IMPACT OF INTERNATIONAL TRADE ON ECONOMIC GROWTH AND DEVELOPMENT WITH SPECIAL REFERENCE TO DEVELOPED, DEVELOPING AND UNDERDEVELOPED COUNTRY

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ABSTRACT

This study aims at finding the impact of International trade on economic growth and development of Underdeveloped Countries, Developing Countries and Developed countries. For a time horizon of around 10 years, this study tried to correlate the relationship between GDP, unemployment, Industrial Production, inequality and Volume of Trade using the simple econometric technique called Ordinary Least Squares (OLS). This study finds that the international trade provides positive impact on all the economies. But the degree of benefits differs to different countries due to their economic status. During the study period, the impact of international trade on the economic growth and development of developed countries was good even though they have been majorly hit at the times of global financial crisis and oscillations in the global economy. Regression results prove that the Developed countries are receiving high benefits than the developing and underdeveloped ones. So this study suggested that the developed countries should produce some sort of supportive measures to the developing and underdeveloped countries to bring equitable and fair trade in the global market.

Keywords: *Trade, Economic Development, Economic Growth, Volume of Trade, GDP, Ordinary Least Square Method*

JEL Classification Code*: F1, F63, N10, O47, O57*

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INTRODUCTION

International trade is the exchange of capital, goods, and services across international boundaries. This kind of trade gives rise to a global economy, in which prices, or supply and demand is affected by global actions. International trade permits us to expand our markets for both goods and services. As a result of international trade, the market contains greater rivalry and consequently more competitive prices, which brings a cheaper product home to the consumer. International trade provides opportunity to the consumers and countries to access goods and services which are not available in their own countries. Almost every kind of product can be found in the international market like food, clothes, spare parts, oil, jewellery, wine, stocks, currencies and water. Services are also traded like tourism, banking, consulting and transportation.

Imports and exports are accounted for in a country's current account in the balance of payments. The history of international trade chronicles notable events that have affected the trade between various countries. In the era before the rise of the nation state, the term 'international' trade cannot be literally applied, but simply means trade over long distances; the sort of movement in goods which would represent international trade in the modern world.

There are a number of motivations for countries across the globe to engage themselves in the international trading activities. Global trade allows wealthy countries to use their resources - whether labour, technology or capital - more efficiently. Because countries are endowed with different assets and natural resources (land, labour, capital and technology), some countries may produce the same good more efficiently and therefore sell it more cheaply than other countries. If a country cannot efficiently produce an item, it can obtain the item by trading with another country that can. This is known as specialization in international trade.

International trade not only results in increased efficiency but also allows countries to participate in a global economy, encouraging the opportunity of foreign direct investment (FDI), which is the amount of money that individuals invest into foreign companies and other assets. In theory, economies can therefore grow more efficiently and can more easily become competitive economic participants. As it opens up the opportunity for specialization and therefore more efficient use of resources, international trade has the potential to maximize a country's capacity to produce and acquire goods. Opponents of global free trade have argued, however, that international trade still allows for inefficiencies that leave developing nations compromised.

INTERNATIONAL TRADE: THE DEVELOPING COUNTRIES PERSPECTIVES

The modern economic trends are revealing that International Trade is helping the growth of Developing Nations. The openness to international trade has been lucrative to the developing countries for rapid economic growth. The adoption of open market policies, and decline in the concepts of trade protection in certain developing countries has helped them immensely in their rapid economic growth. International trade supports growth in a variety of ways. It makes the producers more efficient as they must contend with some of the best in the world. The open markets also provide access to some of the best technologies, which allow countries to focus on certain industries, rather than producing all on their own. One of the main reasons behind the fall of Soviet Union was the failure to adopt advanced technology, in order to compete with the other world class producers. India and China, at present are the best possible examples of developing countries in international trade even though other BRICS are also doing well.

The international trade facilitates growth & development, opening of agriculture markets leading to elimination of poverty and provides consumer benefits as more options to choose from. However, there have been certain problems being faced by the developing economies in international trade issues. One of them is a series of financial crisis since early 1990s - financial collapse in Mexico (1994-95), economic crisis in Southeast Asian countries (1997), crisis in Brazil (1999) etc. Also the late 2000s financial crises in United States & Euro zone debt crisis have weakened the global economic environment which have plunged the international trade activities in developing nations. India is presently facing huge current account deficit (CAD) problems amid weak demand in the global economy. Deep poverty in many developing countries also affects international trade. The restructuring of the transition economies still requires huge amount of capital from developed western economies & more liberal access of their exports in the western nations.

INTERNATIONAL TRADE: THE UNDERDEVELOPED COUNTRIES PERSPECTIVES

International trade is important for less developed countries as it is an important factor inducing their growth and also the statistics suggest that it frequently accounts for 20 percent or more of their total economy as against just 8 percent for a developed economy such as the United States. Indeed, trade is much more important to them than aid. Total exports of the less developed areas amounted to $31 billion in 1960, while the total flow of financial assistance from the industrial nations (including private foreign investment) amounted to $8 billion. Despite these facts, very little is being done either within the less developed nations

or through various aid programs to encourage their exports. Indeed, there is a disturbing trend toward policies which actively work in the opposite direction. The failure to stress the importance of international trade is serious, since unless these nations can expand it they cannot achieve their aspirations for accelerated development and for a rapid growth in living standards.

Consequently, it is pertinent to review the role which exports have played in the development process; examine critically the argument that a developing nation should now concentrate its efforts on local industrialization and play down its traditional trade in food and industrial raw materials and consider what could be done through commodity agreements or other policies to promote exports from the less developed nations. Experts agree that the protectionist measures taken during the global financial crisis have proved to be considerably less far-reaching than those taken during the Great Depression of the 1930s. Nevertheless, new trade restrictions have been established in the aftermath of the crisis, especially in member countries of the G20. Some of these measures hurt the least developed countries. In recent years there has been a significant change in the composition of the trade between the industrial and less developed nations. The United Kingdom, many continental European nations and Japan supported their industrial development by trading textiles, flour, shoes and other consumer products for such primary products as cotton, cocoa, sugar, hides, copper and jute. In such a trading system, it was difficult for local manufacturing to get under way in the less developed nations, though a start was made in the 1920s and 1930s.

INTERNATIONAL TRADE: THE DEVELOPED COUNTRIES PERSPECTIVES

The developed countries are major players in the world markets and have high volumes of trade across different goods and services. The greatest volume of trade occurs between such developed, capital-rich countries, especially between industrial leaders such as Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, the United Kingdom, and the United States. Generally, as a country matures economically, its participation in foreign trade grows more rapidly than its GDP. The EU affords an impressive example of the gains to be derived from freer trade between such countries. A major part of the increases in real income in EU countries is almost certainly attributable to the removal of trade barriers. The EU's formation cannot, however, be interpreted as reflecting an unqualified dedication to the free-trade principle, since EU countries maintain tariffs against goods from outside the Union. Trade protectionism is a serious problem in such nations these times.

However, there are certain differences in the patterns of trade among such developed countries as well. The United States, being a huge nation and rich in wide variety of resources can produce almost all of the products it needs. Whereas smaller developed nations like Switzerland & Austria having a relatively narrower range of resources available at their disposal can produce a much smaller range of products and import the rest of them. Even the industrially developed nations of European Union & England rely crucially on international trade. This is evident from the volume of trade as a percentage of GDP for these nations. This value is much larger for smaller developed nations compared to the United States.

INDIA AND THE INTERNATIONAL TRADE

Before the Liberalization the Indian economy is very poor compared with the other developed countries with high deficit in Balance of Payments (BOP) and no foreign reserves. With the Liberalization, privatization and Globalization of the economy and the government policies on exports and imports Many of the foreign countries which are members of the trading blocs like SAARC, WTO entered into India to do export and imports business trade with India. Trade agreements with its neighbours, East Asian countries, the United States and Preferential Trade Agreements with Afghanistan, Chile, and Mercosur boosted India's trade relations with global economies.

After the independence, India depended upon the foreign countries and used to import rice, sugar, wheat, Pulses, Maize, oil and other industrial allied products and bi-products .With the changing conditions in the business environment and the development of advance technology in science and technology there were drastic changes in the Indian economy. India is now producing the Agricultural products and Industrial products and bi-products and became self-sufficient and competing with the developed and developing countries in the world like Agriculture green revolution, white revolution, and Science and technology advancement in Pharmaceuticals industries and now with the development in services sector.

India International Trade reflects the growing prominence of Indian economy in the global market, in turn leading to an International economic. The development of the International economic environment has helped the other developing countries as well, improving the entire global economy. The present liberal trading policies taken by the Indian government have facilitated the establishment of an international economic order setting up a symbiotic relation between the developed and developing countries. The EXIM policy of the government products which were earlier in restricted list now became in the open general list and more over the number of products from restricted list has now brought down to somewhere around two hundred and place in open general licensing policy with this many of

the Indian firms entered into business with individual or with joint ventures to do exports and imports business. The liberal reforms launched and policies implemented so far have attracted many investors to participate in the India International Trade.

Major commodities imported by India comprises of cereals & preparation, fertilizers, edible oils, sugar, pulp and waste paper, paper board and manufacturing, news print, crude rubber, non-ferrous metals, metallic ferrous ores and metal scrap, iron and steel, petroleum crude and products, medical ,pharmacy products, chemicals etc. Major exported commodities for India are Tea, Coffee, Wheat, Sesame& Niger Seeds Groundnuts, Oil meals, Guar gum Meals, Shellac, Floriculture Products, Processed Foods, Mica, Coal, Gems & Jewellery, Sports Goods, Chemicals & Allied Products (except Residual Chemicals), Engineering Goods, Electronic Goods, Manmade Textiles, Made Ups etc., Jute Manufactures, Hand Made Carpets (excluding Silk), Cotton, Rice, Tobacco, Spices, Nuts & Seeds, Marine Products, Iron Ore, processed Minerals, Residual Chemicals and Allied Products, Project Goods, Readymade Garments, Cotton Yarn Fabrics Made ups, Wool & Woollen Manufactures, Coir, Handicrafts and Carpets.

With the liberalization and Privatisation and globalization of the Indian economy and the government policy on foreign trade, there are changes in the business environment, with the development of science and technology there is a drastic change in the Indian economy .The present liberal trading policies taken by the Indian government have facilitated the establishment of an international economic order setting up a symbiotic relation between the developed countries and India which has boosted economic growth through the means of Foreign Investment and has helped India secure prominent position in the World Economy. The foreign trade policy of the government of India made awareness in the manufactures and producers to do the international business trade of imports and exports .The Government on one side protecting the domestic market and allowing the imports of goods from the foreign countries. Export more products which are self-sufficient in the counted and import less from the foreign country and make the balance of payment low.

SIGNIFICANCE OF STUDY

International trade is the exchange of capital, goods, and services across international borders or territories. In most countries, such trade represents a significant share of gross domestic product (GDP). While international trade has been present throughout much of history (see Silk Road, Amber Road), it’s economic, social, and political importance has been on the rise in recent centuries.

The issues of international trade and economic growth have gained substantial importance with the introduction of trade liberalization policies in the developing nations across the world. International trade and its impact on economic growth crucially depend on globalization. As far as the impact of international trade on economic growth is concerned, the economists and policy makers of the developed and developing economies are divided into two separate groups.

One group of economists is of the view that international trade has brought about unfavourable changes in the economic and financial scenarios of the developing countries. According to them, the gains from trade have gone mostly to the developed nations of the world. Liberalization of trade policies, reduction of tariffs and globalization have adversely affected the industrial setups of the less developed and developing economies. As an aftermath of liberalization, majority of the infant industries in these nations have closed their operations. Many other industries that used to operate under government protection found it very difficult to compete with their global counterparts.

The other group of economists, which speaks in favour of globalization and international trade, come with a brighter view of the international trade and its impact on economic growth of the developing nations. According to them developing countries, which have followed trade liberalization policies, have experienced all the favourable effects of globalization and international trade. China and India are regarded as the trend-setters in this case.

However, even if we take the positive impacts of international trade, it is important to consider that international trade alone cannot bring about economic growth and prosperity in any country. There are many other factors like flexible trade policies, favourable macroeconomic scenario and political stability that need to be there to complement the gains from trade.

In conclusion it can be said that, international trade leads to economic growth provided the policy measures and economic infrastructure are accommodative enough to cope with the changes in social and financial scenario that result from it.

RESEARCH GAPS

- Analysis in a number of studies has been done only on a particular country or group of countries. So it is difficult to generalise the results based on their economic status.
- Most of the studies done in the past consider only a few variables during the analysis in which case it becomes really difficult to get the correct results and infer their implications.

- In this study, number of parameters have been considered for the economic growth and development of a nation through GDP, GDP growth rate, unemployment, industrial production growth rate, Gini coefficient in order to understand the implications of the results more accurately.

RESEARCH QUESTIONS

- What are the different trade parameters which can affect the behaviour of major macroeconomic variables related to economic growth and development of the nation?
- What is the impact of trade measures on the determination of various parameters of economic growth and development in Developed Countries (USA & UK), Developing Countries (India & Brazil) and Underdeveloped Countries (Bangladesh & Zambia)
- What is the relationship between trade measures and different parameters of economic growth and development in each of the above mentioned cases?

OBJECTIVES OF THE STUDY

- Identify the different trade parameters which affect economic growth and development through GDP, GDP growth rate, unemployment rate, industrial production growth rate and Gini coefficient.
- Analyze the impact of trade measures on the determination of economic growth and development of underdeveloped, developing and developed countries through GDP, GDP growth rate, unemployment rate and industrial production growth rate.
- To probe into the relationship between economic growth variables on economic development of underdeveloped, developing and developed countries.
- To suggest favourable policies that benefits economic growth and development of developing, developed and underdeveloped countries.

PERIOD OF STUDY

The period of study chosen for the analysis is from 1999-2011. This period is of significance to the study as it has witnessed huge international trade activities with the globalisation and world economies becoming more dependent on each other. The patterns of international trade have also changed during this period so it has affected economies across the globe.

TOOLS OF ANALYSIS

The study uses secondary data obtained from various published sources like government reports, database of international institutions etc. The analysis uses linear regression model and descriptive statistical methods like bar graphs, line graphs, and data table. These tools have been used to show the relationship between the relevant variables, changes in trends of growth and development variables which shows the effect of economic policies implemented.

METHODOLOGY

The analysis throughout the study has been done on the basis of Ordinary Least Squares (OLS) estimation. The macroeconomic variables such as GDP, Unemployment rate, Industrial Production Growth Rate, IIP, Gini coefficient have been regressed against the trade volumes and the results thus obtained, have been analysed. Here, the trade volumes are the explanatory variables and the other macroeconomic variables are the dependent variables.

LIMITATIONS

The major limitations of the study are mentioned below;

1. The study is limited only to the period of 1999-2011 for effect of Volume of Trade on economic growth & development parameters.
2. Only the countries USA, UK, Zambia, India, Brazil and Bangladesh have been considered as sample countries for the study. But these countries might not be representative countries for rest of the world to represent developed, underdeveloped or developing countries.
3. Parameters of growth such as GDP and unemployment rate have been considered which may not reflect changes in other parameters.
4. The study only relates the relevant variables and interprets the numerical results and does not go into causal analysis.
5. The study uses only Gretl software to apply econometrics for simple regression analysis and graphical analysis using excels only.

ANALYSIS

This study has been conducted to find out the impact of international trade on economic growth and development. Two countries have been taken in each of the category – developed, underdeveloped & developing. United States & United Kingdom for developed, Zambia and Bangladesh for underdeveloped, Brazil & India for developing have been studied.

Basic econometric technique of Ordinary Least Squares (OLS) has been used to analyse the relationship between economic growth & development parameters & international trade parameters. The explanatory variable used is Volume of Trade & dependent variables used

are GDP, Industrial Production growth rate, Unemployment rate & GDP growth rate, Gini coefficient, IIP.

The following simple 2-variable regression equation has been used for the analysis

$$\mathbf{Y} = \boldsymbol{\beta_0} + \boldsymbol{\beta_1}\mathbf{X} + \hat{\boldsymbol{u}}$$

Where, **Y** = dependent variable, **X** = explanatory variable

$\boldsymbol{\beta_0}$ = intercept coefficient, $\boldsymbol{\beta_1}$ = slope coefficient

$\hat{\boldsymbol{u}}$ = error term

For each country case, each of the dependent variable has been individually regressed against the explanatory variable to empirically obtain the relationship between the two and the numerical results obtained have been used to infer about the relationship. These relationships give the idea about how international trade has affected economic growth & development in each of the respective countries considered.

Unemployment Rate

The percentage of labour force that is unemployed in the economy and actively seeking employment and ready to work.

Gini coefficient

The Gini coefficient (also known as the Gini index or Gini ratio) is a measure of statistical dispersion developed by the Italian statistician and sociologist Corrado Gini. The Gini coefficient measures the inequality among values of a frequency distribution (for example levels of income). A Gini coefficient of zero expresses perfect equality, where all values are the same (for example, where everyone has an exactly equal income).

Per Capita GDP

Per capita income, also known as income per person, is the mean income of the people in an economic unit such as a country or city. It is calculated by taking a measure of all sources of income in the aggregate (such as GDP or Gross national income) and dividing it by the total population.

Index of Industrial Production

Index of Industrial Production (IIP) in simplest terms is an index which details out the growth of various sectors in an economy. E.g. Indian IIP will focus on sectors like mining, electricity and manufacturing.

Volume of Trade

It is a measure of total amount of trade activity in which a country is engaged i.e. total sum of all the imports & exports of a country.

1.1. Impact of Trade on the Economic growth and Development of Developed Nations

1.1.1. UNITED STATES OF AMERICA

The economy of the United States of America is the largest national economy in the world. The US is one the world's wealthiest nation with abundant natural resources, a well-developed infrastructure and high productivity. The United States of America, today, trades with a large number of nations and also the economic growth and the stability of the US greatly affects the economies of other nations all across the globe. Therefore, while analysing the impact of trade on the economic growth of the developed nations, United States of America becomes the obvious first choice.

Dependent Variable: Gross Domestic Product (GDP) (in billion $)

Independent Variable: Volume of Trade (VOT) (in billion $)

Model 1: OLS, using observations 1999-2011 (T = 13)
Dependent variable: GDP

	coefficient	std. error	t-ratio	p-value	
const	5160.72	924.373	5.583	0.0002	***
VOLUME_OF_TRADE	2.88046	0.361216	7.974	6.73e-06	***

Mean dependent var	12306.92	S.D. dependent var	2037.650
Sum squared resid	7347689	S.E. of regression	817.2954
R-squared	0.852528	Adjusted R-squared	0.839121
F(1, 11)	63.59027	P-value(F)	6.73e-06
Log-likelihood	-104.5384	Akaike criterion	213.0767
Schwarz criterion	214.2066	Hannan-Quinn	212.8445
rho	0.318453	Durbin-Watson	1.126656

The Value of R^2 comes out to be 0.85 (85%). This is a significant value for R-squared analysis and is greater than 80%. Hence, it can be concluded that the variations in GDP has been largely affected by the change in the Volume of Trade of USA.

The next tool used for the analysis is the coefficient, for which the value obtained is positive i.e. 2.88. This shows that the Volume of Trade have a positive effect on the nation's GDP. The probability of the coefficient is 0.0167 (1.67%), which shows that the probability of regression output, coming by chance is 1.67% which is fairly low.

Based on the OLS estimations, this study found that the positive relationship between the GDP and the Volume of Trade.

Dependent Variable: GDP Growth Rate (in %)

Independent Variable: Volume of Trade (in billion $)

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Model 1: OLS, using observations 1999-2011 (T = 13)
Dependent variable: GDP_growth_rate

                  coefficient   std. error    t-ratio   p-value
  ------------------------------------------------------------
  const             4.99691     2.19834       2.273    0.0441  **
  VOLUME_OF_TRADE  -0.00106070  0.000859041  -1.235    0.2426

Mean dependent var   2.365385   S.D. dependent var   1.985718
Sum squared resid    41.55705   S.E. of regression   1.943686
R-squared            0.121730   Adjusted R-squared   0.041887
F(1, 11)             1.524616   P-value(F)           0.242648
Log-likelihood      -25.99997   Akaike criterion     55.99993
Schwarz criterion    57.12983   Hannan-Quinn         55.76769
rho                 -0.088907   Durbin-Watson        2.137508
```

The value of R^2 comes out to be 0.1217 (12.17%). This is not a significant value as it even less than 20%. Hence, it can be concluded that the growth rate of GDP is not as significantly affected by the Volume of Trade as the GDP itself.

Also, the coefficient for the GDP growth rate comes out to be negative (-0.001). Due to the low value of coefficient, we can observe that the Volume of Trade has been negatively related to the GDP Growth Rate and it does not have any significant effect on the nations GDP. This empirical result can also be verified with the help of OLS method and statistical data. It is clearly seen from the data that there is no significant relationship between GDP Growth rate and Volume of Trade and the trend lines in both the graphs seem to be uncorrelated.

Dependent variable: Unemployment rate (in %)

Independent Variable: Volume of Trade (in billion $)

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Model 2: OLS, using observations 1999-2011 (T = 13)
Dependent variable: UNEMPLOYMENT

                  coefficient   std. error    t-ratio   p-value
  ------------------------------------------------------------
  const           0.966139      1.75884       0.5493    0.5938
  VOLUME_OF_TRADE 0.00208174    0.000687301   3.029     0.0115  **

Mean dependent var   6.130769   S.D. dependent var   2.016343
Sum squared resid    26.60182   S.E. of regression   1.555104
R-squared            0.454743   Adjusted R-squared   0.405174
F(1, 11)             9.173978   P-value(F)           0.011473
Log-likelihood      -23.10040   Akaike criterion     50.20080
Schwarz criterion    51.33070   Hannan-Quinn         49.96855
rho                  0.505652   Durbin-Watson        0.973415
```

Based on the analysis of unemployment rate, the coefficient of determination R^2 comes out to be 0.4547 (45.47%) which implies that the unemployment rate of USA has been moderately affected by the Volume of Trade.

Based on the estimations, the coefficient came out to be 0.002. The p-value for the test came out to be 0.0115 (1.15%) which is quite low. Therefore, it can be said that the chance or probability of chance is very low.

From the statistical data relating to unemployment rate and volume of trade, this study finds that there is no specific relation between the two parameters. This can be explained on the basis that the volume of trade is one of the indirect factors which affect the unemployment rate in a nation. There are many other variables which affect the unemployment rate more directly. Hence the volume of trade is not the significant on unemployment rate which can be verified by the low value of the coefficient of volume of trade (0.002).

Dependent variable: Industrial Production Growth Rate

Independent Variable: Volume of Trade

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Model 2: OLS, using observations 1999-2011 (T = 13)
Dependent variable: INDUSTRIAL_PRODUCTION_GROWTH_RA

                    coefficient    std. error   t-ratio    p-value
  ------------------------------------------------------------------
  const              1.22233       4.14321       0.2950    0.7735
  VOLUME_OF_TRADE   -5.24093e-05    0.00161904   -0.03237   0.9748

Mean dependent var    1.092308   S.D. dependent var    3.507483
Sum squared resid     147.6152   S.E. of regression    3.663272
R-squared             0.000095   Adjusted R-squared   -0.090805
F(1, 11)              0.001048   P-value(F)            0.974756
Log-likelihood       -34.23899   Akaike criterion      72.47797
Schwarz criterion     73.60787   Hannan-Quinn          72.24573
rho                   0.111308   Durbin-Watson         1.716627
```

The coefficient of determination R^2 for the industrial production growth rate came out to be 0.000095 which is very low. Hence, we can say that the industrial production growth rate is insignificantly affected by the volume of trade.

The coefficient for the volume of trade came out to be 0.035 which is also low supporting the fact that the industrial production and its growth rate are not significantly affected by the volume of trade.

Simultaneously, the statistical data and its trends also prove that there is an insignificant relationship between the growth rate of industrial production and volume of trade because the reason for the growth of the industrial production in an economy does not directly depend on the volume of trade. There are other parameters like investment etc. which affect the growth of industrial production in a country more directly

UNITED KINGDOM (UK)

The United Kingdom is the sixth largest economy in the world when measured by nominal GDP and the second largest economy in Europe. The UK has one of the most globalized economies. London is the world's largest financial centre alongside New York. The UK has a very diverse trade base, exports ranging from pharmaceuticals to military and imports ranging from manufactured goods to food, beverages and tobacco. Due to the large trade base and its ability to affect the global economy significantly, this study has chosen United Kingdom as the second developed nation in our analysis.

Dependent Variable: Gross Domestic Product (GDP) (in billion $)

Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 1: OLS, using observations 1-12
Dependent variable: GDP

             coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------
  const       594.216      171.193       3.471    0.0060   ***
  VOT           1.54699      0.203599    7.598    1.84e-05 ***

Mean dependent var   1859.000   S.D. dependent var   343.7449
Sum squared resid    191894.7   S.E. of regression   138.5261
R-squared            0.852362   Adjusted R-squared   0.837598
F(1, 10)             57.73330   P-value(F)           0.000018
Log-likelihood      -75.10603   Akaike criterion     154.2121
Schwarz criterion    155.1819   Hannan-Quinn         153.8530
```

The first tool used for the analysis is the coefficient of determination, R^2. The value of R-squared comes out to be 0.8523 (85.23%). This is quite a significant value which implies that the GDP of United Kingdom has been determined by volume of trade to a very large extent.

The next tool implemented is the coefficient of Volume of Trade. The coefficient comes out to be 1.547, which is a significant. The implication of this value of coefficient is that the GDP is significantly affected by the Volume of trade. Also the p-value comes out to be 0.012. This low p-value indicated that the probability that the results of this analysis are obtained by chance is very low.

Also, the p-value of F statistic comes out to be 0.000018 which is also very low signifying the fact that the probability obtained by chance is very low.

Dependent Variable: GDP Growth Rate

Independent Variable: Volume of Trade

```
Model 2: OLS, using observations 1-12
Dependent variable: GDP_Growth_Rate

             coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------
  const        3.26046      2.80398      1.163    0.2719
  VOT         -0.00221442   0.00333475  -0.6640   0.5217

Mean dependent var   1.450000   S.D. dependent var   2.210512
Sum squared resid    51.47996   S.E. of regression   2.268920
R-squared            0.042233   Adjusted R-squared  -0.053543
F(1, 10)             0.440956   P-value(F)           0.521677
Log-likelihood      -25.76498   Akaike criterion     55.52996
Schwarz criterion    56.49977   Hannan-Quinn         55.17090
```

The value of coefficient of determination, R-squared, comes out to be 0.0422 (4.22%). The value of R^2 is quite low and hence we can say that the GDP Growth of UK is not that significantly determined by the Volume of Trade.

The value of the coefficient of the Volume of Trade comes out to be negative (-0.0022). This implies that even though there is a negative relationship between GDP growth rate and Volume of trade but it is not that significant.

Dependent Variable: Unemployment Rate

Independent Variable: Volume of Trade

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Model 3: OLS, using observations 1-12
Dependent variable: Unemployment_Rate

             coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------
  const      3.59568       1.82388       1.971    0.0770  *
  VOT        0.00259425    0.00216912    1.196    0.2593

Mean dependent var   5.716667   S.D. dependent var   1.504438
Sum squared resid    21.78112   S.E. of regression   1.475843
R-squared            0.125139   Adjusted R-squared   0.037653
F(1, 10)             1.430389   P-value(F)           0.259289
Log-likelihood      -20.60408   Akaike criterion     45.20817
Schwarz criterion    46.17798   Hannan-Quinn         44.84911
```

From the empirical analysis, the coefficient of determination R-squared comes out to be to be 0.1251 (12.51%). This is quite a low value which implies that the unemployment rate is not significantly determined by the volume of trade.

The coefficient of volume of trade comes out to be 0.0026 which is also a low value implying that the unemployment rate is not the significantly affected by the volume of trade.

Dependent Variable : Industrial Production Growth Rate

Independent Variable: Volume of Trade

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Model 1: OLS, using observations 1-12
Dependent variable: INDUSTRIAL_PRODUCTION_GROWTH_RA

             coefficient    std. error   t-ratio   p-value
  ------------------------------------------------------------
  const      -0.524674      4.14979      -0.1264   0.9019
  VOT        -0.000805625   0.00493531   -0.1632   0.8736

Mean dependent var  -1.183333   S.D. dependent var   3.205913
Sum squared resid    112.7562   S.E. of regression   3.357919
R-squared            0.002658   Adjusted R-squared  -0.097077
F(1, 10)             0.026646   P-value(F)           0.873584
Log-likelihood      -30.46919   Akaike criterion     64.93838
Schwarz criterion    65.90820   Hannan-Quinn         64.57932
```

According to the Industrial production growth rate, the coefficient of determination R-squared is 0.0026588 which is less than even 1%. This implies that the volume of trade has not been a significant parameter behind the determination of industrial production growth rate in UK since 1999.

The coefficient of determination of volume of trade comes out to be negative (-0.008). This implies that there has been a negative relationship between the volume of trade and the industrial production growth rate but this relationship has not been a significant one.

Impact of Trade on the Economic Growth and Development of developing nations - Analysis for India

Indian economy is the tenth-largest economy in the world by nominal GDP and the third largest in terms of purchasing power parity (PPP). India is the nineteenth largest exporter and tenth largest importer in the world contributes lot to international trade. Economic growth rate slowed to around 5% for the 2012–13 fiscal year as against of 6.2% in the last year. It is to be noted that India's GDP grew by an amazing of 9.3% in 2010-11. So the growth rate has nearly shared in a span of just three years. The independence-era Indian economy (from 1947 to 1991) was based on a mixed economy uniting structures of capitalism and socialism, resulting in an inward-looking, interventionist policies and import-substituting economy that failed to take advantage of the post-war expansion of trade. This model contributed to widespread inefficiencies and corruption, and the failings of this system were due largely to its poor implementation. In 1991, India implemented liberal and free-market oriented principles and liberalized its economy to international trade under the guidance of Manmohan Singh, who then was the Finance Minister of India under the leadership of P.V. Narasimha Rao the then Prime Minister who eliminated License Raj a pre- and post-British Era

mechanism of strict government mechanism on setting up new manufacturing. Ensuing these strong economic reforms and a strong focus on developing domestic infrastructure such as the Golden Quadrilateral plan by Atal Bihari Vajpayee, the then Prime Minister, the country's economic growth developed at a rapid pace with very high rates of growth and large increases in the incomes of people. Due to the large contribution to international trade and emerging economy in the world, this study has chosen Indian economy as the first developing nation in the study.

Dependent Variable: Real GDP Growth rate

Independent Variable(s): Volume of Trade (VOT)

Model 1: OLS, using observations 1999-2010 (T = 12)
Dependent variable: gdpgr

	coefficient	std. error	t-ratio	p-value	
const	3.61441	3.02437	1.195	0.2663	
vot	0.00390836	0.00224796	1.739	0.1203	
iip	0.704260	0.316741	2.223	0.0569	*
unemp	-0.266262	0.397476	-0.6699	0.5218	

Mean dependent var	7.441667	S.D. dependent var	1.738577
Sum squared resid	17.43246	S.E. of regression	1.476163
R-squared	0.475702	Adjusted R-squared	0.279091
F(3, 8)	2.419504	P-value(F)	0.141326
Log-likelihood	-19.26782	Akaike criterion	46.53565
Schwarz criterion	48.47528	Hannan-Quinn	45.81753
rho	-0.159395	Durbin-Watson	2.290269

As it can be seen from the regression results, the value of R squared comes to be 0.475702. This is a reasonably good value which proves that the growth rate of GDP can be mainly attributed to the volume of trade.

Based on the value of Probability of F statistic, the value turn out to be 0.141326 which shows that there is a strong relationship between the growth rate of GDP and the volume of trade.

BRAZIL

The economy of Brazil is the world's seventh largest by nominal GDP. Brazil has moderately free markets and an inward-oriented economy. Its economy is the largest in Latin American nations and the second largest in the western hemisphere. Brazil is one of the fastest-growing major economies in the world with an average annual GDP growth rate of over 5 percent. In Brazilian reals, its GDP was estimated at R$ 4.403 trillion in 2013($2.223 trillion USD). The Brazilian economy has been predicted to become one of the five largest economies in the world in the decades to come. Brazil is a member of diverse economic organizations, such as Mercosur, Unasul, G8+5, G20, WTO, and the Cairns Group. Its trade partner’s number in the

hundreds, with 60 percent of exports mostly of manufactured or semi manufactured goods. Brazil's main trade partners in 2008 were: Mercosul and Latin America (25.9 percent of trade), EU (23.4 percent), Asia (18.9 percent), the United States (14.0 percent), and others (17.8 percent).

According to the World Economic Forum, Brazil was the top country in upward evolution of competitiveness in 2009, gaining eight positions among other countries, overcoming Russia for the first time, and partially closing the competitiveness gap with India and China among the BRIC economies. Important steps taken since the 1990s toward fiscal sustainability, as well as measures taken to liberalize and open the economy, have significantly boosted the country's competitiveness fundamentals, providing a better environment for private-sector development. The owner of a sophisticated technological sector, Brazil develops projects that range from submarines to aircraft and is involved in space research: the country possesses a satellite launching centre and was the only country in the Southern Hemisphere to integrate the team responsible for the construction of the International Space Station (ISS). It is also a pioneer in many fields, including ethanol production.

Brazil, together with Mexico, has been at the forefront of the Latin American multinationals phenomenon by which, thanks to superior technology and organization, local companies have successfully turned global. These multinationals have made this transition notably by investing massively abroad, in the region and beyond, and thus realizing an increasing portion of their revenues internationally. Brazil is also a pioneer in the fields of deep water oil research from where 73 percent of its reserves are extracted. According to government statistics, Brazil was the first capitalist country to bring together the ten largest car assembly companies inside its national territory. The annual Brazil Investment Summit takes place in São Paulo and is the largest gathering in Brazil of international investment experts covering opportunities in alternative vehicles, infrastructure, and advanced trading strategies.

Dependent Variable: Real GDP Growth rate Independent Variable(s): Volume of Trade (VOT) (in billion $)

Industrial Production Growth Rate

Unemployment Rate

```
Model 1: OLS, using observations 1999-2011 (T = 13)
Dependent variable: gdpgr

             coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------
  const       1.27011      1.86660       0.6804   0.5133
  vot         0.00482818   0.00266580    1.811    0.1035
  iip         0.466796     0.0694739     6.719    8.66e-05 ***
  unemp      -0.0658931    0.176929     -0.3724   0.7182

Mean dependent var   3.023077   S.D. dependent var   2.378078
Sum squared resid    9.413482   S.E. of regression   1.022713
R-squared            0.861287   Adjusted R-squared   0.815050
F(3, 9)              18.62741   P-value(F)           0.000336
Log-likelihood      -16.34796   Akaike criterion     40.69592
Schwarz criterion    42.95572   Hannan-Quinn         40.23143
rho                  0.055280   Durbin-Watson        1.790158
```

As it can be seen from the regression results, the value of R squared comes to be 0.861287. This is very high value which proves that the growth rate of GDP can be strongly attributed to the volume of trade.

Based on the value of Probability of F statistic, the value turn out to be 0.000336. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is very low, we can say that the regression model is perfectly specified and that the changes in per capita GDP may be totally attributed to the changes in volumes of trade.

BANGLADESH

In recent times, the economy of Bangladesh is also showing some improvements in its GDP growth and international trade. Its per capita income in 2010 was estimated to US$1,700. Bangladesh is deriving more than half of its GDP from the service sector. Nearly 50 percent of their labour force is directly depends on agriculture sector.

Main source of their foreign exchange is through the exports of textiles and garments. Pharmaceuticals and Shipbuilding have become a major strength of growth, while the re-emerging sector is jute with growing international demand for green fibres. Payments from Bangladeshis employed overseas, mostly in the Middle East, are another major source of foreign exchange earnings. Other significant export sectors include ceramics, cement, fertilizer, construction materials, fish and seafood, cane and leather products. Bangladesh has also made major strides in its HDI.

Gross Domestic Product (GDP)

Dependent Variable: Gross Domestic Product (GDP) (in billion $)

Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 2: OLS, using observations 1999-2011 (T = 13)
Dependent variable: gdp_per_capita_

                    coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------------
  const              1782.83       203.546       8.759    2.73e-06 ***
  Volume_of_Trade     -0.901680      7.69764    -0.1171   0.9089

Mean dependent var    1760.769   S.D. dependent var    266.8165
Sum squared resid     853228.0   S.E. of regression    278.5071
R-squared             0.001246   Adjusted R-squared   -0.089550
F(1, 11)              0.013721   P-value(F)            0.908863
Log-likelihood       -90.54311   Akaike criterion      185.0862
Schwarz criterion     186.2161   Hannan-Quinn          184.8540
rho                   0.341626   Durbin-Watson         1.201702
```

Theoretically, the study finds that the impact of per capita GDP on the volume of trade is a positive one. As trade increases, the income of the citizens and the net output of the nation are expected to increase.

Statistical data from 2000 to 2011 shows that there is no significant relationship was established. The R-squared value is observed to be very low, which shows the poor fit of the curve.

It is seen from the value of probability (F-statistic), it turns out to be 0.908863. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is high, we can say that the regression model is not perfectly specified and that the changes in per capita GDP may not be totally attributed to the changes in volumes of trade.

Industrial Production Growth Rate

Dependent Variable: Industrial Production Growth Rate

Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 3: OLS, using observations 1999-2011 (T = 13)
Dependent variable: industrial_prod

                  coefficient   std. error   t-ratio   p-value
  ------------------------------------------------------------
  const             3.67008      1.28428      2.858    0.0156  **
  Volume_of_Trade   0.0895765    0.0485684    1.844    0.0922  *

Mean dependent var   5.861538   S.D. dependent var   1.925071
Sum squared resid    33.96700   S.E. of regression   1.757245
R-squared            0.236195   Adjusted R-squared   0.166758
F(1, 11)             3.401581   P-value(F)           0.092211
Log-likelihood      -24.68906   Akaike criterion     53.37812
Schwarz criterion    54.50802   Hannan-Quinn         53.14588
rho                  0.331241   Durbin-Watson        1.323171
```

As can be seen from the regression results, the value of R-squared comes to 0.236 (or 23.6%). This is a relatively small value of R-squared but it can still explain that the growth in industrial production can be majorly attributed to the increase in volume of trade.

Considering the value of prob(F-statistic), it turns out to be 0.092211. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is low, we can say that the regression model is correctly specified and that the growth in industrial production can be majorly attributed to the increase in volume of trade.

As it can be seen from the values of the coefficients, the positive value can be attributed to the fact that the volume of trade has a positive effect on a nation's industrial production.

Unemployment Rate

Dependent Variable: Unemployment Rate

Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 4: OLS, using observations 1999-2011 (T = 13)
Dependent variable: unemployment_ra

                  coefficient   std. error   t-ratio   p-value
  ------------------------------------------------------------
  const             57.2838      7.04876      8.127    5.62e-06 ***
  Volume_of_Trade   -1.44633     0.266568    -5.426    0.0002   ***

Mean dependent var   21.90000   S.D. dependent var   17.70490
Sum squared resid    1023.210   S.E. of regression   9.644641
R-squared            0.727983   Adjusted R-squared   0.703254
F(1, 11)             29.43858   P-value(F)           0.000208
Log-likelihood      -46.82358   Akaike criterion     97.64716
Schwarz criterion    98.77706   Hannan-Quinn         97.41492
rho                  0.276261   Durbin-Watson        1.385968
```

As it can be seen from the regression results, the value of R-squared comes to 0.727 (or 72.7%). This is a relatively very high value of R-squared and hence the variations in unemployment rate can be majorly attributed to the increase in volume of trade.

Based on the value of prob(F-statistic), it turns out to be 0.000208. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is very low, we can say that the regression model is correctly specified and that the changes in unemployment rate can be attributed to changes in volume of trade.

As it can be seen from the values of the coefficients, the negative value can be attributed to the fact that volume of trade has a negative effect on a nation's unemployment rate. The probability of the coefficient is 0.0002 which shows that the probability of the regression output being a chance result is less than 0.02% which is a very low value and hence we can say that the model correctly regresses the variables.

Gini Index

Dependent Variable: Gini Index

Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 5: OLS, using observations 1999-2011 (T = 4)
Missing or incomplete observations dropped: 9
Dependent variable: gini_index

                  coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------------
  const            34.7040       0.337204     102.9     9.44e-05 ***
  Volume_of_Trade  -0.0745217    0.0105623     -7.055   0.0195   **

Mean dependent var   32.50000   S.D. dependent var   1.055146
Sum squared resid    0.129008   S.E. of regression   0.253977
R-squared            0.961375   Adjusted R-squared   0.942062
F(1, 2)              49.77957   P-value(F)           0.019503
Log-likelihood       1.192590   Akaike criterion     1.614820
Schwarz criterion    0.387409   Hannan-Quinn        -1.078643
```

From the regression results, we obtain the value of R-squared as 0.961375 (or 96.1%). This is a very high value of R-squared and hence the variations in Gini Index can be majorly attributed to the increase in volume of trade.

Coming to the value of prob(F-statistic), it turns out to be 0.019503. As we know, the smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is low enough, we can say that the regression model is correctly specified and that the changes in Gini Index can be attributed to changes in volume of trade, but other factors may also affect its value.

From the values of the coefficients, the negative value can be attributed to the fact that volume of trade has a negative effect on a nation's Gini Index, i.e. a measure of inequality.

ZAMBIA

Zambia is a small country located in Sub-Saharan Africa. About one-half of the country's 11.5 million people are concentrated in a few urban zones strung along the major transportation corridors, while rural areas are under-populated. Unemployment and underemployment are serious problems. The low GDP per capita places the country among the world's poorest nations. Social indicators continue to decline, particularly in measurements of life expectancy at birth (about 50 years) and maternal and infant mortality (85 per 1,000 live births). The high population growth rate of 2.3% per annum makes it difficult for per capita income to increase. The country's rate of economic growth cannot support rapid population growth or the strain which HIV/AIDS-related issues (i.e., rising medical costs, street children, and decline in worker productivity) places on government resources.

Gross Domestic Product (GDP)

Dependent Variable: Gross Domestic Product (GDP) (in billion $)

Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 1: OLS, using observations 1999-2011 (T = 13)
Dependent variable: gdp_per_capita_

                  coefficient   std. error   t-ratio   p-value
  ---------------------------------------------------------------
  const             764.707       43.3509     17.64    2.05e-09 ***
  imports_exports    64.8925       6.25568    10.37    5.12e-07 ***

Mean dependent var   1116.923   S.D. dependent var   305.5155
Sum squared resid    103880.0   S.E. of regression   97.17836
R-squared            0.907256   Adjusted R-squared   0.898825
F(1, 11)             107.6066   P-value(F)           5.12e-07
Log-likelihood      -76.85547   Akaike criterion     157.7109
Schwarz criterion    158.8408   Hannan-Quinn         157.4787
rho                  0.494199   Durbin-Watson        1.005176
```

Based on the estimations from the regression results, the value of R-squared comes to 0.907256 (or 90.7%). This is a very high value of R-squared and it shows that the growth in GDP can be majorly attributed to the increase in volume of trade.

Considering the value of prob(F-statistic), it turns out to be very low. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is so low, we can say that the regression model is correctly specified and that the growth in GDP can be majorly attributed to the increase in volume of trade.

As it can be seen from the values of the coefficients, the positive value can be attributed to the fact that the volume of trade has a positive effect on a nation's per capita GDP.

Industrial Production Growth Rate

Dependent Variable: Industrial Production Growth Rate Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 2: OLS, using observations 1999-2011 (T = 13)
Dependent variable: industrial_prod

                  coefficient   std. error   t-ratio   p-value
  ------------------------------------------------------------
  const             4.10730      1.60260      2.563    0.0264  **
  imports_exports   0.456421     0.231260     1.974    0.0741  *

Mean dependent var   6.584615   S.D. dependent var   4.002467
Sum squared resid    141.9655   S.E. of regression   3.592486
R-squared            0.261507   Adjusted R-squared   0.194372
F(1, 11)             3.895206   P-value(F)           0.074071
Log-likelihood      -33.98533   Akaike criterion     71.97066
Schwarz criterion    73.10056   Hannan-Quinn         71.73841
rho                 -0.031556   Durbin-Watson        1.443625
```

From the regression results, the value of R-squared comes to 0.261507 (or 26.150%). This is a relatively small value of R-squared but it can still explain that the growth in industrial production can be majorly attributed to the increase in volume of trade.

Considering the value of prob(F-statistic), it turns out to be 0.074071. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is high, we can say that the regression model is incorrectly specified and that the growth in industrial production cannot be majorly attributed to the increase in volume of trade, but there are other factors affecting its value too.

As it can be seen from the values of the coefficients, the positive value can be attributed to the fact that the volume of trade has a positive effect on a nation's industrial production.

Unemployment Rate Dependent Variable: Unemployment Rate Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 3: OLS, using observations 1999-2011 (T = 13)
Dependent variable: unemployment

                  coefficient   std. error   t-ratio    p-value
  ------------------------------------------------------------
  const             16.0829      0.656667     24.49     6.02e-011 ***
  imports_exports   -0.137863    0.0947593    -1.455    0.1736

Mean dependent var   15.33462   S.D. dependent var   1.538997
Sum squared resid    23.83557   S.E. of regression   1.472029
R-squared            0.161373   Adjusted R-squared   0.085134
F(1, 11)             2.116672   P-value(F)           0.173638
Log-likelihood      -22.38669   Akaike criterion     48.77339
Schwarz criterion    49.90329   Hannan-Quinn         48.54114
rho                  0.516121   Durbin-Watson        0.512431
```

As it can be seen from the regression results, the value of R-squared comes to 0.161 (or 16.1%). This is a relatively low value of R-squared and hence the variations in unemployment rate cannot be majorly attributed to the increase in volume of trade.

Based on the value of probability (F-statistic), it turns out to be 0.085134. The smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is relatively high, we can say that the regression model is a bit incorrectly specified and that the changes in unemployment rate cannot be solely be attributed to changes in volume of trade.

As it can be seen from the values of the coefficients, the negative value can be attributed to the fact that the volume of trade has a negative effect on a nation's unemployment rate.

Gini Index Dependent Variable: Gini Index Independent Variable: Volume of Trade (VOT) (in billion $)

```
Model 1: OLS, using observations 1999-2011 (T = 4)
Missing or incomplete observations dropped: 9
Dependent variable: GINI

                  coefficient   std. error   t-ratio   p-value
  ------------------------------------------------------------
  const             54.3389       2.34461     23.18     0.0019  ***
  Volume_of_Trade   -1.17433      0.903576    -1.300    0.3233

Mean dependent var   51.45000   S.D. dependent var   1.654287
Sum squared resid    4.450956   S.E. of regression   1.491804
R-squared            0.457862   Adjusted R-squared   0.186792
F(1, 2)              1.689095   P-value(F)           0.323345
Log-likelihood      -5.889403   Akaike criterion     15.77881
Schwarz criterion    14.55140   Hannan-Quinn         13.08534
```

From the regression results, we obtain the value of R-squared as 0.457862 (or 45.78%). This is not a very high value of R-squared and hence the variations in Gini Index are partly attributed to the increase in volume of trade.

Consider the value of prob(F-statistic), it turns out to be 0.186792. As we know, the smaller the value of this statistic, the more accurate the model is and the lesser the chance that the output from the model is by chance. Since the value is relatively high, we can say that the regression model is incorrectly specified and that the changes in Gini Index cannot be attributed only to changes in volume of trade, many other factors may also affect its value.

As it can be seen from the values of the coefficients, the negative value can be attributed to the fact that volume of trade has a negative effect on a nation's Gini Index, i.e. a measure of inequality.

CONCLUSION

This study has forged link between foreign trade, GDP, unemployment etc. This study found that the international trade provides mixed implications. The obtained results indicate that the international trade have positive effects on all the economies. But the degree of benefits differs for various countries due to their economic status. Developed countries received high benefits while compared to developing as well as underdeveloped countries.

During the study period, the impact of international trade on the economic growth and development of developed countries was good even they have been majorly hit at the times of global financial crisis and oscillations in the global economy.

Many of the "less" developed countries have gone through major trade liberalization policies in the recent years, while fighting their internal problems such as failing governments, military coups, etc. Based on the regression model, this study finds that there is a positive relation between increases in trade in the recent years leading to rapid growth in per capita GDP, and also the study finds positive results related to other development factors such as IIP and Gini-coefficient. In the case of unemployment, it leads to ambiguous results as these countries are often hit by various external factors like global financial crisis, world GDP and the growth rate of world trade.

In the case of developing countries like India and Brazil, opening up of their economy and liberalizing trade policies has been nothing short of a boon, as the countries are some of the fastest growing countries in the world, catching up with the super-powers. The results of our analysis, has mostly been positive as these countries because of FDI and foreign trade have face multi-faceted growth in almost all the sectors.

Finally, this study suggested that the international trade can be expanded through full-fledged liberalisational measures by the respective economies. If they did so, there will be a positive impact on the growth of industrial sectors as well as their allied sectors in the respective domestic economies. This study also suggested that the developed countries should produce some sort of supportive measures to the developing and underdeveloped countries to bring equitable and fair trade in the global market.

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