
A STUDY ON IMPACT OF FOREIGN TRADE IN GDP OF NEPAL

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Abstract

Foreign trade is a major source of economic revenue for any nation. This study investigates the linkage between economic growth with import and export. The objectives of study are to study the growth trend of foreign trade and to examine the relationship between exports, imports and economy growth of Nepal. The ARDL model has been used to examine the relationship between foreign trade and economic growth of Nepal. The analysis is based on data for the period of 1994/95 to 2018/19. The empirical evidence indicates that there is a stable long run relation of economic growth with foreign trade.

Key Words: *Foreign Trade, Export, Import, GDP*

Introduction

Foreign trade is the exchange of capital, goods, and services across international borders or territories. Increasing international trade is crucial to continuance of globalization. It is a major source of economic revenue for any nation that is considered a world power. It represents a significant share of Gross Domestic Product (GDP). J. L. Hanson viewed, "An exchange of various specialized commodities and services rendered among the corresponding countries is known as foreign trade."

Nepal is a landlocked country, surrounded by India on three sides and by Tibet in the north. Historically, international trade before 1950s was with these countries. Until the 1950s, 90 percent of Nepal's trade was with its giant neighbor, India. But after 1951 AD, Nepal's trade relation expanded with many other countries of the world like Japan, USA, Germany, Malaysia, Singapore,, Thailand, Kuwait, France, Bangladesh, Spain etc. Nepal's foreign trade is rapidly increasing but with the increase in the total volume of trade, the trade deficit is also increasing (Kafle, 2017).

Although trade policies were modified significantly after the change of government, the country seems keen to open its economy further to foreign trade and develop its exports. In 2018, foreign trade represented of 55 percent of GDP (World Bank report, 2018) its highest share in 17 years. The average applied tariff rate is 12.6 percent and companies that export more than 90 percent of their goods are exempt from customs duties, excise duties, and sales taxes. The country is a member of WTO. However, significant barriers to the development of trade persist, including lack of skilled labour, advanced technology, and geographic accessibility.

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Problem and Issues

The growing and continued mismatch between import and export have resulted in an alarming level of trade deficit in Nepal. Over the years, export has almost been snagged, and the import skyrocketed (NPC, 2016).

High cost of production complied with poor access to international market are some of the major constraints to expand Nepal's export base.

Objectives

The general objective of the study is to Analyze Nepalese foreign trade. The specific objectives of the study are as follows:

1. To study the growth and trend of foreign trade
2. To analyze the impact of foreign trade on real GDP of Nepal

Scope and Limitations

Foreign trade has significant role in the development of different sectors of the economy. The study provides the idea about trade. The study helps for the researcher, planners and others to decide about trade expansion.

The main focus of the study is to view the trade performance of Nepal. However, the study has some limitations, which are as follows:

- a. The study uses secondary data. So. It makes no efforts to conduct field survey.
- b. The study includes only two independent variables.
- c. The study considers the real GDP.

Literature Review

Many writers have written different kinds of books, journal articles etc. about foreign trade. There are some of the notable studied previously conducted in the area of foreign trade.

Busse and Koniger (2012) stated that foreign trade has been found effective in fostering economic growth in developing countries. By using econometric model, it concluded the positive relationship between trade and growth.

Babaji et al (2015) viewed that long run relationship estimation result shows a positive and significant relationship between exports and domestic investment with GDP. By using ARDL model the researchers found the conclusion.

Sharma and Bhand (2005) believed that exports growth leads to economic growth. The study assumed GDP, PCI and growth rate of GDP are the major development indices and analyzed the relationship between trade and economic growth.

Acharya (2019) using descriptive method found that very low export performance of Nepal is creating the problem of rapidly increasing trade deficit. Nepal is also unable to diversify its trade in terms of countries and commodities.

Kafle (2017) examined the trends in Nepalese foreign trade and found major reasons for trade deficit. He believed that foreign trade plays a very important role in the economic development of a country. It promotes economic development by improving competitive capacity, expanding market, and providing modern technology and machineries for industrial and agricultural sector.

Research Methodology

Research Design and Source of Data

This study is designed to assess the increasing volume of foreign trade and GDP growth in Nepal. Most of the data has been taken from already produced data in various publications. The descriptive and analytical research design are used for the study.

The analysis is mainly based on published materials and records of various offices. The appropriate data are collected from Ministry of finance (MoF), National Planning Commission (NPC), and Central Bureau of Statistics (CBS). Besides this, information has been collected from various articles, journals, magazines, newspapers, internet, five year plan book etc. the annual time series data from 1974\75 to 2018\19 have been used in this study.

Model Specification

The relationship among import, export and economic growth expressed in the form of mathematical equation. Due consideration has been given to the model applied by Sayed et al (2020) so as to click the relationship between foreign trade and economic growth. The regression equation for model is:

Economic Growth (EG) = f (Export, Import)

$$RGDP = \beta_1 + \beta_2Exp + \beta_3Imp + e_1$$

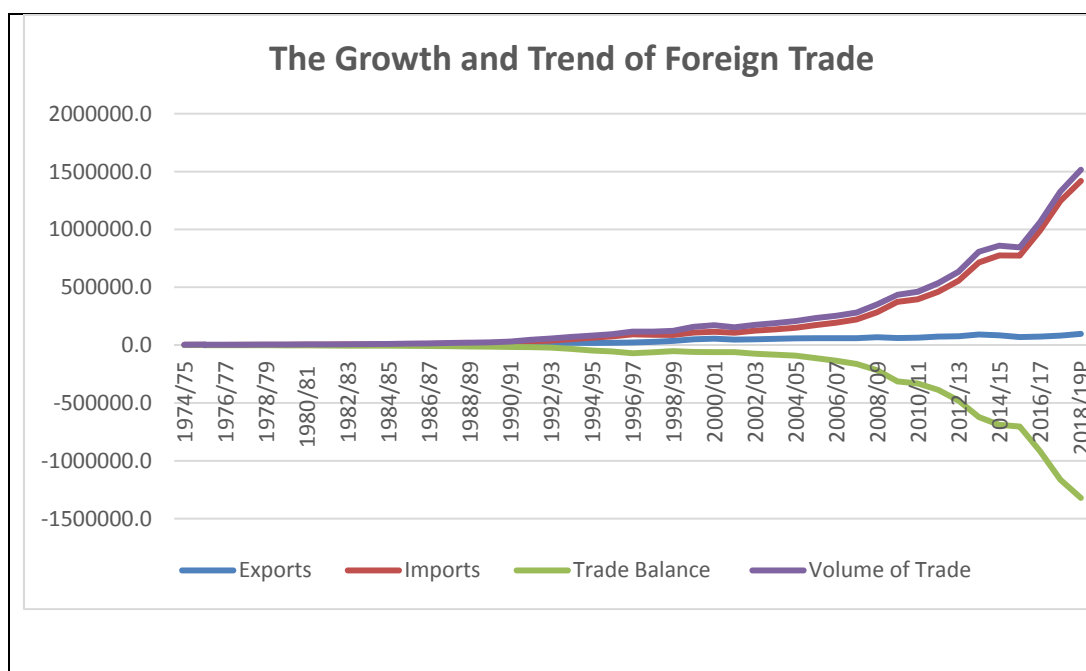
RGDP implies Real Gross Domestic Product that explains the economic growth and used as dependent variable in this study. Exp. Is denoted for the explanation of the exports. Imp. Is used as the Import. Export and Import are used as the dependent variables. β_1 , β_2 , and β_3 are coefficient parameters of the model. e_1 is the error term.

Results and Findings

Growth and trend of foreign trade in Nepal

Before 1951 AD, Nepal's trade relation was only with India and Tibet. The decline of Rana regime in 1951AD was the turning point of Nepalese foreign trade. After this, foreign trade of Nepal has run systematically with many countries of the world and the volume of trade has also increased (NPC Report, 2016). The growth and trend of foreign trade can be presented by the help of following figure:

Fig-1: Growth and Trend of Foreign Trade



The figure 1 shows that Nepal's export, import, the volume of trade, and trade deficit are increasing rapidly. But the rate of increase in imports is higher than the rate of increase in export. Consequently, Nepal's trade deficit is very high and increasing rapidly every year.

Effect of Foreign Trade on Economic Growth of Nepal

For the positive relationship between trade and economic growth, there must be positive relationship between trade and growth. To prove this relation, the basic starting point is the examination of a relationship between GDP and foreign trade.

Augmented Dickey- fuller Test

To confirm the presence of the stationarity between the variables, the Augmented Dickey- Fuller (ADF) test has been performed. It is tasted to check the stationarity of the variables at level and

first difference by using e-views 10 data software. The result of the ADF test is presented in the table.

Table-1: Augmented Dickey-Fuller (ADF) Unit Root Test for Stationary

Variable	At Level		At First Difference	
	t-Statistics	P-Value	t-Statistics	P-Value
LNGDP	0.965464	0.9955	-7.47021	0.0000***
LNEXPORT	-1.42377	0.5621	-5.50375	0.0000***
LNIMPORT	-0.44975	0.8912	-2.58149	0.1049*

Note: *** and * indicate significant at 1 percent and 10 percent level

The result of the ADF test as shown in the table 1 explains that all the three variables (LNGDP, LNEXPORT and LNIMPORT) are not stationary at level. So. The ordinary differencing has been used in the study. Hence, these three variables are differenced. We conclude that the variables are stationary. Hence, the three variables become stationary after first difference so that integrated of order one I(1).

**Table- 2: Estimated Long Run Coefficient Using ARDL Approach
(Dependent variable is LNGDP)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNEXPORTS	-0.080823	0.054673	-1.478294	0.1483
LNIMPORTS	0.3823	0.052162	7.329042	0.0000

$$EC = LR GDP - (-0.0808 * LEXPORTS + 0.3823 * LNIMPORTS)$$

The long run estimate of the model specification is presented in table 2. The result indicates that LNEXPORT is significant at 1 percent level. This implies that the level of export is an important factor in determining long run economic growth of the country.

ARDL Bound Test

The ARDL bound test is performed to check the cointegration between GDP and foreign trade. The result is presented in the following table:

Table- 3: Testing for the Existence of Level Relationship among Variables in the ARDL Model

No. of regressors	Value of Statistics
Computed F-Statistics	5.679414
5% Critical Value	
Lower Bound Value	3.790
Upper Bound Value	4.850

From the table 3, the calculated F- statistics is 5.679414. This value is above the upper bound critical value of 4.850 at 5 percent significant level. This implies that GDP is cointegrated with export and import. The result also implies that there exists a long run relationship between the variables.

Error Correction Model (ECM)

The error correction model (ECM) is a time series regression model that is based on the behavioral assumption that two or more time series exhibit an equilibrium relationship that determines both short run and long run behavior. The result of ECM is presented in the following table:

Table- 4: Estimated Long-run Coefficient: ARDL (3, 1, 0) Selected by Schwarz Bayesian Crioterion

Variable	Coefficient	Standard error	t-Statistics
ECM	-0.13721	0.03233	-4.24404

From the table- 4, the error correction coefficient of -0.13721 (P value = 0.0002) is significant and suggests a moderate speed of convergent to equilibrium.

Table- 5: Descriptive Statistics Result (Normality Test)

Statistics	Result
Mean	1.58e-15
Median	9.86e-05
Maximum	0.022674
Minimum	-0.041332
Std. Dev.	0.014537
Skewness	0.553493
Kurtosis	3.374563
Jarque-Bera	2.389999
Probability	0.302704

From the table- 5, the skewness value is 0.55 and the kurtosis value is 3.374563 that indicates the variables are normally distributed. The standard deviation is 0.014537. The probability is 0.302704 which indicates that there is no serial correlation up to 2 lags.

Summary and Conclusion

The study investigated the linkage between economic growth with export and import. The objectives of this study were to study the growth trend of foreign trade and to examine the relationship between export, import and economic growth of Nepal. For this purpose, the

empirical analysis was based on data for the period of 1994\95to 2018\19.The ADF was performed to checke the stationarity of the variables. The ARDL approach was employed to analyze the long run relationship.

The empirical evidence indicates that there is a stable long run relation of economic growth with export and import. The result showed that export has a positive effect on economic growth indicating if the country is able to produce more goods and exports in the foreign market, the higher the economic growth would be. To get the reliable and valid result, this is to ascertain goodness of fit, the ARDL model, diagnostic test was also conducted in which diagnostic test examined the normality.

Since the study evidenced foreign trade contributes economic growth, it is recommended that the government and policy makers should pursue the policies that will promote production and export in the country.

References

- Acharya, K. R. (2009). Nepalese foreign trade, growth, competition and direction. *NCC Journal*, 4(1), 91-96.
- Babaji, A., Abubakar, & Sheru, K. K. (2015). Impact of international trade on economic growth of India. *Annamalai Journal of Management*, ISSN- 0974-0406, 30-35.
- Busse, M. and Kaniger, J. (2012). Trade and economic growth: A re-examination of the empirical evidence. Retrieved from [htt\www.hwwi.org](http://www.hwwi.org).
- Central Bureau of Statistics (2018). *CBS Report*. Government of Nepal, Kathmandu, Nepal.
- Chhatauro, M. &Khobi, H. (2018). The impact of trade liberalization of economic growth in Switzerland. Retrieved from [htt\www.mpra.ub.unimuenchen.de](http://www.mpra.ub.unimuenchen.de).
- Kafle, A. (2017). Nepal's foreign trade: Present trends. *IJLEMR*, 2(11).
- Ministry of Finance (2019). *Economic Survey Kathmandu*: Ministry of Finance, GON
- Nepal International Trade, Information about International Trade. Retrieved from [http\www.nepalsencyclopedia.com](http://www.nepalsencyclopedia.com).
- National Planning Commission (2016). *Fourteenth Three Year Plan Documents*, Government of Nepal, Kathmandu, Nepal.
- Shah, S.A, Ahmad, N., Aslam, W & Subhani, B. H. (2020). Relationship among export, import, physical capital and economic growth in Pakistan: An econometric analysis. *Journal of Quantitative Methods*, 4(1), 99-119.
- Sharma, O. & Bhand, R. (2005). Foreign trade and its effect on Nepalese economic development. *Journal of Nepalese Business Studies*. 2(1), 13-32.