



A STUDY ON FACTORS AFFECTING THE EXPORTS PERFORMANCE IN INDIA**Anil Kumar¹ and Satish Kumar²**¹M.Phil Scholar , Department of Commerce , K.U.K (Haryana) , India.² Assistant Professor , Ganga Degree College , Dhabi Gujran (Khanori), Punjab India.**ABSTRACT**

In an economy, exports performance is of crucial importance because it determinesthe level of national income and employment. Export is equivalent to the engine of economic growthto the countries that introduces new technologies, stimulate demand, encourage savings and accumulate capital. That's why, export is considered as the backbone of the economic development. Thus, the present paper investigates the factors affecting theexports performance in India for the period from 2007-08 to 2016-17.By using simple multiple regression analysis it is found that all the predictorssuch as inflation, Import, GDP and CAB are having a positive impact on the exports performance.Furthermore, factors such as Import, GDP and CABare found to be significant;whereas, inflation is found to be insignificant.

KEYWORDS: Exports performance, national income, employment, economic development.

INTRODUCTION

Export is the engine of economic growth to the country that introduces new technologies, stimulate demand, encourage savings and accumulate capital. Even more, export is the significant contributor to foreign exchange and national income(Gururaj et al., 2016).It is one of the major sources of foreign exchange currency in a country, which ultimately covers the Balance of Payment deficit and as well as utilizes in the formation of domestic capital, which is subsequently used in the process of the export production (Gul et al., 2013).If exports of the country increase at the faster pace than imports, then the economy can't be stoppedfrom beingthe developed one.The instability in the exports can adversely affect the process of economic development.Exports play the crucial role in the growth of the country by influencing the level of economic growth, employment and balance of payment. Thus, it is right to say that the growth of an economy is directly linked to the exports of the country.Given this importance and the role export plays in the Indian economy, it is of great importance to find out the economic factors influencing Indian exports in order to help the government and policymakers to undertake appropriate measures to improve the exportsperformance of the country.

The rest of the paper is organized as follows:

Section 2 comprises of the literature review on determinants of exportsperformance and research problem. Section 3 describes the objectives of the study and research methodology. Section 4 presents the results of the regression analysis and section 5 presents the findings and conclusions.



REVIEW OF LITERATURE

This section is devoted to the review of the studies already conducted on the same topic in order to identify the potential area for further research. A summary of some of the studies is given below:

Rahman (2017) investigated both of short run and long run dynamics between export performance of Bangladesh and selected macro-economic variables for the period from July 2011 to June 2016. It was found that there was a long-run association between export of Bangladesh and the selected macroeconomic variables such as Interest rate, Inflation rate, Broad money (M2), Exchange rate and Quantum index of industrial production; whereas, no short-run dynamics was found. **Gururaj et al. (2016)** analyzed the impact of factors affecting export performance in India for the period of 24 years ranging from 1990-91 to 2014-15. The study concluded that variables such as inflation rate, real effective exchange rate (REER) and foreign direct investment (FDI) were negatively related with the value of export. **Bhavan (2016)** investigated the determinants of the export performance of Sri Lanka over a period 1980-2013. By using Unit root analysis, Johansen's cointegration and Vector Error Correction model it was found that in long run FDI, interest payment on foreign debt and import had a positive impact, while gross capital formation and per capita income of the export destination countries have a negative impact on the export performance. Besides, in the short run, FDI and per capita income of export destination countries had a significant influence; whereas, import, gross capital formation and interest payment for debts were found insignificant. **Elshehawy (2014)** investigated the factors affecting Egypt's bilateral export flows to its main trading partners for the period from 2000 to 2013. The gravity model approach had been used. It was found that Egypt's GDP, GDP of the importing countries, population of the importing countries had a positive influence on Egypt's exports. Apart from these, transportation costs (distance variable) were found to have the negative but insignificant effect on Egypt's exports. **Gul et al. (2013)** studied the various factors affecting the demand of Pakistani exports for the period from 1990-2010 by using two stage least square method. It was concluded that, export demand decreases with increase in real effective exchange rate. Insignificant relationship was found between the demand of Pakistani exports and export price variable and nominal exchange rate. Also, the study found a positive and significant association between the demand of Pakistani export and world income. **Nadeem et al. (2012)** examined the impact of various determinants on exports Pakistan using secondary data over the period from 1981-2011. By using multiple regression analysis, it was found that there was a positive and statistically significant impact of variables such as world income, industry value added, indirect taxes, exchange rate and saving on exports of Pakistan. **Moniruzzaman et al. (2011)** used techniques of cointegration, Engle-Granger causality and vector error correction to empirically estimate the export supply model of Bangladesh for the period from 1972-73 to 2008-2009. It was found that export supply was positively related with GDP. Besides, it was noticed that gross capital formation was the most important determinant of the export supply. Also, the relative price of real export was positively related to the supply of real export. **Rahman (2010)** investigated the factors affecting Bangladesh's exports for the period from 1972 to 1999 by using gravity model. It was found that the main contributors to Bangladesh's exports were the exchange rate, partner countries' total import demand and the openness of the Bangladesh economy. The study concluded that all these factors affected the country's exports positively. Also, transportation costs had a negative but insignificant effect on Bangladesh's exports. **Agasha (2009)** in their study used secondary data from 1987-2006 and found that there was a positive and significant relationship of foreign price level and terms of trade with the export growth rate in Uganda; whereas, there was no significant effect of FDI, GDP and exchange rate on the export growth rate of the country.

RESEARCH PROBLEM

As we know, export plays an important role in the growth of the country by influencing the level of economic growth, employment and balance of payment. Even more, the performance of exports in an economy is of great importance in the determination of level of national income and employment. Therefore, the growth of an economy is directly linked to the exports of the country. So, it is of great importance to analyze the factors affecting the exports performance of the country. A large number of

studies have been conducted to examine the determinants of exports but the present study is different from the previous studies in terms of the mixture of factors. Therefore, in the present study, an effort is made to analyze the factors affecting India's exports. The results of this study can help the Government of India and policymakers to undertake appropriate measures to improve the performance of the exports.

OBJECTIVES OF THE STUDY

The main objectives of the study are to identify the factors affecting the exports in India as well as to examine the impact of various factors on the exports performance in the country.

RESEARCH METHODOLOGY

The present study is descriptive cum analytical in nature and based on secondary data which has been collected from the secondary sources such as **Imports and Exports database** published by Department of Commerce, Ministry of Commerce & Industry, Government of India, **World Economic Outlook (WEO)** database on Indian economy published by International Monetary Fund (IMF), various journals and newspapers. The frequency of dataset is annual and covers the time period from 2007-08 to 2016-17. By taking export as the dependent variable, simple multiple regression analysis has been used to find the impact of various macroeconomic variables on the exports performance in India. Here, export and import data is in the absolute term so, it would be appropriate to take natural logarithm of both of these variables before including these variables in the model to be consistent with other variables.

The empirical model is developed as follows:

$$\text{Export} = \alpha + \beta_1 \text{Inflation} + \beta_2 \text{Import} + \beta_3 \text{GDP} + \beta_4 \text{CAB} + \epsilon$$

Dependent Variable = Export

Independent Variables = Inflation, Import, GDP (Annual Growth Rate of Gross Domestic Production), CAB (Current Account Balance as % of GDP).

α = constant

β_1 ... β_4 = Estimated regression coefficients

ϵ = Error term

ANALYSIS OF DATA

This section contains the results of the study. In this section, various tables have been constructed to show the output of multiple regression analysis.

Table 1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.998 ^a	.996	.993	.02050	1.855

a. Predictors: (Constant), CAB, GDP, Import, Inflation

b. Dependent Variable: Export

Table 1 represents the output of the regression analysis. Here, we can see that the value of R is .998, which illustrates that the predictors have 99.8 % influences on the output. In case of this value of R Square is .996 this means that the predictors account for 99.6 % variation in the dependent variable. The

Durbin-Watson test value **1.855** indicates that there is no problem of autocorrelation likely to distort the conclusion.

Table 2
ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.567	4	.142	337.651	.000^b
Residual	.002	5	.000		
Total	.570	9			

a. Dependent Variable: Export

b. Predictors: (Constant), CAB, GDP, Import, Inflation

Table 2 here shows the output, which contains an Analysis of Variance (ANOVA). Here, the sum of Square is .567; the value of Residual of Squares is .002 and represents the total difference between the model and observed data. Here, the Sig. (p-value) is less than alpha (.05), which indicates that the model is significant.

Table 3
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-2.949	.479		-6.154	.002		
Inflation	.003	.005	.030	.649	.545	.349	2.863
Import	1.197	.036	1.101	33.096	.000	.667	1.500
GDP	.011	.004	.085	2.868	.035	.843	1.186
CAB	.047	.009	.252	5.082	.004	.300	3.335

a. **Dependent Variable:** Export

Table 3 of the model is concerned with the parameters of the model. The Coefficients table shows the parameters. We can define the equation here as follows:

$$\text{Export} = -2.949 + .003 \text{ Inflation} + 1.197 \text{ Import} + .011 \text{ GDP} + .047 \text{ CAB}$$

The results of Variance Inflation Factor (VIF) are all below 10 and Tolerance values (Tol) are greater than 0.1 as shown in table 3, which implies that there is no problem of Multicollinearity in the model. It is found that all the predictors have the positive impact on the export performance of the country, which illustrates that all of these variables and export moves in the same direction means when these variables increase export also increase. In addition, it is noticed that Import, GDP and CAB have the significant positive impact on the export performance.

CONCLUSION

As earlier discussed that the growth of an economy is directly linked with the exports of the country therefore, it is of great importance to analyze the factors affecting the export performance of the country. Here, the results of multiple regression analysis show that the predictors have 99.8 % influences on the output which suggests that the relationship between the variables is positive and strong. Besides, it is noticed

that all the predictors have the positive impact on the export performance of the country, which illustrates that all of these variables and export moves in the same direction means when these variables increase export also increase. Amongst all the predictors, **Import**, **GDP** and **CAB** have the significant positive impact on the exports performance.

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Websites:

- (1) <http://www.imf.org>
- (2) <http://commerce-app.gov.in/eidb>

ANNEXURE

Table 4

Dependent & Independent Variables

Year	Import (US \$ Million)	Export (US \$ Million)	Inflation (%)	CAB (%)	GDP (%)
2007-08	251,654.01	163,132.18	5.93	-1.27	9.8
2008-09	303,696.31	185,295.36	9.2	-2.28	3.89
2009-10	288,372.88	178,751.43	10.61	-2.82	8.48
2010-11	369,769.13	249,815.55	9.5	-2.81	10.26
2011-12	489,319.49	305,963.92	9.54	-4.29	6.64
2012-13	490,736.65	300,400.58	9.94	-4.81	5.48
2013-14	450,199.79	314,405.30	9.44	-1.74	6.54
2014-15	448,033.41	310,338.48	5.93	-1.32	7.18
2015-16	381,006.63	262,290.13	4.91	-1.06	7.93
2016-17	384,355.56	275,851.71	4.87	-0.92	6.83

Source: (1) Imports and Exports database published by the Department of Commerce, Ministry of Commerce & Industry, Government of India.

World Economic Outlook (WEO) database on Indian economy published by International Monetary Fund (IMF).



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