Effect of FDI Inflows in Indian Automobile Industry



COMMERCE

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ABSTRACT

The automobile industry in India is one of the largest automotive markets in the world. Recently India had reached sixth position in passenger car and commercial vehicle manufacturing segment. Similarly, India became third largest exporter of passenger cars. These kinds of achievements would happen when serious of initiatives, progresses and supports taken by Government, Organizations and public. Foreign Direct Investment (FDI) is type of financial instrument to substantiate the foreign funds in India for economical and country development. Thus this paper investigates the effect of FDI in automobile industry.

1. INTRODUCTION

The Indian automotive industry has come a long way from its nascent state at the time of India's independence. At the time of 1950 the automobile production is 4,000 vehicles whereas now it crossed the historic landmark of 20.7 million vehicles in 2013. [Tata Motors, Society of Indian Automobile Manufacturers (SIAM), Aranca Research, Joint Venture, 2013], Until 1983 the Indian automotive segment is a closed market with limited players such as Hindustan Motors, Premier, Telco, Ashok Leyland, and Mahindra & Mahindra. Therefore the growth of the market is limited by supply and most of the cars are outdated models compared to neighbouring countries. During the time of 1983-1993 joint venture concept is evolved through relaxation of Indian policies on foreign investments. This period is really very helpful to India for learning technology from foreign companies. In the liberalisation period (after 1991), automotive industry is getting improved in various aspects such as technological, infrastructural, production and delivery. Besides foreign investment had a significant influence on the Indian automotive industry as we see it today.

The industrial policy of 1965, allowed MNCs to venture through technical collaboration in India. However, the country faced two severe crises in the form of foreign exchange and financial resource mobilization during the second five year plan (1956-61). Therefore, the government adopted a liberal attitude by allowing more frequent equity participation to foreign enterprises, and to accept equity capital in technical collaborations. The government also provides many incentives such as tax concessions, simplification of licensing procedures and de-reserving some industries such as drugs, aluminium, heavy electrical equipments, fertilizers, etc in order to further boost the FDI inflows in the country. This liberal attitude of government towards foreign capital lures investors from other advanced countries like USA, Japan, and Germany, etc. But due to significant outflow of foreign reserves in the form of remittances of dividends, profits, royalties etc, the government has to adopt stringent foreign policy in 1970s. During this period the government adopted a selective and highly restrictive foreign policy as far as foreign capital, type of FDI and ownerships of foreign companies was concerned.

In the early nineties, Indian economy faced severe Balance of payment crisis. Exports began to experience serious difficulties. There was a marked increase in petroleum prices because of the gulf war. The crippling external debts were debilitating the economy. India was left with that much amount of foreign exchange reserves which can finance its three weeks of imports. The outflowing of foreign currency which was deposited by the Indian NRI's gave a further jolt to Indian economy. The overall Balance of Payment reached at Rs. - 4471 crores. Inflation reached at its highest level of 13%. Foreign reserves of the country stood at Rs.11416 crores. The continued political uncertainty in the country during this period adds further to worsen the situation. As a result, India's credit rating fell in the international market for both short- term and long term borrowing. All these developments put the economy at that time on the verge of default in respect of external payments liability. In this critical face of Indian economy the then finance Minister of India Dr. Manmohan Singh with the help of World Bank and IMF introduced the macro-economic stabilization and structural adjustment programme.

As a result of these reforms India open its door to FDI inflows and adopted a more liberal foreign policy in order to restore the confidence of foreign investors. Further, under the new foreign investment policy Government of India constituted FIPB (Foreign Investment Promotion Board) whose main function was to invite and facilitate foreign investment through single window system from the Prime Minister's Office. The foreign equity cap was raised to 51 percent for the existing companies. This unprecedented growth of global FDI in 1990 around the world make FDI an important and vital component of development strategy in both developed and developing nations and policies are designed in order to stimulate inward flows. In fact FDI provides a win-win situation to the host and the home countries. Both countries are directly interested in inviting FDI, because they benefit a lot from such type of investment. The 'home' countries want to take the advantage of the vast markets opened by industrial growth. On the other hand the 'host' countries want to acquire technological and managerial skills and supplement domestic savings and foreign exchange. Moreover, the paucity of all types of resources viz. financial, capital, entrepreneurship, technological know-how, skills and practices, access to markets-abroad-in their economic development, developing nations accepted FDI as a sole visible panacea for all their scarcities. Further, the integration of global financial markets paves ways to this explosive growth of FDI around the globe.

2. PROBLEM STATEMENT

It is obvious from the above description that automobile industry in India is one of its vibrant industries. The industry accounts for 22 per cent of the country's manufacturing gross domestic product (GDP). It comprises passenger cars, twowheelers, three-wheelers and commercial vehicles and is currently the seventh-largest in the world with an average annual production of 17.5 million vehicles, of which 2.3 million are exported. The Indian auto market has the potential to dominate the global auto industry, provided a conductive environment is created for potential innovators to come up with new pilot projects. The next few years are projected to show solid but cautious growth due to improved affordability, rising incomes and untapped markets. All these open up an opportunity for

automobile manufactures in India. In addition, with the government's backing and a special focus on exports of small cars, multi-utility vehicles (MUVs), two and three-wheelers and auto components, the automotive sector's contribution to the GDP is expected to double, reaching a turnover of US\$ 145 billion in 2016, according to the Automotive Mission Plan (AMP) 2006-2016. The cumulative foreign direct investment (FDI) inflows into the Indian automobile industry during the period April 2000-May 2014 was recorded at US\$ 9,885.21 million, according to data published by Department of Industrial Policy and Promotion (DIPP). The growth of automotive industry is phenomenon, thus this paper trying to explore the significance of FDI in Indian automotive industry.

3. RELATED WORKS

Chugan, P. K. (1995) studied about foreign technology and its role in determining the firm's development, adaptation and absorption (DAA) capabilities reveals that while the number of foreign collaboration agreements (FCA) and foreign equity do influence DAA capabilities, the impact is limited: for, other technology transfer related factors restrict the firm's freedom to operate in a manner it deems fit. Ranawat et al. (2009) states that automobile industry has produce a wide range of automobiles and auto-components for both domestic and foreign markets. At relaxation period (1980-1990) this industry gets updated in technology and in the liberalization period (after 1991) this industry had received persistent foreign investments. Humphrey, John (2003) were broadly discuss about the investments made on the automotive industries in Brazil and India. 1990's trade liberalization was decisively influenced by government policies and it enhances the assembler and supplier relationship in the global auto industry. D'Costa, Anthony P (2004) explains the remarkable restructuring of the Indian automobile industry. He argues that firms have had to deploy new governance modes for economic coordination to overcome supply bottlenecks and meet expanding demand. Firms that failed to adopt these practices performed poorly, while firms that attained economies of scale were able to graduate to exploiting economies of scope. The industry experience suggests that new governance modes can serve mass production goals in developing economies and not just cushion market volatility, for which they were designed.

Sudhir Kumar, R et al., (2010) probes the extent and diversity of assistance received by Small adn Medium Enterprises (SMEs) from a Trans National Corporations (TNC) through subcontracting and its influence on technological innovations and economic performance of SMEs, in the Indian automobile industry. Indian SMEs were able to receive mainly product related and purchase process assistance, thereby implying that subcontracting is largely confined to purchase-supply relationships. He concludes that subcontracting relationship with a TNC can be an important source of technological innovations and enhanced economic performance for SMEs. Dangayach et al., (2003), presents extensive review of Indian manufacturing companies. The survey encompassed four sectors: automobile, electronics, machinery, and process industry. Various manufacturing strategy issues have been identified and assessed in Indian context. Sector wise comparison of competitive priorities, order winners, and activities of improvement is provided. The Indian companies are still emphasizing on quality; however, automobile sector has set to compete globally with high innovation rate, faster new product development, and continuous improvement. Kamala et al., (2007) states that India's quest to become a global auto manufacturing hub has made the world's top auto makers increasingly turn to India for their vehicle components. Riding this success and capitalizing on the spiralling demand from domestic auto companies, the Indian auto components industry is strengthening the demand and is emerging as one of fastest growing manufacturing sectors, and a globally competitive one.

4. RESULTS & DISCUSSION

Secondary data was collected from DIPP during the financial year 2008-09 to 2012-13. The analysis is presented in two parts. In the first part we have collected top ten industries during the selected study period. The sector-wise FDI inflow is achieved using total amount of FDI inflows received during the selected study period. The following table describes the sector-wise rank order of the FDI inflows during the study period.

Table 1: Sector-wise FDI Inflows - Rank Analysis

SECTOR-WISE FDI INFLOWS	Rs. in Crore	IRO
Services Sector	260340	1
Telecommunications	99283	3
Construction Activities	141961	2
Computer Software & Hardware	71585	5
Housing & Real Estate	37096	10
Chemicals (other than Fertilizers)	83687	4
Drugs & Pharmaceuticals	67382	6
Power	60130	8
Automobile Industry	60485	7
Metallurgical Industries	54341	9

IRO - Investment Rank Order

It is apparent from the Table 1 that rank analysis is performed to predict the top 10 sectors along with its total FDI inflows received by the sector during the study period. The result table reveals the priority order of FDI inflows as follows; service sector, telecommunications, construction activities, chemicals, computer software & hardware, drugs & pharmaceuticals, automobile industry, power, metallurgical industry and housing & real-estate industry. Hence, the key finding denotes that among the top ten sectors received high FDI inflows, service sector is declared as number one sector to receive high volume FDI inflows.

Among the list of sectors considered, this study is trying to investigate the automobile industry. The selection of automobile industry has no specific reason, but it is picked up based on the researcher's interest and the following tables describe the same. Subsequent table describes summary statistics of FDI inflows received under various sub-head in the automobile industry during the study period.

It is inferred from the Table 2 that summary statistics is performed for automobile industry. During the study period, FDI inflows received in automobile industry is accounted as Rs.1240.98± 1166.34 crore, FDI inflows received under passenger cars is accounted as Rs.2048.06±1603.47 crore, FDI inflows received under auto ancillaries head is accounted as Rs.605.88±393.71 crore, and FDI inflows received under others transport head is accounted Rs.896.95±574.69 crore. The mean & standard deviation of the total FDI received during the financial year depicts Rs.4791.87±1894.59 crore. The co-efficient of variation performed to measure the consistency and the result shows that FDI received under others transport head is more consistent than other categories considered.

Table 2: Automobile Industry-wise FDI Inflows – Summary Statistics

Financial Year	AI	PC	AA	ОТ	Total
2008-09	528.24	893.57	346.35	282.18	2050.34
2009-10	3021.75	2200.61	652.63	709.74	6584.73
2010-11	178.70	4692.28	265.50	581.55	5718.03
2011-12	675.19	684.74	507.20	1759.24	3626.37

2012-13	1801.03	1769.09	1257.72	1152.02	5979.86
Mean	1240.98	2048.06	605.88	896.95	4791.87
SD	1166.34	1603.47	393.71	574.69	1894.59
CV	93.98	78.29	64.98	64.07	39.54

AI – Automobile Industry, PC – Passenger Cars, AA – Auto Ancillaries/Parts, OT – Others Transport

The key finding exhibits that passenger cars has recorded high FDI inflows s.2048.06±1603.47 crore in the automobile industry. But, the coefficient of variation indicates that others transport head is found more consistency in receiving FDI inflows.

The following table describes growth analysis for percentage of FDI inflows received under four segments in automobile industry for study period and projection period.

Table 3: Percentage with Total FDI inflows in Automobile Industry – Growth Analysis

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Financial Year	AI	PC	AA	ОТ	Total
2008-09					
2009-10	28.30%	-4.64%	-7.58%	6.98%	4.65%
2010-11	9.43%	22.16%	-24.24%	13.95%	10.51%
2011-12	-7.55%	-1.55%	-25.76%	41.86%	-2.69%
2012-13	-1.89%	-4.64%	-16.67%	51.16%	0.24%
2013-14	-4.42%	5.30%	-16.36%	8.46%	0.24%
2014-15	-8.46%	4.65%	-22.55%	17.54%	-0.44%
2015-16	-12.50%	4.00%	-28.73%	26.62%	-1.12%

AI – Automobile Industry, PC – Passenger Cars, AA – Auto Ancillaries/Parts, OT – Others Transport

It is observed from the above table that growth analysis is performed for percentage of FDI inflows received under four segments in automobile industry during study period and projection period. Automobile segment had an average growth rate of 7.07%, passenger cars segment had an average growth rate of 2.83%, auto ancillaries segment had an average growth rate of -18.56%, other transport segment had an average growth rate of 28.49% and overall FDI inflows received under these four segments had growth rate of 3.18%. The projection period growth shows that automobile segment is predicted to grow -8.46%, passenger cars segment is predicted to grow 4.65%, auto ancillaries segment is predicted to grow -22.55%, other transport segment is predicted to grow 17.54% and overall growth is expected -0.44%. The key findings states that among the four segments considered in the automobile industry, other transport segment had found highest growth rate of 28.49% during the study period. While in the case of projection period, same scenario is exhibited.

The following table describes analysis of variance towards FDI received between the automobile industry's segments considered for this study.

 \mathbf{H}_{o} There is no difference in mean FDI inflows received among the segments in automobile industry during the study period

Table 4: ANOVA – Segment-wise FDI Inflows Received in Automobile Industry

FDI Inflows to AI	Mean	SD	F-value	P-value
Auto Industry	1240.98	1166.34		
Passenger Cars	2048.06	1603.47		0.195
Auto Ancillaries	605.88	393.71	1.759	
Other Transport	896.95	574.69		
Total	1197.97	1112.02		

SD - Standard Deviation, SE - Standard Error

It is obvious from the above table that auto industry had received FDI $1240.98\pm~1166.34$, passenger cars industry had received FDI 2048.06 ± 1603.47 , auto ancillaries industry had received FDI $605.88\pm~393.71$ and other transport industry had received FDI 896.95 ± 574.69 . The analysis of variance is used to measure the significant difference in the mean value of automobile industry segments. The result states that F-value is 1.759 and its p-value is 0.195, which is greater than the level of significance 0.05. Hence, the null hypothesis is accepted. Key finding states that there is no significant difference of the mean FDI received in automobile industry segments.

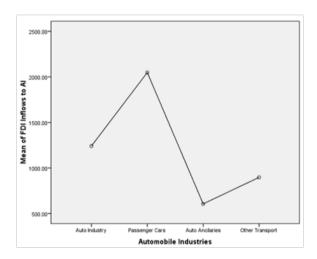


Fig. 1: Segment-wise FDI Inflows to India in Automobile Industry

The Fig.1 illustrates that passenger car segment had received high FDI inflows compared to other segments. The observed result exhibits the disparity among segments, it is suggested that the ratio of disparity should be maintained through certain standard. Otherwise, invested country/company may be threatening in future.

5. CONCLUSION

The automobile industry in India is considered as one of the major automobile manufacturer in the world. Our statistical analysis confirms that passenger car segment is getting highest attraction compared to other segments. The analysis of variance states that the mean FDI received in automobile industry segments has no significant difference. Therefore, it exhibits an association of amount received during the study period in the respective segment. With the effort of Government initiative automobile industry is rapidly growing and a special focus given on exports. The automotive sector's contribution to the GDP is expected to double, reaching a turnover of US\$ 145 billion in 2016, according to the Automotive Mission Plan (AMP) 2006-2016. The cumulative foreign direct investment (FDI) inflows into the Indian automobile industry during the period April

2000-May 2014 was recorded at US\$ 9,885.21 million, according to data published by Department of Industrial Policy and Promotion (DIPP).

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