour force are statistically significant at a five per cent level. The results indicate that the $R^2$ of the fixed effect model has high; however, Durbin Watson is low. The results of the random effect model show that GDP, GDP per capita, Exchange rate, Inflation and labour force are statistically significant at a five per cent level, and the Human development index is statistically insignificant. The results indicate that the $R^2$ of the fixed effect model has high; however, Durbin Watson is low. To find the appropriate model, the researcher used the Hausman test. According to the Hausman test result, the test statistic is greater than the table value. Hence, it can be concluded that the random effect model is appropriate. This study analyses all the methods of the panel data model to the robustness of parameter co-efficient in explaining the factors influencing international trade of the developing countries. The regression coefficients are used to describe the factors influencing international trade and the selected independent variables of the study.

The results of the panel ordinary least square model, GDP, GDP per capita, Inflation, and labour force are statistically significant at a 1 per cent level.

The study's exchange rate is statistically significant at a 5 per cent level. The results indicate that $R^2$ is high and low Durbin Watson at 0.61. The other remaining variables of the model are not statistically significant. According to these results, GDP, GDP per capita, exchange rate, Inflation, and labour force influence the international trade of developing countries.

## 5. LIMITATIONS OF THE STUDY

The conception of transnational trade has a wide range of aspects piecemeal from International Trade and Investment, including socio-artistic impact. However, it's necessary to assay the effect on the socio-artistic and profitable goods on the nations encyclopedically, if one wants to study the real impact of transnational trade. The present study uses secondary data. The study discusses the impact of transnational trade on transnational trade by comparing named developed and developing countries only. Hence, the limitations of secondary data, similar as inadequacy and lack of durability, are also applicable to this study. Piecemeal from the variables specified in the model, the present study does not include geographical position, distance, tariff, population and political stability. The country named is slightly grounded on the GNI per capita for all developed and developing countries. The data available from the same source at different ages and between sources differ greatly in several cases. The analysis of data, thus, is subject to this limitation. Hence the exploration work covered the period up to 2018.

## 6. CONCLUSION

The relationship between economic growth and international-trade is multifaceted concept. Developed countries have generally benefited from global trade, particularly exports, contributing to economic prosperity. For developing countries, the impact of international trade on economic growth varies, with some experiencing positive growth during the post-reform period. It underscores the need for context-specific strategies to harness the benefits of international trade. The factors influencing international trade were analyzed Lower-middle-income countries faced the challenge of multicollinearity among variables, necessitating a comprehensive approach to understanding trade dynamics. In upper-middle-income countries, the combination of GDP per capita, FDI, exchange rate, inflation, and labour force played significant roles in trade patterns.

## 7. SUGGESTIONS FOR FUTURE

As empirical studies on the impact of international trade on international trade abound, future researchers can synthesize these studies into general theoretical models using meta-analysis methodology. This approach can enable researchers to provide a more comprehensive view of the impact of international trade on international trade. Concepts such as the impact of international trade on economic growth are dynamic and multifaceted. Future research can focus on improving methodological approaches and selecting appropriate variables that can better capture the impact of international trade on trade and economic growth.

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