

**Manufacturing Sector in India;
An Analysis in the Pre and Post Economic Crisis of 2007-08**

Authors

Muhammedali K A
Research Scholar
Department of Economics,
Central University of Kerala, Kasaragod

Dr. T.J Joseph
Assistant Professor
Department of Economics,
Central University of Kerala, Kasaragod

ABSTRACT

Considering the economic performance and global financial crisis of 2007-08, this paper analyses the fifth stage of economic development. Apart from the earlier studies, it analysed political as well as economic aspects with a view to trace the shrinking growth rate in GDP, industry, and manufacturing sector in a proper perspective. The first phase of economic development followed a liberal regime and accounted a GDP growth rate of 4.1 percent. The second phase experienced restrictive policies and adopted 'indigenous non-availability import system'. The end result was drop in GDP and industrial growth rate. Hence, in the third phase, it adopted relatively liberal policies and systematic liberalization enacted in the fourth phase. The liberalization policies resulted in an accelerated growth rate in all sectors and continued until the economic crisis of 2007-08. The fifth phase of economic development is the post-crisis period where the economy hit by the 2007-2008 global financial crisis shock. It is remarked by an increase in the GDP growth rate; however, the growth rate in the industrial and manufacturing sector exhibited a declining trend. It appears that due to the continued reduction of export demand and foreign capital flows in the post-crisis period, the industrial sector, especially the manufacturing sector, revoked its growth paths.

Keyword: Economic Development; Industrial Performance; Structural changes in India, Economic Crisis of 2007-08 and India.

1.1 Introduction

India is an emerging economy holding 3.1 percent of the world GDP (PIB, 2018) with a 1.35 billion population (World Bank, 2019). Within the economy, the service sector contributes more than 54.33 percent of the total GDP while industry and agricultural sector contributes 28.42 percent and 17.25 percent respectively, of which 18.04 percent of total GDP contributed by manufacturing sector (RBI, 2019). Ever since the independence, the industrial sector has recognized as a developmental strategy to the long run objective of the nation which had an average annual growth rate of 6 percent and providing 26 percent of total employment (Prabir and Neogi, 2010).

The history of economic development in India apparently illustrates on-going political and economic situations. The 67 years of growth performance, from 1951 to 2017, showed a sharp rise and fall in its Gross Domestic Product (GDP) and industrial growth rate in accordance with changing political and economic situations. There might be much reason for the cyclical changes in the growth rates; however, it is difficult to validate the explanations without considering the micro-level economic and political analysis.

According to Panagaria (2008) and Bhut (2013), India had undergone different developmental phases since independence from inward-looking restrictive regime to the more liberal development strategies. During the first phase (1950-1965), which is soon after the independence, the economy followed somewhat pre-independence developmental strategies which characterized by relatively liberal policies and free import system. The liberal regime has continued up to the balance of payment crisis in 1958 where there introduced foreign exchange budgeting. Thereafter the nation slightly began to initiate restrictive policies to control the import through licensing and tariff in order to strengthen and protect the domestic industries. Even then, the foreign direct investments was quiet open until the mid of 1960s and there had an average GDP growth rate of 4.1 percent during the first phase.

In the second phase (1966-1980), the strategic emphasize of the nation was concentrated on enhancing the capacities in the heavy capital intensive industries like steel and electricity. The focal intention was to create employment, enable indigenous products, and encourage the domestic industrial sector. Accordingly, the import-export regimes were under the tight controls and foreign companies in India forced to leave the country or to transform as an

Indian company to protect industrial sector from external competition. Along with that, many of the private banks, oil companies, and coal mines were nationalized in order to control the market-concentration by the larger firms. The end result was falling of GDP growth rate to an average of 3.52 percent (1965-1980) which was 4.1 percent in the first phase. In addition, the average annual growth rate of industrial and manufacturing sectors, which was 6.6 percent and 6.7 percent respectively, cut down to 3.51 and 3.31 percent in the second phase.

In the mid of the 1970s, it is realized that the net result of restrictive and licensing strategies were not enriched the economy, however, it stemmed revenue generation to the government and enabled excessive concentration of few public and private companies in industrial sector. As restrictive policies were ineffective to induce economic growth, the government began to easeup the import controls and adopted moderate policies through the administrative measures in third phase (1980-1990).

The moderate policies include de-licensing in certain investments and in selected sectors, capacity expansion, and introduction of Open General Licensing (OGL) for import (1977). The items included in the OGL are gradually increased and there had substantial liberalizing policies especially after the 1980s. As a result, the export increased drastically and average annual GDP growth rate moved up to 4.8 percent, accompanied by significant increase in the growth rate of industrial and manufacturing sector.

The later periods of 1980s showed an acceleration in the liberalizing policies by continued fiscal expansion which mainly financed by the external borrowings. The intention was to promote competition in the domestic market, technological up gradation and modernization of industries in the nation. It aims to higher productivity, optimum utilization of installed capacity, higher employment level, promotion of export oriented industries, removal of regional disparities and consumer protection against higher prices and poor quality. Hence the GDP growth rate accounted to 7.6 percent during 1988-1991 accompanied by a growth rate of 7.75 percent in industrial sector and 7.35 percent in manufacturing sector.

In the fourth phase of development (1990-2006), the on-going liberalizing approaches had been abandoned by the then finance minister Dr. Manmohan Singh and initiated an era of systematic reforms of liberalization. This major reform includes removal of licensing on imports of raw materials, machinery and investments, opening of most of the industries to the

foreign investments, reduced industrial tariffs and opening up of telecommunications and aviation to the private sector. The end result of these reforms was spurt in the growth rate of GDP, along with Industrial and manufacturing sectors.

The process of reforms continued in later periods of 1990s that systematically transformed the nation into an open economic system. As a result, the domestic economy became highly integrated with global economy and there had significant increase in the market competition along with the essential infrastructural development in the nation. In order to attract foreign investments in the country, the tariff rates were reduced from 45 to 20 percent and removed import licensing on consumer goods in 2000s. There also introduced privatisation and opened insurance sector to the private sector with limited foreign investment.

On the macroeconomic front, the major reforms was on liberalizing entry of domestic as well as foreign private banks and freeing up of several external capital account transactions. It enabled greater competition among the banking sector and most of the interest rates became flexible due to foreign capital inflows. The reforms also helped to widening of industrial base in the nation and possessed competitiveness in 71 products to 254 products between 1975 and 2007 (Bhat, 2013).

During the reforms periods, the growth rate was very low and began to pick up after a three to four year time lag and reached a high of 13 percent in 1995-96. Thereafter, the growth rate narrowed to the average of 5-6 percent annually till the end of the decades. The industrial growth rate has also reduced in the beginning of the 20th century because of Asian Financial Crisis in 1997-98 along with downward cycle in the Europe and North American countries. After the crisis, the growth rate began to improve than the pre-crisis where the GDP growth rate accounted at 8.52 percent, industrial sector at 9.53 percent, and manufacturing at 8.65 percent during 2003-2007.

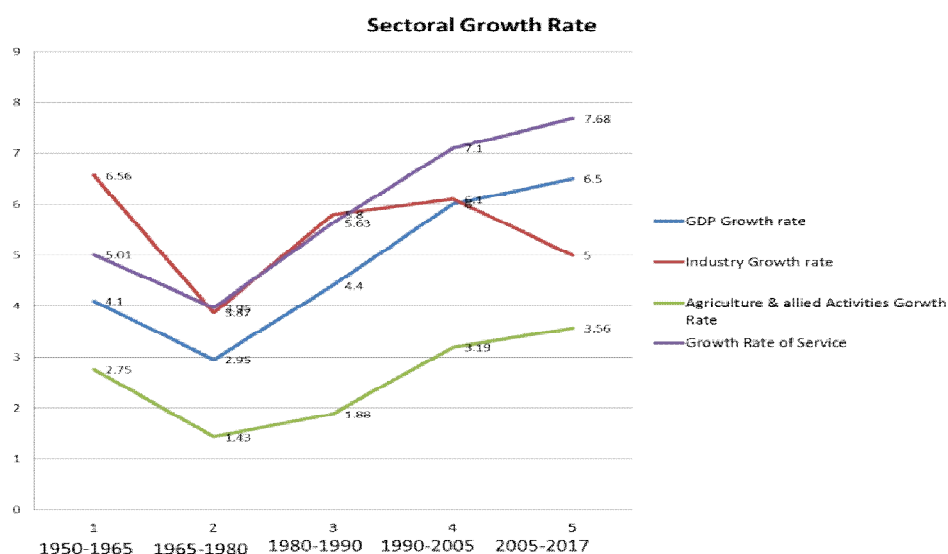
In the beginning of 20th century, the dimension of development has moved to social aspects than economic growth which emphasised on poverty eradication, education, health, quality of life and generation of productive employment. Along with that, the economy began to grow rapidly which marked by high growth of agriculture and manufacturing sector and growth in export. The proximate reason of this growth included the sustained boom in overall investment, international economic environment and a demand and technology driven

acceleration of modern services. According to Kumar and Subramanian (2011) the 2000s was the best ever decade for Indian economic performance, in which the growth increased across almost all major states in 2001–09 compared to 1993–2001 with average of 8.8 percent. The aggregate investment was 37 percent of GDP in the 2004-07.

The process of liberalization augmented foreign investments as well as international trade, and India became a part of the growing international production network and integrated with the global economy than it was in the early 1990s. Accordingly, the industrial sector recorded a growth rate of 6.1 percent that also injected high GDP growth rate. Consequently, the domestic markets were highly integrated into the global market and the domestic demand-supply equations followed global economic and political aspects. As a result the domestic economy has compelled to follow in accordance with the global market fluctuations which finally dropped Indian economy in to the global financial crisis of 2007-08.

The fifth phase of India's economic development (2007-2017) begins with 2007-08 where economy experienced a reverse tendency in the growth mainly resulted from the after-effects of global financial crisis emerged in 2007-08. As a result, there was a decline in GDP growth rate, notably, the growth rate in industrial sector which was 6.1 percent during 1990-2006 declined to 5 percent during 2007-2017 as shown in the Figure1.

Figure 1



1.2 US Financial Crisis

According to Krugman, there was a phenomenon of current account surpluses in many of the world economies in the beginning of 20th century, coexisting with large deficit in the US economy (Rajya Sabha Secretariat, 2009). This imbalance in the current account led the high saving countries to park excess savings to the deficit economies, especially in the US. The overflow of money into the US economy resulted in continued reduction of interest rate in the mid of 2003. It fuelled the credit boom and inflated real estate and other asset prices to unsustainable levels; roughly, it was the period of most rapid home-price increase in US economy.

The reduced interest rate with easy availability of credit encouraged people without house to own a house in US. Accordingly, the banks started to lend money to those people who have no access in the credit market on the assumption that housing price would continue to go up and housing finance seemed as a very safe venture. In addition, the credit continues to these people without sufficient collateral security expecting further rise in housing sector.

On the contrary, in the beginning of 2006, there had a tendency of plummet in housing sector which finally led to the fall in investment and home prices cut down even more than 40 per cent in 2007. As a result, sub-prime borrowers started defaulting in large numbers, many banks had incurred huge losses, and some reported bankruptcy.

An important aspect of these lending is that the banks who sold housing loans to subprime borrower did not hold with them. However, they further sold it to other banks and to investors through a process called securitization¹ as shown in the Figure 2. Under this process, banks and financial institution pooled and repackaged these debts and sold and resold them to the investors across the world as a new financial product which rated as profitable investment. Through the securitization process US has gained large amount of world currencies over the last couple of decades and this time it was more than 56 percent compared to the 1980s.

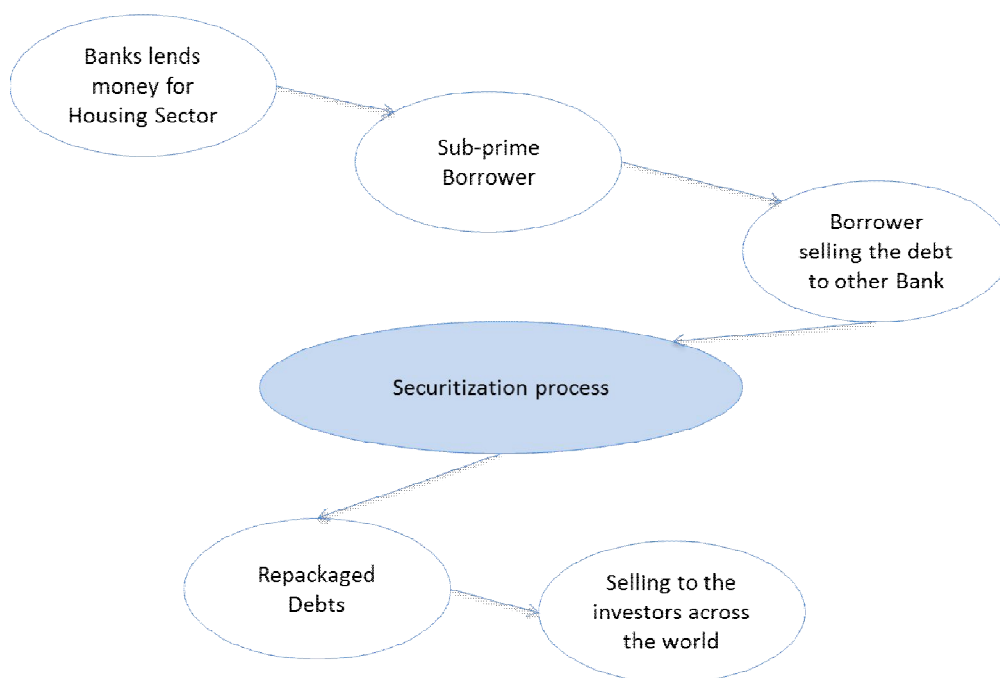
Interestingly, many of the America's big banks including Merrill Lynch, Bear Stearns, Lehman Brothers, Goldman Sachs and Morgan Stanley, moved out from the 'lending business' to the 'moving business'. They focused on the asset buying, repacking and selling

¹**Securitization** is a structured financial process, which involves pooling and repackaging of cash flow producing financial assets into securities that are then sold to investors. Securitization means turning something into a security. For example, taking the debt from a number of mortgages and combining them to make a financial product which can then be traded. Banks who buy these securities receive income when the original home-buyers make their mortgage payments (Research Unit, Rajya Sabha Secretariat, India).

them to the rest of the world. This way, the crisis shaped as a typical nature of US financial system having complex mortgage financing and its consequences crossed the boundaries of US economy and had seen in the world market from developed to underdeveloped countries (Khitoliya 2104).

Figure 2

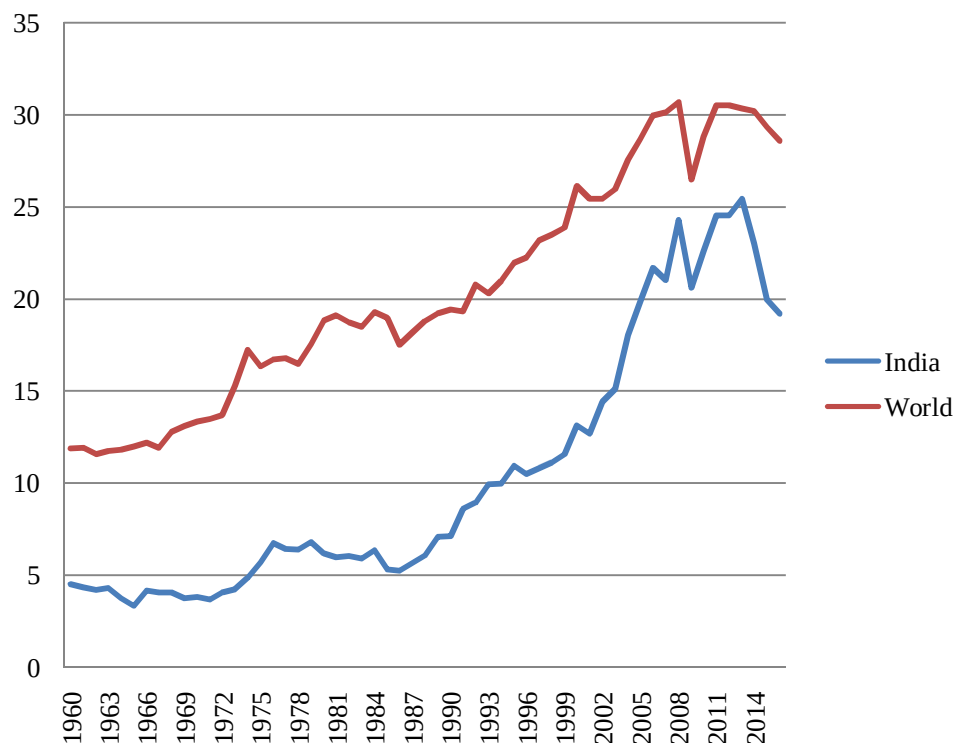
The emergence of Economic Crisis of 2007-08



According to Stiglitz (2010) the economic crisis emerged in the US has been unparalleled since the great depression of 1929-32. When crisis came forward, there had sorts of impact on the world economies as economies are integrated each other depending upon the extent of openness and trade and finance. One important influence of the crisis was direct impact by the breakdown in the sub-prime mortgage² loans and associated activities that were at the source of the crisis. The other impacts are by the reduced export demand and decreased inflows and increased outflows of foreign investments. The contraction of export is significant as seen from the figure 3 where world export as a percentage of GDP has decreased after the 2008 and thereafter the trend follows a decreasing trend.

²**Sub-prime** is a financial term that denotes financial institutions providing credit to borrowers deemed sub-prime (sometimes referred as under-banked). Sub-prime borrowers have a heightened perceived risk of default, those with a recorded bankruptcy or those with limited debt experience. Sub-prime lending means extending credit to people who would otherwise not have access to the credit market (Research Unit, Rajya Sabha Secretariat, India).

Fig: 3
World Export (% of GDP)



Source: <https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?locations=1W>

While crisis were originated in the developed countries, its after-effects spread widely to the global economies via several mechanism. The initial impact was with sub-prime related securities which was relatively small. However, the delayed effects have been much more sever through different paths such as reduced availability and increased cost of trade financing, increased out flow of capital, losses in equity market due to withdrawal of capital, jobs losses, reduced financial inflows, increased difficulties in debt services and pressure on national currencies; where all created a negative feedback on many of the emerging markets. Along with that the decline in asset price is not only in US, but several countries undergone significant decline in the real estate and asset markets across the world. Moreover, the projected economic growth of many countries fell down by the reduction in commodity price, remittance, foreign investment and exports to the developed countries.

1.3 Short-term impact of the Crisis

According to De and Neogi (2010), the immediate impact of crisis was reduction in the key performing indicators across the world economies. Supporting to this, the report by IMF and ADB (2009) found a decreasing trend in the growth rate of world GDP during the crisis. It also observed a decelerating trend in trade (WTO, ESCAP, ITC, 2009), falling of trade price and increase in the trade protection (WTO, 2009), decline in world remittance and flow of foreign direct investment (World Bank, 2009), and increase in the unemployment (ILO, 2009) as shown in table 1.

Table: 1 Economic Crisis of 2007-08 -Stylized Observations				
Sl No	Fundamentals	Pattern	Studies	Year
1	Growth	Decelerated	IMF, ADB	2009
2	Trade	Decelerated	WTO, ESCAP, ITC	2009
3	Trade price	Fallen	WTO	2009
4	Trade protection	Increased	WTO	2009
5	Remittances	Declined	World Bank	2009
6	FDI	Slowed	World Bank, UNACTED	2009
7	Commercial lending	Slowed	ODI	2009
8	Domestic protection	Slowed	ADB	2009
9	Unemployment	Increased	ILO	2009

Source: Prabir De and Chiranjib Neogi, 2010

According to IMF estimates, in the beginning of the crisis, world output grew by 5.2 percent in 2007 which declined to 3.0 percent in 2008 and further declined to 1.1 percent in 2009. The GDP Growth in developed countries fell from 2.7 percent in 2007 to -3.4 percent in 2009 and the developing countries have experienced a decline of 6.6 percent from 8.3 percent to 1.7 percent (IMF, 2009e). The crisis impact has been so severe in Europe that the growth rate has

dropped 2 percent in 2009. The GDP expected to reach -1.6 percent in US and -2 percent in Euro area with a large fall in employment in all sectors of the economy (IMF, 2009e).

The impact of crisis spread across the countries through two major channels, (1) deceleration in export demand and (2) fall in foreign capital inflow. The export growth, which has averaged annually of about 22 percent since 2002-2003, became negative in 2008-09. It has decreased export and export oriented products which had more adverse impact on demand, employment and wage cut. The FDI flows also showed a highly elastic behaviour during the crisis period. In the developing economies, the elastic behaviour is more significant especially in the garments and tourism sector (Ahmed et.al, 2011). The growth rate of employment in manufacturing sector was other challenge by the crisis, which was constant since 2002 fell in 2007-08 from 13 percent to 1 percent. The total output produced by the manufacturing sector had declined drastically during the crisis period.

In African countries, the impact of crisis was comparatively small due to their concentration of manufacturing exports to middle and low income countries. The African countries which their exports are highly concentrated in the advanced countries market, showed a reduction in the manufacturing export (Mauritius, Morocco and Tunisia). The crisis had also impacted on commodity prices (fall), foreign investment (declined), remittances (weakened) and growth rate which lowered in Africa in 2009 than in any of the last 10 years (Page, 2009).

A report by the United Nations Industrial Development Organization (UNIDO 2009) explains that the least developed countries are heavily exposed to external shocks because of their extensive trade with the rest of the world. They suffered from structural weaknesses and chronic balance-of-payments and fiscal deficits. They are heavily dependent on commodity exports and external financing. The commodity boom of 2003-08 allowed many of them to accelerate growth of their GDP and manufacturing value-added (MVA), but most of these benefits have been lost during the economic crisis due to declines in export earnings, workers' remittances and external sources of finance. It has seen a significant decline in the GDP, MVA and investment in production capacity and sharp increases in unemployment due to closing of number of factories. The shocks on manufacturing sector in the way of external competition pressured them to change the 'rules of the game' in international competition and to restructure and nurture their industries.

1.4. Crisis Impact in India

The impact of crisis on Indian economy was in many ways such as export demand, decrease in capital inflows, and increase in capital outflows. Industrial sector faced more shock especially the manufacturing sector which mainly depended on foreign capital investment, and more than 60 percent of the nation's trade export is dependent on manufacturing products. In addition, the advanced countries, especially the United State is importing around 55 per cent of its branded apparels from India alone (Yadav, 2009).

The export from India as a percentage of GDP has fluctuated during the crisis and it followed a decreasing trend after the crisis. The gap between actual trend line and expected trend line is significantly widened in the post crisis period as in the figure 4. In the case of FDI inflow, there observed atrend-break where the actual trend line followed a new trend line which is far below the expected trend line as in the figure 5. The FDI outflow has drastically increased during the crisis and thereafter it followed a fluctuating trend as in the figure 6.

Figure 4

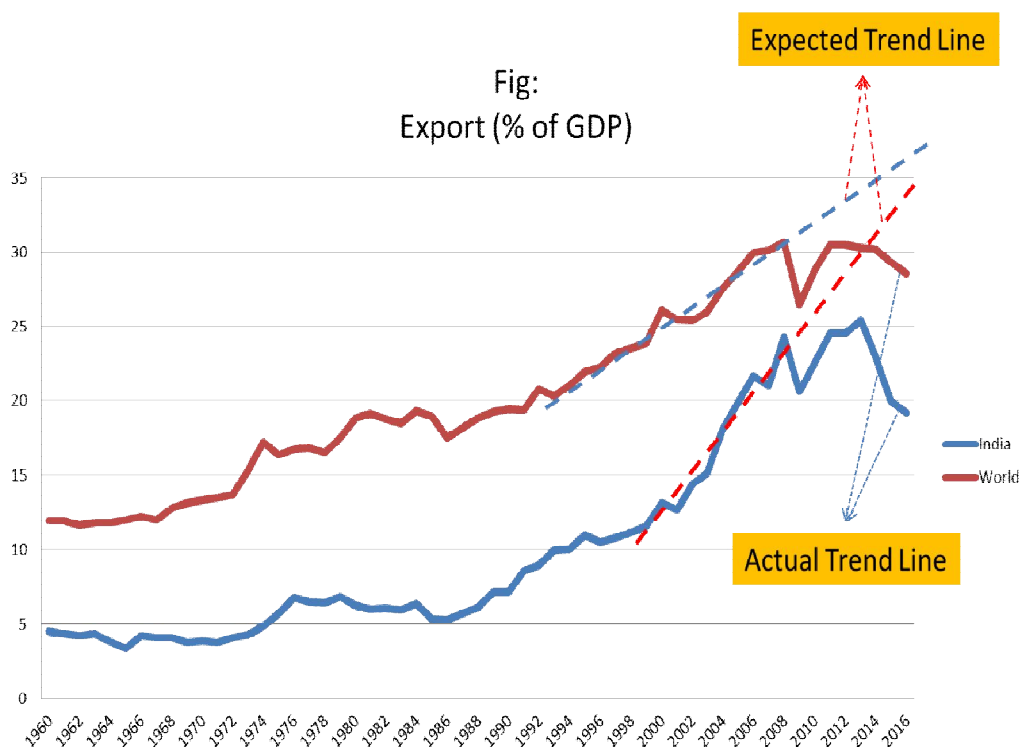


Figure 5

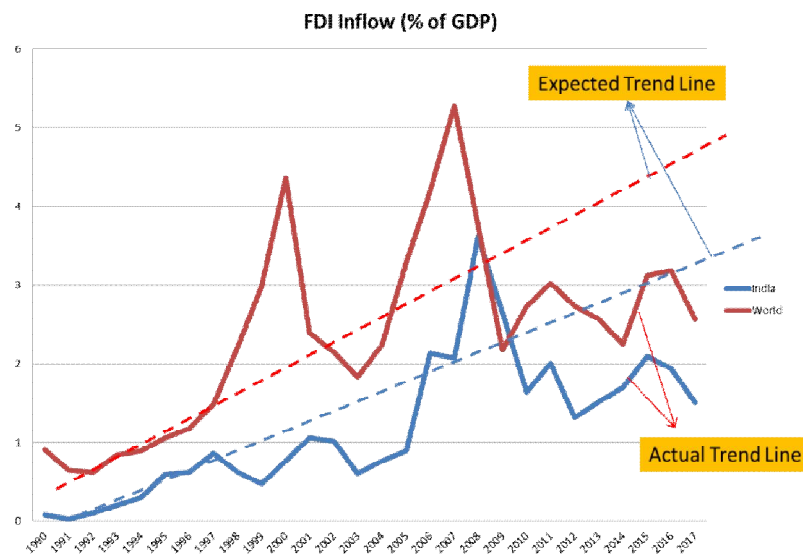
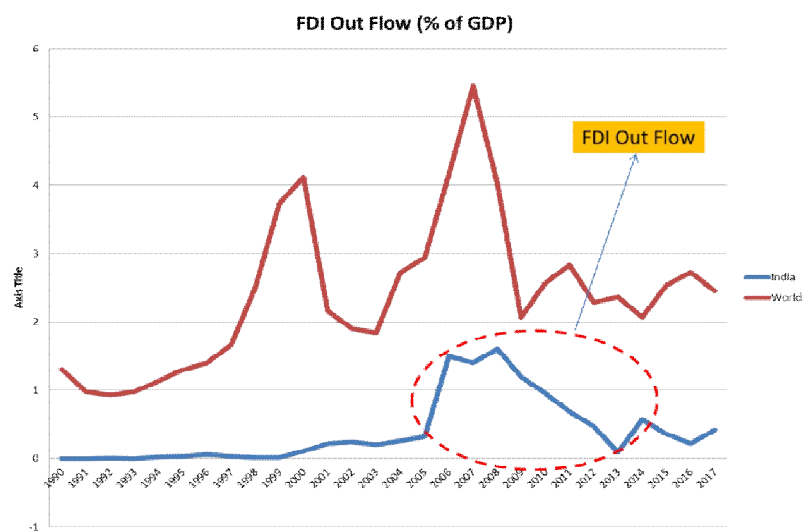


Figure 6



After the crisis, the contribution of manufacturing sector to GDP has felled-down from 9.7 percent (2006-07) to 9.2 percent in 2007-08 and from 9.2 percent (2007-08) to 6.7 percent in 2008-09(Walia, 2012).The export to advanced countries, which was 60.43 percent in pre-crisis (2002) declined dramatically to 46.31 percent in 2010 (Walia, 2012).

The impact of crisis on the textiles industries and its employment was the other major shock (Prasad and Panduranga, 2009). There accounted a decrease of around 5 lakhs employment in the later period of 2009-10, particularly in the manufacturing sector. It has pulled down the

global demand for many of the Indian products, such as, textiles and garments, which remarked a drop of 95 percent in orders only from US during crisis. Many other export oriented industries including auto, pharmacy and engineering products has also faced large decrease in demand from US market (Thomas and Jayan, 2009).

According to Khitoliya (2014), the financial crisis hit India in 2007 but full effect was seen in 2008-2010. He concluded the crisis impact in three ways. Firstly, there has been a fall in export of manufactured goods which includes petrochemical, leather, textiles, electronic goods, engineering goods and other. Secondly, the contribution made by the manufacturing sector in total merchandise export declined to 72 percent in 2008-09 and further dropped to 68 percent in 2009-10. Finally, the effect of crisis was serious on the output produced by the manufacturing sector where in pre-crisis period it was consistently rising whereas in post-crisis period it fell down heavily.

1.5 Conclusion

Over the last decades of globalization, India had grown rapidly in the industrial sector till the financial crisis appeared in the mid of 2007. The rapid growth in the industrial sector helped overall economy to make impressive steps in economic development since 1990s. The process of liberalization augmented international trade in goods and services and India became a part of growing international production network through exchange of goods and services. Sooner, it became more integrated with the global economy than it was in early 1990s. Today, it accounts 2.0 percent³ of world trade in goods and services and about 3.1 percent of the world GDP⁴. In addition, in the country, around 20 percentage of the GDP is contributed by its export sector (World Bank, 2016). The industrial sector in the nation contributes 28 percent of the GDP that also providing employment for 26 percent (Prabir and Neogi, 2010).

The crisis emerged in the 2007-08 is the most severe financial crisis since great depression of 1930s. It is the harshest financial crisis in the liberalized era which has crucial adverse impact on many of the world economies. What started as a sub-prime mortgage crisis in the US has extend to Europe and later to the rest of the world, turning into a widespread banking crisis

³Press Information Bureau, Govt. of India, Ministry of Commerce & Industry
(<http://pib.nic.in/newsite/PrintRelease.aspx?relid=154454>)

⁴Calculated from World Bank Data Bank

with the breakdown of both domestic and international financial markets. It also caused as a worldwide economic recession due to collapse of exports, reversal of capital flows and weakening of market confidence. Many of the Asian countries also witnessed some common features of crisis impact like deceleration in growth, decline in the export and import, trade protection and sharp rise in unemployment.

With liberal economic settings and free global mobility of trade and finance, the economic crisis of 2007-08 adversely affected world economies and India can't be an exception to this. In the market driven economy, the crisis decreased growth rate of the various sectors, especially the manufacturing sector due to its export intensity and dependency on foreign investment. The immediate impact of crisis on manufacturing sector was by decrease in the external demand and reduction in foreign capital flow. As a result, many of the industries like textiles, jewels and other export oriented industries showed decrease in growth rate. As India is getting 20 percent of its GDP from export earnings and exporting more than 55 percent of its manufacturing products to developed countries, it may have direct or indirect impact on the economy (Yadav, 2009). Moreover, there are huge amount of foreign investments in the productive sector from the rest of the world. The studies by Khitoliya (2014), Thomas and Jayan (2009), Panduranga (2009), and others confirms the fact that the declining trends in export demand and foreign investment may presumably cause the long term performance of industrial sector in India, especially in the manufacturing sector.

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