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Economic reforms and its impact on Indian economy

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ABSTRACT

Before 1991, India was a nation with political independence but no economic freedom. If the license and permit tied India down, they also stifled individual aspiration, ambition and achievement. That's why the touchstone of the economic reforms launched in 1991. India initiated the reforms in 1991, after financial crisis. In this process, India liberalized the industrial sector from license-permit raj which has accelerated the growth of Indian economy. Indeed economic reforms, aided by the rapid diffusion of technology, have enabled individuals, groups and companies to tap talent to not only create new businesses but set off a virtuous cycle of growth and entrepreneurship but on the other side agriculture sector adversely affected. Foreign Direct Investment, exports and other related variables of external sector shows a positive outcome growth of Indian economy. This paper attempt to analyse the impact of two decades of economic reforms, on growth of GDP and other related factors, using regression model.

Key Words : Foreign Direct Investment (FDI), GDP, Gross Fixed Capital Formation and Export

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Indian economy was in deep crisis in July 1991, when foreign currency reserves had plummeted to almost $1 billion; Inflation had roared to an annual rate of 17 percent; fiscal deficit was very high and had become unsustainable; foreign investors and NRIs had lost confidence in Indian Economy. Capital was flying out of the country and we were close to defaulting on loans. Along with these bottlenecks at home, many unforeseeable changes swept the economies of nations in Western and Eastern Europe, South East Asia, Latin America and elsewhere, around the same time. These were the economic compulsions at home and abroad that called for a complete overhauling of our economic policies and programs.

After pursuing an inward-looking development strategy with the state assuming an important role for more than four decades, India decided to take a historic step of changing tracks in 1991. It embarked on a comprehensive reform of the economy to widen and deepen its integration with the world economy as a part of structural adjustment. There seems to be a general consensus on the desirability of reforms to dismantle the bureaucratic regulatory apparatus evolved over the years that may have outlived its utility. However, there has been considerable debate on the contents of the reform package, their sequencing and the pace, their implementation and their impact.

The new economic reforms, popularly known as, Liberalisation, Privatisation and Globalisation (LPG model) aimed at making the Indian economy as fastest growing economy and globally competitive. The series of reforms undertaken with respect to industrial sector, trade as well as financial sector aimed at making the economy more efficient. With the onset of reforms to liberalize the Indian economy in July 1991, a new chapter has dawned for India and her billion plus population. This period of economic transition has had a tremendous impact on the overall economic development of almost all major sectors of the economy, and its effects over the last decade can hardly be overlooked. Besides, it also marks the advent of the real integration of the Indian economy into the global economy.

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Now that India is in the process of restructuring her economy, with aspirations of elevating herself from her present desolate position in the world, the need to speed up her economic development is even more imperative. And having witnessed the positive role that Foreign Direct Investment (FDI) has played in the rapid economic growth of most of the Southeast Asian countries and most notably China, India has embarked on an ambitious plan to emulate the successes of her neighbors to the east and is trying to sell herself as a safe and profitable destination for FDI.

Two decades of liberalization in India had a favorable impact on the overall growth rate of the economy. This is major improvement given that India's growth rate in the1970's was very low at 3 per cent and GDP growth in countries like Brazil, Indonesia, Korea, and Mexico was more than twice that of India. Though India's average annual growth rate almost doubled in the eighties to 5.9 per cent, it was still lower than the growth rate in China, Korea and Indonesia.The pick up in GDP growth has helped improve India's global position. Consequently India's position in the global economy has improved from the 8th position in1991 to 4th place in2001; when GDP is calculated on a purchasing powerparity basis. During 1991-92 the first year of Rao's reforms program, The Indian economy grew by 0.9 per cent only. However, the Gross Domestic Product (GDP) growth accelerated to 5.3 per cent in 1992-93, and 6.2 per cent 1993-94. A growth rate of above 8 per cent was an achievement by the Indian economy during the year 2003-04. The annual growth rate of the GDP was impressive 8.5 per cent (2004-05), 9.0 per cent (2005-06) and 9.2 per cent (2006-07).The foreign exchange reserves (as at the end of the financial year) were $ 39 billion (2000-01), $ 107 billion (2003-04), $ 145 billion (2005-06) and $ 180 billion (in February 2007). The cumulative FDI inflows from 1991 to September 2006 were '1, 81,566 crores (US $ 43.29 billion). The sectors attracting highest FDI inflows are electrical equipment's including computer software and electronics (18 per cent), service sector (13 per cent), telecommunications (10 per cent), transportation industry (nine per cent), etc. In the inflow of FDI, India has surpassed South Korea to become the fourth largest recipient. India controls at the present 45 per cent of the global outsourcing market with an estimated income of $ 50 billion. In respect of market capitalization (which takes into account the market value of a quoted company by multiplying its current share price by the number of shares in issue), India is in the fourth position with $ 894 billion after the US ($ 17,000 billion), Japan ($ 4800 billion) and China ($ 1000). India is expected to soon cross the trillion dollar mark. As per the Forbes list for 2007, the number of billionaires of India has risen to 40 (from 36 last year)—more than those of Japan (24), China (17), France (14) and Italy (14) this year. A press report was jubilant: "This is the richest year for India." The combined wealth of the Indian billionaires marked an increase of 60 per cent from $ 106 billion in 2006 to $ 170 billion in 2007. The 40 Indian billionaires have assets worth about ' 7.50 lakh crores whereas the cumulative investment in the 91 Public Sector Undertakings by the Central Government of India is 3.93 lakh crores only. As per Economic survey 2010-11, External trade growth collapsed in different countries in the tumultuous recession ridden years of 2008 and 2009. The fall in trade, which was steeper than the decline in real GDP, was arrested in 2010, with trade growth recovering faster than real GDP growth. The recovery in trade growth has been made possible, in part, by the fiscal stimulus imparted by the governments and the low base of the preceding years. However, the extent of recovery differs substantially across countries and world trade remains below its pre-crisis level. India, which weathered the global crisis well, seems poised to be among the few countries to surpass the earlier peak and even reach or surpass the pre-crisis trends in trade.

Several earlier studies have attempted to analyze the impact of the economic reforms of 1991 on the economy and industrial sector of India. In one of the earlier studies Nambiar *et al.* (1999) started from the expectation that trade liberalization "encourages economic activity and hence raises production and employment"; he then asked whether this was also true in the Indian case. Although this expectation may be justified in the longer run, it seems somewhat unrealistic to expect immediate benefits since trade liberalization always implies increased foreign competition, which in turn may lead to the closure of less competitive firms and therefore job losses and income reduction in the initial phase following trade liberalization. One may argue, however, that by 1999 it was possible to expect the longer-run impact of increased productivity, competitiveness and accelerated growth. This raises questions about the timing of the reforms and about the time lags necessary to achieve the longer-run changes. In spite of the accelerated growth figures of the mid-1990s being already available, Nambiar *et al.* (1999) concluded that "trade has over the years shrunk India's manufacturing base, both in terms of value addition and employment". Although the authors admit that "this 'high protection-high cost-poor quality' syndrome needed to be corrected by import liberalisation", their assessment of the reform impact is rather pessimistic.

Chauduri (2002) also reported that the "expectations of rapid and sustained growth of output and employment …have not materialized." The author concluded that value added growth in the 1990s was inferior to that in the 1980s, that the industrial base had become shallower, that employment growth in the 1990s was negative in five out of nine years and that the labour productivity stagnated after 1995/96, after having increased 4 in the early 1990s. Here again no attention is paid to the changes in protection, prices and costs that resulted from the reforms.

A much more positive picture was drawn by Panagariya (2004), who argued that growth in the 1990s was more robust than that of the 1980s and that it was achieved through important policy changes. The main policy changes held responsible for accelerated growth are the liberalization of foreign trade, the reduction in industrial licensing and opening to foreign direct investment.Balasubramanyam and Mahambre (2001) attempted to relate different aspects of the reforms with changes in industry performance, in particular with productivity change. The present paper seeks to attain following objectives:

– To analyse the impact of economic reforms on Growth rate of GDP, and

– To impact of change in export, gross fixed capital formation and foreign direct investment on growth rate of GDP.

RESEARCH METHODOLOGY

This study is based on secondary data collected from Economic survey, Government of India Ministry of Finance, and world development report 2011.An attempt is being made to analyse the response on GDP of India (Table 1) in regard to variation in export, foreign direct investment in preceding year and gross fixed capital formation in preceding year of India during the period 1991-92 to 2010-11, using multiple linear regression technique.

The primary source of data for study is the online database of World Bank covering the 20 years period from 1991-92 to 2010-11. The data includes the Exports of goods and services (% of GDP), Foreign direct investment, net inflows (% of GDP), GDP (constant 2000 US$), Gross capital formation (% of GDP) of India during the study period. The dependent variable is taken as GDP (constant 2000 US$); independent variables are taken to exports of goods and services (% of GDP), foreign direct investment net inflows (% of GDP) in preceding year and gross capital formation (% of GDP) in preceding year.

Format of regression model used here is

$$\textbf{Log GDP}_t = \textbf{log } a_1 + a_2 \textbf{ log } X_t + a_3 \textbf{ log FDI}_{t-1} + a_4 \textbf{ log GFCF}_{t-1}$$

where

GDP_t GDP (constant 2000 US$)

X_t Export of goods and services (% of GDP)

FDI_{t-1} Foreign Direct Investment, net inflows (% of GDP) in preceding year

$GFCF_{t-1}$ Gross Fixed Capital Formation (% of GDP) in preceding year

a_1 Intercept in log term

a_2, a_3, a_4 Elasticity of respective variable

The estimated log-linear regression equation is given as:

Table 1: Selected indicators of external sector (Post reforms) of India

Year	Exports of goods and services (% of GDP)	Foreign direct investment, net inflows (% of GDP)	GDP (constant 2000 US$)	Gross capital formation (% of GDP)
1991	8.59	0.03	273371753217.17	21.98
1992	8.94	0.11	288353259333.11	23.77
1993	9.95	0.20	302100866388.36	21.22
1994	10.00	0.30	322203110259.01	23.53
1995	10.97	0.60	346591482106.51	26.59
1996	10.51	0.62	372784133902.80	22.12
1997	10.82	0.87	387898660909.21	23.90
1998	11.15	0.63	411923321463.34	22.64
1999	11.66	0.48	442353379785.96	26.10
2000	13.23	0.78	460182031503.10	24.16
2001	12.76	1.15	484189242979.59	24.18
2002	14.49	1.11	502427834715.24	25.24
2003	14.80	0.72	544485550467.26	26.77
2004	17.55	0.80	589559010700.39	32.82
2005	19.28	0.91	644499568182.66	34.66
2006	21.27	2.14	704256486829.92	35.67
2007	20.43	2.05	773393372039.48	38.14
2008	23.48	3.58	811540036224.84	34.52
2009	19.58	2.58	885430184576.82	36.48
2010	18.47	1.40	971486068096.36	32.46

Source: World Development Report, 2011

$$\text{Log GDP}_t = 10.39 + 0.46\, X_t + 0.33\, \text{FDI}_{t-1} + 0.25\, \text{GFCF}_{t-1}$$

(44.43)* (2.92)* (3.69)* (1.83)*
Adjusted R^2=0.942 F-Value=98.77 DW Test=1.21 (3, 15)**
*figures in parentheses denote t-values at 5 percent
**figures in parentheses denote d.f.

RESEARCH AND REMONSTRATION FINDINGS

It is evident from the above computed test statistic in the form of adjusted R^2 (0.942) and F-value [98.77 (3, 15)] indicates the idea of goodness of fit of model used here. This shows that export of goods and services, foreign direct investment and gross fixed capital formation play a vital role in growth of GDP of India.

Again, the estimated coefficients of exports, foreign direct investment and gross fixed capital formation are positive and seem significant at 95 percent level of confidence. Estimated DW statistic (1.21) shows there is a positive serial auto correlation but favoring the estimation. An analysis of the regression model suggests 1% increase in FDI leads to increase in GDP of next year by .33 per cent where the 1 per cent increase in Export of goods and services leads to increase in GDP by .46 per cent and the increase of 1% in gross fixed capital formation increase the GDP of next year by .25 per cent.

Table 2 reveals that from first plan to seventh plan growth rate of GNP was quit low but after eighth plan growth rate on GNP started to increase rapidly.

Table 2: Annual average growth rate of GNP (at 1990-00 prices)

Plan	Annual average growth rate of GNP
First Plan (1951-56)	3.7
Second Plan (1956-61)	4.2
Third Plan (1961-66)	2.8
Three Annual Plans (1966-69)	3.9
Fourth Plan (1969-74)	3.4
Fifth Plan (1974-79)	5.0
Annual Plan (1979-80)	-5.0
Sixth Plan (1980-85)	5.4
Seventh Plan (1985-90)	5.5
Two Annual Plans(1990-92)	3.2
Eighth Plan (1992-97)	6.6
Ninth Plan (1997-2002)	5.5
Tenth Plan (2002-2007)	7.9

Source: Economic survey (2010-11) Government of India, Ministry of Finance, Department of Economic Affairs, Economic Division

Table 3: Annual growth rate of GNP (at 1990-00 prices in per cent)

Years	Growth rate on GNP
1991-92	1.4
1992-93	5.4
1993-94	5.9
1994-95	6.5
1995-96	7.3
1996-97	8.1
1997-98	4.5
1998-99	6.7
1999-00	6.4
2000-01	4.0
2001-02	6.0
2002-03	4.0
2003-04	8.5
2004-05	7.5
2005-06	9.5
2006-07	9.5
2007-08	9.8
2008-09	6.6
2009-10	7.9

Source: Economic survey (2010-11) Government of India, Ministry of Finance, Department of Economic Affairs, Economic Division.

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