



# Impact of Trade Liberalization on Economic growth in India

## KEYWORDS

Trade openness, Economic growth, Gross Fixed Capital Formation, Foreign Direct Investment, inflation

**Kali Charan Modak**

Assistant Professor IBMR, IPS Academy Indore, India

**Pallabi Mukherjee**

Assistant Professor IBMR, IPS Academy Indore, India

**ABSTRACT** *The paper empirically analyzes the impact of trade liberalization on the economic growth of India over the period 1990-2010. Trade openness, Gross Fixed Capital Formation (GFCF), Foreign Direct Investment (FDI) and Inflation are important explanatory variables, while Real GDP is dependent variable used for the model specification. The study used Johansen Co-integration approach developed by Johansen & Juselius (1990) for long run relationship. The result shows that trade liberalization and Gross Fixed Capital Formation have positive and significant impact on economic growth. Foreign Direct Investment and inflation negatively affect growth of economy. Residual test are used to check the overall fitness of model.*

## INTRODUCTION

Trade liberalization policies aims to achieve increased productivity and eliminate inefficiency and barrier in the production process and leads towards more competitive and free market economy. Foreign trade is an important aspect of economic development for a country like India. Foreign trade is also known as growth engine for developing economy. India had balance of trade surplus at the time of independence, but from last six decades India is facing BOT deficits. There is a big challenge for India to reduce the trade gap. India is fast emerging as a global leader, what with its vast, natural resources, and huge base of skilled manpower. Combined with cutting edge technology, Indian trade market is making its presence felt all across the world. Indian products and services are seen as of international standards and globally competitive. Trade in India has made good progress on liberalizing trade regimes and cutting tariffs since the recent times, when most of the countries started with reforms.

## LITERATURE REVIEW:

Ferrantino et al (1997) discussed the relationship between trade liberalization and economic growth. At theoretical level trade liberalization positively affected the economic growth but there are controversies among theorist about the time lag that require for complete affect of TL. While on other hand empirical literature investigated that there is a strong positive linkage between trade liberalization and economic growth especially in the rapidly growing countries.

Jin (2003) analyzed the data before economic crisis of 1997/98 in Korea. Findings of the paper show negative impact of trade liberalization on growth due to crowding out of domestic investment. Inflation also negatively associated with increased openness.

Chuhdhary et al (2010) studied the relationship between trade liberalization and economic growth by Granger causality test. Results of this study revealed that in long run relationship between economic growth human capital and trade liberalization is significant and positive while in short run labor force also significantly contribute in growth.

Hammouda, Jallab (2011) examined the relationship between liberalization and growth alone, but can be enriched by comparing the development experiences of Africa and Asia. Future thinking should turn towards a search for optimal combinations between liberalization and control in order to promote growth and strengthen the competitiveness of developing economies.

## DATA AND MODEL:

The main purpose of the study is to investigate the impact of trade liberalization in economic growth of India over the period of 1975-2010. Data on annual observations are taken from SBP publication "Hand Book of India Economy 2010" and World Bank Indicators 2009.

The Model is,

$$RGDP = \beta_0 + \beta_1 TOP + \beta_2 RGFCF + \beta_3 RFDI + \beta_4 INF + \mu_t$$

Where

RGDP= Real Gross Domestic Product

TOP =Real Trade Openness (export plus import as a share of GDP)

RGFCF=Real Gross Fixed Capital Formation

RFDI=Real Foreign Direct Investment

INF=Inflation

$\mu_t$  = White Noise Error Term.

B's represented the parameters of variables.

To obtain econometric model of study we take log on both sides. So, model is rewritten as:

$$LRGDP = \beta_0 + \beta_1 LTOP + \beta_2 LGFCF + \beta_3 LFDI + \beta_5 LINF + \mu_t$$

Now all  $\beta$ 's are coefficient elasticities of their respective variables.

## OBJECTIVES

The objectives of the study can be enumerated as follows:

**(1) To Study the impact of trade liberalization on economic growth in India.**

## HYPOTHESIS

H<sub>0</sub>-There is no significant relationship between trade liberalization and economic growth in India.

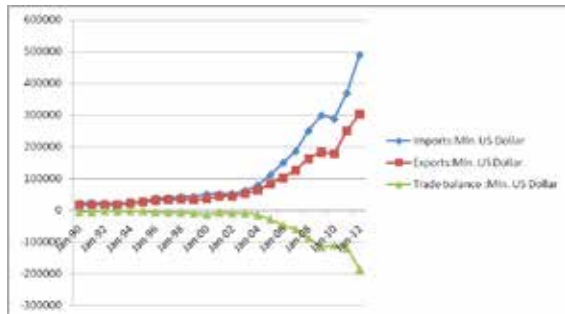
H<sub>1</sub>-There is a significant relationship between trade liberalization and economic growth in India.

## RESEARCH METHODOLOGY

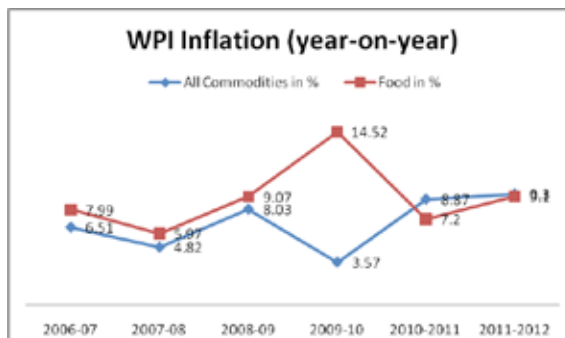
This study is based on secondary .the data required for the

study has been collected from the CMIE database. The study covers a period of last two decades from 1990-2012 .It is based on various aspects of Exports, Imports and trade balance; and relationship between trade liberalization and economic growth in India. Statistical technique namely correlation analysis and Dickey Fuller test is used for the purpose of analyzing the data.

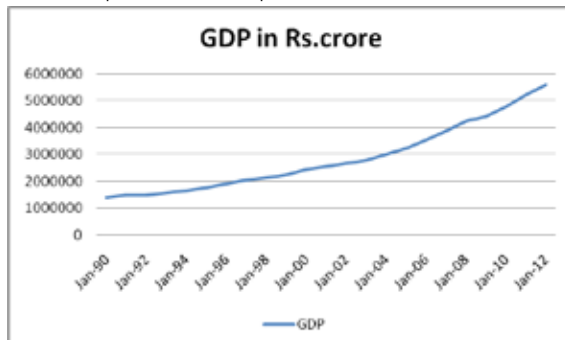
**DATA ANALYSIS AND INTERPRETATION**



From the above data we can analyze that there is a significant growth in export from 2004 but there is a huge increase in imports in India that cause high current account deficit.



From 1969 until 2010, the average inflation rate in India was 7.99 percent reaching an historical high of 34.68 percent in September of 1974 and a record low of -11.31 percent in May of 1976. Inflation rate refers to a general rise in prices measured against a standard level of purchasing power. In 2008 Inflation Rate was 9.70 percents in December and has reached to 14.97 in 2009 and 2010 decreased to 9.47 and was last reported at 10.05 percent in March of 2011.



Source: Office of the economic adviser, ministry of commerce and industry

**Results and Discussion:**

Stationary of variables are checked by using Augmented Dickey Fuller test. Null hypothesis of test is that there exist unit root and series is non stationary at 5% level of significance. Null hypothesis of unit root is accepted at level because probability is greater than 0.05. At first difference probability is less than 0.05 so we reject null hypothesis of unit root. Table 1 shows results of ADF that all variables are non stationary at level but stationary at first difference.

variables	Level		1st difference	
	Test statistic	Probability	Test statistic	Probability
LRGDP	-0.542736	0.8706	-4.171354	0.0025
LRGFCF	-1.259023	0.6373	-4.593603	0.0008
LTOP	-0.248559	0.5894	-7.249534	0
LRFDI	-1.697944	0.4235	-6.269429	0
LINF	-0.02963	0.6656	-7.397437	0

Table 1

**VECM Equation:**

$$LRGDP = 2.088 - 0.652ECT_{-1} + 0.426LTOP_{-1} + 0.661LRGFCF_{-1} + 0.091LRFDI_{-1} - 0.052LINF_{-1}$$

Trade openness has positive sign and significant. More technically if trade openness expands by 1%, RGDP grow by 0.426%. Positive linkage between trade openness and economic growth. Gross Fixed Capital Formation also positively affects the GDP growth. Further 1% increase in RGFCF leads to 0.661% rise in RGDP. Positive association between GFCF & RGDP is also consistent with existing research literature. Inflation negatively affects the economic progress of country i.e. 1% rise in inflation will cause 0.052% decline in RGDP. FDI also positively affected the economic performance of India which is proof from the Table that is a 1 % rise in FDI accompanied with 0.091% rise in RGDP. Study also confirmed the positive growth impact or FDI in the case of India.

**CONCLUSION**

The paper empirically analyzes the impact of trade liberalization on economic growth in India over the period 1990-2012 by utilizing Johansen co integration technique. Results reveal that trade liberalization, Gross Fixed Capital Formation exerted positive impact on real GDP while inflation and Foreign Direct Investment are negatively related to real GDP. This result highlighted the importance of trade liberalization in order to enhance economic growth. Based on these findings, the study suggests that India should go more of trade liberalization policies to enhance more economic growth. A high rate of inflation, particularly inflation in food prices, is a constant danger to the wellbeing of the poor. There is no doubt that high rate of inflation if not checked effectively, will undo most of the effects of policies to enhance growth. Role of trade liberalization and growth also increased due to Global recession of 2008-09 which support the positive link between trade liberalization and economic growth. World GDP decreased due to fall in world trade volume. For Trade liberalization to be a significant contributor to economic growth, India should focus on improving infrastructure, capital accumulation, establishing entrepreneurship, developing a secure macroeconomic framework and conditions favorable for investments. All these will help to speed up growth of economy.

**REFERENCE**

Omar K. M. R. Bashar & Habibullah Khan. "Liberalization and Growth: An Econometric Study of Bangladesh." U21 Global Working Papers, February 2007: No. 001/2007. | | Kandil, M., and J. Woods (1997), "Cyclical Co movements in Industrial Labor and Product Markets: Theory and Evidence," Economic Inquiry. | | Kandil, M., and A. Mirzaie (2002), "Exchange Rate Fluctuations and Disaggregated Economic Activity in the U.S.: Theory and Evidence," Journal of International Money, and Finance, Vol. 21, No. 1, February, 1-31. | | Huchet-Bourdon, M. and J. Korinek (2011), "To What Extent Do Exchange Rates and their Volatility Affect Trade?" OECD Trade Policy Papers, No. 119, OECD Publishing. | | Ahmad Jafari Samimi, Mehdi Adibpour and Negin Heydarizadeh (2012) Exchange Rate Uncertainty and Imports: Evidence from Iran Middle-East Journal of Scientific Research 11 (2): 167-172, 2012 | | Yaw-Yih Wang (2011) Fluctuations of Exchange Rate on the Valuation of Multinational Corporations as Taiwan's Samples. |