CHAPTER 7
FINDINGS, CONCLUSION SUGGESTIONS AND RECOMMENDATIONS

The summary of findings, discussions, conclusion and further research are presented in the following paragraphs:

FINDINGS

The findings of the study are furnished in the following sequence and are given chronologically based on the order of objectives of the study.

FDI Inflows, FDI in service sector, Automobile Industry, Auto components industry investments, passenger vehicle comparative production trends and customer satisfaction on using foreign made passenger car.

7.1 FDI INFLOWS

The Indian automotive industry is the second fastest growing in the world. About 8 million vehicles are produced annually in this country. During 2005-2006, India has emerged as the third largest market in the Asia Pacific Region. With various car manufacturing companies setting up their units in different parts of the country, the production of the cars will increase at a very fast rate.

From this study we can find that India will soon become one of the top 10 car manufacturing countries. The production of cars will increase by 70% from the present capacity of 1.2 million (March 2011). Export of passenger cars from India have also grown considerably over the last decade.
The domestic sale of passenger cars have increased significantly over the years. In the recent years, India has emerged as one of the major bases for manufacturing small passenger cars.

The country has received only $18.35 billion in FDI in the first 11 months (April-February) of the financial year 2010-2011, compared to $24.63 billion that came in the 11 months of the previous financial year.

At present the Indian automotive industry boasts of being the third largest manufacturer of small cars. Almost 70 % of the cars sold in this country come under the segment of small cars. A number of car manufacturers like: Maruti, Tata Motors, Hyundai, Honda, Ford, Hindustan Motors, Fiat, General Motors etc offer various new model of cars now and then. It is expected that the various automobile manufacturers will be investing about $ 5 billion in India, between 2005-2011.

7.1.1 Main Findings

The aggregate results of the select FDI companies in 2008-09 revealed that the global financial crisis during the year had a significant impact on the performance of the non-government, non-financial, FDI companies. While financial performance as indicated by growth rate of sales, value of production and income moderated, gross profit, profit after tax and profit retained declined in 2008-09 when compared to those in 2007-08. However, the FDI companies performed better than non-FDI companies in 2008-09. The FDI companies experienced a higher growth in sales and lower decline in gross profit and profit after tax as compared to those of non-FDI companies.

The country received maximum investment from countries like Mauritius, the US, the UK, Singapore, the Netherlands and Japan. India is, however, one of the largest recipients of Japanese Official Development Assistance (ODA), through which Japan has assisted India in building infrastructure, including electricity generation, transportation, and water supply. It is possible that this Japanese government assistance may crowd out some private sector Japanese investment.
The foreign investment remained low-key despite that India would remain the second most important FDI destination for transnational corporations during 2010-2012, next only to China. FDI for 2009-10 at USD 25.88 billion was lower by five per cent from USD 27.33 billion in the previous fiscal.

The FDI Inflows to the country in the month of March 2006 was at US $1,244 Millions. The trend of capital flows has been positive, except in the year 2008-09. The FDI is stable and positive after the liberalization. So FDI is the only capital inflows into India is stable in nature, the flow of Foreign Direct Investment to India in the month of March 2009-10 increased at a faster pace.

FDI inflows in the first four months of this fiscal (April-July 2010) were $7.6 billion, down 27.9 per cent from $10.53 billion in the same period of 2009-10. The country has got a cumulative FDI of $123.3 billion from April 2000 till July 2010, of which $101 billion have come since 2006-07. Firm based in Mauritius invested $16.0 billion in India between 1991-2006, equal to 39 percent to total FDI inflows. The second largest investor in India is the United States, with total capital inflows of $5.6 billion during the 1991-2006 period followed by United Kingdom, the Netherlands and Japan.

Leading investors into India with major FDI inflows were led by Mauritius with a staggering US$8.91, with Singapore coming a close second with US$1.7 billion. The US had an overall US$1.58 billion in FDI inflows into India over the same period of time.

7.1.2 FDI in India’s Service Sector

Equity limits for foreign investment in most types of telecommunications companies were raised from 49 percent to 74 percent in November 2005, resulting in a wave of new FDI primarily focused on India’s cellular telecommunications industry. Cumulative FDI inflows in telecommunications from August 1991 to December 2006 were $3.9 billion, and annual inflows jumped from $588 million in 2004–05 to $3.0 billion in 2005–06.
December 2010 were the electrical equipment sector and the services sector, each accounting for 17 percent. These were followed by the telecommunications, transportation, fuels, and chemicals sectors.

The chip fabrication facility will manufacture chips for cell phones, set-top boxes, personal computers, and similar products. Sem India is attempting to capitalize on India’s domestic demand for semiconductors, predicted to grow from $3.3 billion in 2006 to $40 billion in 2016.

7.1.3 Automobile Industry: (2011)

The automobile industry in India happens to be the ninth largest in the world. Following Japan, South Korea and Thailand, in 2009, India emerged as the fourth largest exporter of automobiles. Several Indian automobile manufacturers have spread their operations globally as well, asking for more investments in the Indian automobile sector by the MNCs.

- Production at Maruti, majority-owned by Japan's Suzuki Motor, was hurt by a strike at June (2011) that led to a production loss of about 16,000 cars.
- Sales at Tata Motors, India's largest maker of trucks and buses and the manufacturer of the Nano, touted as the world's cheapest car, fell 1 per cent. Sales of the Nano plunged 29 per cent at 2011.
- Rising interest rates and inflation are contributing to slowing sales and demand for cars typically slows down. Foreign automakers, however, continued to post a surge in sales, driven by exports.
- The Indian unit of Toyota Motor Corporation posted a 94 per cent rise in June 2011 sales, driven mainly by a big increase in sales of its ETIOS sedan, which accounted for nearly 50 per cent of its sales.
- Nissan Motor Company sales rise 21 times in comparison with the year ago. Nissan's domestic sales in June stood at 1632 cars, while exports stood at 9,072.
- Ford incurred its capacity of production from 65,000 units to 100,000 units at 2009-10 and the phased expansion can be determined by volume growth.
Ford invested $375 million on setting up plant facility and the subsidiary is investing $75 million to expand the production capacity and to introduce new models.

### 7.1.4 Foreign Investment Inflows in Automobile Industry (1991-2011)

Total investment (direct + Portfolio Investment) was 103 $US million at 1990-91 gradually increased to 15,699 at 2003-04 and decreased to 21,313 $US million at 2008-09 due to some US crisis it affected the automobile industries and IT industries. Annual rise = 8586.16 x 100 = 85 therefore 15 % decreased. Growth rate= 32.17 % increased on direct investment, 48 % decreased in portfolio investment and then 38 % increased in total investment.

**Profit after Tax growth:** is only after 1993-94 228.6 decreased to 16.1% at 1996-97 and gradually increased to 139.4 % (2002-03) and reduced to -31.4 % due to US crises at 2008-09. Sales also 0.2% (2001-02) increased to 25%. (2009-10). Total income growth rate of the automobile industry is increased from 3.4 (2008-09) to 24.2% (2010-10). Profit after Tax growth rate of the commercial vehicle total income 48.2% high (1994-95) decreased in the years 1997-98, 1998-99 and totally affected to 1.3%.(2008-09). Therefore vehicle growth rate incomes are expected to decrease significantly in developed countries including India.

### 7.1.5 Growth Rate Of Passenger Car and Multi Utility Vehicle

Profit after Tax on Passenger Car and MUV is 103.9 (1994-95) decreased to -44.5% (1998-99) and increased to 52.3% (2009-10). Sales also increased from 7.1% (2002-03) to 15.6% (2004-05) and decreased to 3.4 % (2009-10) and are expected to remain stable in 2011-12 4.5 to 5 %.

Annual raise in Imports 26 percent, Growth rate raised on Exports are 20 percent, in FDI 48 percent and at FOREX Reserve has been increased to 20 percent. Imports values are expected to increase in the years to come from the year 2008-09 ($174 US billion) to ($543.39US billion) in 2014-15.
Exports value significantly increased in the year 2006-07 ($124.6 billion), 2007-08 ($163 billion), 2008-09 ($182.6 billion), 2009-10 ($177 billion) and significantly expected to increase in the year 2010-11 ($231.8 billion), 2014-15 (US$ 1,135.51 billion).

Annual rise in Turnover is 0.01 percent and annual growth 20 percent increased. In Import annually increased to 31 percent and growth by 64 percent. Annual rise in Export is 38 percent and growth rate increased to 20 percent. Turnover Import, Export and Investment value are expected to increase in the year 2014-15 significantly. Import Market size is therefore significant and have the normal growth. Export Market size is at 0.01 level is significant and growth is expected to increase in the years to come (2014-15).

7.1.6 Auto Components Industry Investments

Indian exports of passenger vehicles grew consistently at a CAGR of 34.8% from FY 2001-02 to FY 2005-06, Maruthi, Tata Motors and Hyundai are the key exporters leading markets include Sri Lanka, Algeria, South Africa, United Kingdom and Italy. Passenger vehicle grow from 2798000 units at 2010 when compare to 2200000 units at 2009. All other SCV and LCV expected to grow gradually at 2015.

Hindustan Motors Production and sales decreased when compared to 2010-11 and no export growth for the years. General Motors Sales and export growth also decreased due to financial crises. Total passenger car production and sales were increased from the year 2010 to 2011 and export also increased from 37479 to 42075 units (2010-11).

7.1.7 Passenger Vehicles, Comparative Production, Domestic Sales, and Exports-March 2011

Auto sales in India hit a record high in January, defying expectations of a slowdown, powered by a growing middle class, easier access to loans and a wider choice of models. Vehicle sales in India, one of the fastest growing auto markets in the world, grew 31 per cent in 2010, but that growth is expected to slump to 15 percent this year 2011, amid rising interest rates, fuel prices and vehicle costs.
In 2011 Production increased to 26.93 percent and domestic sales 29.73 percent and exports also increased to 1.29 percent due to high demand for the products, though there is rise in petrol, other automobile parts, and high inflation rate etc.

Financial Year 2009, 2010 Hyundai Motor India Ltd, the country's third largest car manufacturer and the largest passenger car exporter, achieved the feat of selling 162,273 units as compared to 121,565 units sold in the same period last year. In March 2010, exports grew 23,534 units in contrast with 21,405 units in same period a year ago. General Motors announced its plans of exporting about 50,000 cars manufactured in India by 2011.

In Utility vehicles and in Multi Purpose vehicles, Production, sales and Exports increased gradually when compare to previous year. Production increased substantially to 41.93 percent in the year 2011. Technology changes shrinking economic distance and new management methods favour international production. Impact is however countered by cyclical fluctuations in income and growth.

Total passenger vehicles sales, production and exports has been increased in 2011 shows the increased revenue for automobile industries by more FDI inflows into the industry.

7.1.8 Passenger Car-Company-Wise Trends In Market Size

Companies trend in annual sales has been decreased to 12 % and the growth rate has been increased to 19 % in last two years from 2009 to 2011. P value is significant, therefore market size of the passenger car company growth is more.

The composition of the domestic market makes India an attractive FDI destination for automobile components manufacturers. All the companies like Maruti, Hyundai, Tata motors, Honda Siel, GM and Toyota sales has been increased from 2003-04 to 2009-10, Mahindra Renault, sales started only from 2007-08 and decreased to 280 Crore on 2009-10. It is because of poor maintenance (Car and petrol maintenance).
The predicted value of Maruti Suzuki is decreased from 38.34 (2009-10) to 33.53 (2014-15). Hyundai Motor value increased from 26.64 percent (2009-10) to 33.88 (2014-15), Tata Motors 12.42 (2009-10) to 30.53 (2014-15) more percent increased, Honda Siel 6.28 to 31.11, Fiat India 3 percent to 9.77 percent, Ford India 2.85 to 10.16, GM India 2.85 to 6.69, Skoda 2.24 to 6.10 percent and BMW 1.71 to 2.10 percent expected to increased in the year 2014-15.

Benz value expected to increase 1.51 (2009-10) to 2.31 percent, Toyota 1.04 to 2.41, Hindus Motors 0.67 to 2.47, Mahindra 0.36 to 1.82, International Car Co 0.06 to 1.84, New Holland Fiat 0.05 to -0.63, Premier 0.04 to -0.44 in the year 2014-15.

7.1.9 Statistics For Passenger Cars

In 2006, the industry produced 10.9 million vehicles, an increase of 16.22% over 2005. In 2005, production grew 14.5% over the previous year. The production of the automotive industry growth rate of over 20% in 2006-07 and 15 percent in 2007-08. Annual rise = 7 per cent increased and Growth rate has been 15 percent also increased. In Export quantity also increased up to 46 percent this year, and value increased to 55 percent, Domestic sales value increased to 19 percent at 2011-12.
**Production:** Number of Production increased gradually from March 2010 to March 2011, from 23.9 % to 30.4 % and decreased in the month of November from 31.6 % to 10.3 % due to fuel hike and demand of materials.

**Exports:** the cumulative annual growth rate of automotive exports during the period 2000-01 to 2005-06 was 32.92 per cent. Exports during 2006-2006 and 2007-2008 are expected to grow over 20 per cent. Number of Export has been decreased from the month April 2010 to January 2011. Total Export 32.9% on April 2010, slightly raised to 1.6% in the year March 2011.

**Imports:** Europe is the biggest importer of cars from India, while African nations largely account for the import of buses and trucks. China is most recently making inroads into this market.

**Sales:** Passenger Vehicles: Growth in sales of passenger vehicles was 18.45% in 2006. This was almost three times the growth witnessed in 2005. Sale of passenger cars expanded by 20.0%. Export of passenger vehicles increased by 12.9%. Sales also increased when compared to July 2010, from 20.6% to 30.5 % and overall sales has been decreased from the year 2010, 27 % to 24.0% in the year 2011.

Overall production, sales and export value has been decreased in the year 2011-12, due to Policy implication and fuel demand for the customers.

**7.1.10 Automobile–Passenger Vehicle–Trends-Export**

Indian exports of automotive components more than tripled during the period, with compound annual growth of 20 % and 1.8 billion in FY 2005-06, reached estimated production 298,7296 units in 2010-11, also estimated to increased in the years to come. The ‘p’ value shows 0.991 significant level and constant at 0.254 is accepted.

Production value increased from 120,9876 (2004-05) to 298,7296(2010-11) shows positive growth and ‘P’ value indicates that 0.991, and 0.254 at constant level. Production value estimated to increase in the year 2014-15.
Sales of Passenger vehicles jumped 12.9 % by selling more than 3,48,800 units against 3,08,700 units sold during April-June 2006. June 2007, Indian Passenger vehicle marking going strong with over 94000 units sold against over 80700 units in June 2006, a straight growth of more than 60 %. But sale of commercial vehicle lagged behind by moving lightly over 4 % around 35900 units in June 2007.

In April 2010-11 total sales 2,520,421 from 1,951,333 units.(2009-10) shows 20 % increase in sales volume of the passenger vehicle market. Several global automakers in India such as Toyota, Ford Motor, Volkswagen, Nissan and General Motors are lining up new models and boosting investment in the country, with a focus on exports.

To get better Grades, plans to export 250,000 vehicles manufactured in its India plant by 2011. Similar plans are for General Motors. Sales of trucks and buses however, a key barometer of economic health, rose 17.8 per cent to 62,009 vehicles in June. Sales at top car maker Maruti Suzuki India fell 8.8 percent to 80,298 vehicles in June, marking the first fall since December 2008.

Passenger car sales in India are seen growing at 10 to 12 per cent this fiscal year, down from an earlier forecast of 16 to 18 per cent. Car sales in India rose 1.6 per cent in June and the industry sold 143,370 cars in the year 2010-11. A fleet of hybrid cars from the mills of international and domestic car makers are expected to drive in Indian roads. These cars will run on the combined power of electricity and an engine of various conventional. Other foreign investors who have made it big in the Indian shores such as Toyota and Ford are also eyeing the Indian car market to launch hybrid cars.

The launch of the Toyota Prius is getting delayed because of the lack of government support to the car maker. Easy loan options and reduction in the excise duties from the Indian government led to the high growth in the automobile industry.
Factors like the government sponsored stimulus package, low interest rates and the aggressive competitiveness of auto manufacturers to launch new models have played a pivotal role in this growth.

China registered a growth of 42% last year and Germany witnessed 23% growth. And all these happened while the other markets in the world were having a negative growth in the market. However, the floating automobile market in India is set to cool down relatively, and register a growth rate that would range in the low double-digits in 2010-11, mainly because of the high standard set in the previous year. The Indian automobile market will grow at the rate of 10-14% in this Financial year 2010-11.

7.1.11 Passenger Car: Diesel Vs Petrol

Petrol engine manufacturers are responding by developing their own direct injection engine, demand for diesel cars is growing at a fast clip, threatening the industry’s pecking order. And nowhere is it playing out as prominently as in India where every car maker is scrambling to set up diesel engine plants even as pure-play petrol vehicle makers such as Honda are losing ground.

Demand for diesel vehicles has increased so much that it has more than made up for the fall in demand for petrol vehicles. Nearly 3,000 VW Polo petrol variants remain in the stockyard unsold. Ramping of production of its diesel cars for VW, as all engines are imported from Germany.

In September 2011 petrol rates and interests rates are high for loans, buyers are likely to go for diesel cars for their running cost. GM acquired Daewoo and Suzuki decided to be on its own. Alliances have become the name of game within the global automobile industry to keep costs in check in an intensely competitive scenario. Companies like Daimler could not quit pull it off with Chrysler, Mitsubishi and Hyundai in the recent past but this did not stop the company from tying up with Renault. Suzuki and Fiat could look at strengthening ties in the near future.
Mitsubishi likewise has joined hands with Peugeot and the two could end up working on a global car in India eventually. Renault’s cross-holding deal with Nissan has been the most successful alliance for years now. Renault India entered the premium SUV (sports utility vehicle) segment in India at September 2011. The Renault Koleos made its international debut in 2008 and currently sold across five continents including Europe, South America and the Asia Pacific and the company also participated show case a new small car the Auto expo in January 2012.

Audi, the German car business at present entered in to used car business in India in a big way, there are 5,500 to 600 Audis on Indian roads, and sales target for this calendar year are 5,500 sold now close to 3900 cars and through used car business in Audi markets such as Europe accounts for 30-40 per cent of its revenue.

Two multi-national car, majors-Suzuki Motor Corporation of Japan and Hyundai Motor Company of Korea-have indicated that their manufacturing facilities will be used as a global source for small cars. The spurt in in-house product development skills and the uniquely high concentration of small cars will influence the country's ability to become a sourcing hub for sub-compact cars.

The new car launches that have been lined up for this year are going to increase expenditure on advertising and promotional activities. But that is no cause for the buyers as these companies are likely to transfer only a small part of the cost burden by increasing the car prices.

Indian buyer is considered carefully apparently, included for shipping of brands of bottled water to design the right holder at Hyundai plant. Maruti Suzuki was expected to benefit from access to VW’s (Volks Wagon) diesel engines, met by Fiat from its Ranjangaon plant has fuelled speculation. Both the companies have their core strengths in small cars. Fiat is in much better shape, globally and the successful integration of Chrysler into its fold has been one of the encouraging developments.
7.1.12 Automotive Sales Statistics

Almost all the automotive majors in India have registered a significant surge in their sales figures in the year 2007 with the coming of fuel efficient, swanky and ergonomically designed vehicles. In January 2012, some companies declared record sales. Indian automotive major Maruti Udyog Ltd. rolled out a total of 62,248 vehicles, which translated to a magical 28.3% growth over the same period the preceding year for the company. Meanwhile, Maruti's biggest contenders such as Hyundai Motors, General Motors India, HondaSiel cars India and Ford India posted their sales figures at 17,460 units, 3776 units, 6013 units and 4623 units respectively. Furthermore, Hyundai saw a phenomenal 78% rise in its sale of its flagship brand Santro over last year.

Just like its big brother, the two-wheeler segment also witnessed a huge growth in the recent past. For example, with three of its immensely popular new models namely, CBZ X-treme, Glamour and CD Deluxe, hero honda sold a total of 2,97,554 units posting a modest 19.3% increase in its sales figures over the previous year. Likewise, TVS Motor Company sold a total of 121,147 units that helped better its overall growth by 7% over its previous year postings.

The structure of India's auto industry is unique when compared to other developed economies. Besides a strong four-wheeler market, India also has sizeable two-wheeler, three-wheeler and commercial truck markets. The country rolled out a total of 8.5 million vehicles in 2004, of which 1.2 million were passenger cars and multi-utility vehicles. By 2010, India will be a two million passenger-car market and will become a three million market by 2015. If only India had previously developed an adequate road infrastructure, these volumes could have already been reached. Purchasing power for such volumes exists today, but road development is moving at a far slower pace. Although the foundation for a strong passenger-car industry was laid in the early 1990s, real momentum has been building only since 2000, when the government significantly changed its policies, taking steps to make manufacturing more internationally competitive by creating export promotion zones and expanding infrastructure.
India also freed industry from excessive regulations five years ago. Its stance toward foreign direct investment also became less restrictive. In China a joint venture is required for domestic production. India's auto FDI policy, on the other hand, allows global demand to have 100% ownership, which has created a healthy industry from the start. The Indian market therefore is full of real players and not "aspirers."

7.2 CONCLUSION

The present study concludes that FDI inflows have shown significant growth in the post liberalization period. The compound annual growth rate of Actual FDI inflows during this period comes out to be as high as 29.56 percent. The analysis on structure of FDI in India reveals that, after liberalization there definitely has been a shift in favor of service sector and a steep fall in the share of manufacturing sector. However, this trend matches the trend of change in the structure of FDI inflows to the developing countries and even the world.

7.2.1 FDI inflows

Foreign Direct Inflows (FDI) is, however expected to continue to grow at a healthy pace. This is because the India economy is likely to grow at a faster pace than most international economies. Domestic lending rates have risen considerably over the past 3 to 5 months. FDI in portfolio investments dipped from an estimated $12.3 billion in the December 2010. A heartening feature of the changing automobile scene in India over the past five years is the newfound success and confidence of domestic manufacturers. They are no longer afraid of competition from the international auto majors.

The FDI inflows in August 2009 were USD 3.26 billion. Contrary to smart recovery in the domestic economy and a rebound in exports, overseas investment show a slackening trend in the year 2010-11. For the April-August period of 2010-11, FDI inflows declined by 35 per cent to USD 8.92 billion compared to USD 13.8 billion in the same period last year.
The main reason for the decline in FDI is slump in the major western economies like the US and Europe. This reflects that global economic recovery is still fragile and some impact of that would be reflected in our FDI. Global economic recovery is one of the reasons for declining FDI in India.

Foreign investment in July 2010 was at USD 1.78 billion, a dip of 49 per cent and in June international inflows were at USD 1.38, a dip of 46 per cent over the year ago period.

The key to continued FDI in India’s auto sector rests with continued expansion of the domestic market, which seems ensured, and the further development of India as an automotive export hub. The slow progress on improvements to the transportation infrastructure and the uncertain availability of inputs such as steel may make it difficult for India to meet its AMP (Automotive Mission Plan 2006-2016) targets. The supply of fuel for individual motorists is also problematic in India. Some automakers also note that frequently changing government policies have a negative impact on their investment decisions.

The two factors that are having their impact felt in this segment are the growing buying power of the middle class and the low-interest EMI schemes. With the changing times, more technologically advanced and fuel efficient vehicles would crowd the city streets and rule the roost everywhere.

The Japanese and the Koreans have reason to worry because they have already made investments on petrol engines in India. It is all about the running cost of diesel cars that has people interested in buying them. Because Renault is also bring in a diesel batch back and sedan, with the same DCI engine (direct common-rail injection) that goes into the Nissan Micra.

To conclude, the automobile sales are expected to experience a boom in the coming years and we might get to see a couple more automotive giants invading the Indian territories and locking horns with the Indian titans. India is a fast growing economy and the Automotive Industry playing a leading role in this vehicles sales.
The number of vehicles being manufactured and sold is increasing every year and the projections show a double digit growth in future. The number of vehicles on roads will increase exponentially in the coming years.

7.2.2 Profit Margins to Improve Marginality

The Indian automobile is expected to record growth in revenues supported by in the domestic as well as export market. Nevertheless, as the commodity prices are expected to remain constant, the pressure on margins would increase largely. Besides, the entry of several other OEMs that have lined up elaborate investment plans is also going to benefit the industry in the domestic market. The current financial year is going to be a challenging one. Taxes on personal and corporate incomes mostly make up direct taxes, while indirect taxes include customs, excise and service tax.

7.2.3 Passenger Car Segment

Indian automobile sector has become synonymous to success. The passenger car segment in particular is great due to healthy economic condition, easy finance schemes and low ownership costs. The Indian car manufacturing industry is expanding its horizons. The car industry has been able to amaze the world with its innovation of cars in terms of car sizes and prices. The scenario in India is similar to that in China where demand for affordable cars is increasing. Moreover, India has begun to muse over mass production of clean cars such as hybrid cars and electric cars in the near future. The other Alternative fuel car that we have in India is the electric car. Currently, Maini Reva is the only electric car maker in India.

The key to continued FDI in India’s auto sector rests with continued expansion of the domestic market, which seems ensured and the further development of India as an automotive exports hub. The slow progress on improvements to the transportation infrastructure and the uncertain availability of inputs such as steel may make it difficult for India to meet its AMP targets. (Automotive Mission Plan 2006-2016)
According to the data collected through the survey from the customers and owners of the car industry, view that new models are certainly spurring car sales and despite the escalating interest rates, demands is still picking up as most of the Indian customers turn to finance services to buy vehicles. (over 50% of vehicles sold in the country are purchased on credit). Also healthy economic growth of the country after recession is making the consumer richer, thus encouraging them to invest in cars.

7.2.4 Indian Government Policies Affecting Auto FDI

The supply of fuel for individual motorists is also problematic in India. Some automakers also note that frequently changing government policies have a negative impact on their investment decisions. Since, 1990, Indian government policies have been aimed at promoting a globally competitive auto sector, and FDI is critical component of this plan. For the past 10 years, India has taken a number of steps toward expanding the domestic automotive industry and promoting it as a globally competitive player.

The India has been significant in its encouragement of foreign investments in India for its emerging economy. Invest in India is an initiative to market India as an investment destination all over the globe, to provide a networking platform to the Indian businesses at a global level and to provide information to the international investors about investment opportunities in India.

7.2.5 Future Growth of the Automobile Industry

The latest concern regarding global warming has forced the Indian car industry to go green. On the other hand, the Indian government is showing interest in hydrogen cars. In fact, the government has planned millions of hydrogen-powered cars that are to be launched by 2020. India has long ventured into the hydrogen energy technologies, which is likely to be the reason why hydrogen-powered cars are preferred over the hybrids.
The Maini Reva Electric Car Company came into being back in 1994. It was set up as a joint venture with Maini Group of Bangalore and AEV LLC of California (Foreign Limited Liability Company). It will soon have competition with Bavina Industries which also produced electric cars. Bavina cars will hit Indian roads in 2011.

Based on the study conducted, it is recognized that old vehicles are the gross polluted that can contribute up to 80 percent of the pollution road in major cities. Therefore the supreme court had directed to phase out old vehicle from the operating metropolitan cities. It is important to note that the central and state governments initiative measures to bring all motor vehicles within the ambit of periodic fitness certification so that new vehicles can be produced and can sold in the new market in India to get more revenue to the Indian government.

The Indian auto Industry is working with the authorities to facilitate for introduction of the alternative fuels. India has also setup a task force for preparing the Hydrogen road map. The use of LPG has also been introduced as an auto fuel and the oil industry has drawn up plans for setting up of Auto LPG dispensing station in major cities.

Today, the Indian automobiles manufacturing industry has 11 passenger car manufacturers, 12 commercial and utility vehicle manufacturers, 10 two wheeler manufacturers, 12 tractor manufacturers, 3 three wheeler manufacturers, and seventh earth moving equipment manufacturers. Today, approvals for FDI in Indian Automobile Market have become automatic and the country can export without paying taxes. Hence, a big opportunity for automobile FDI growth exists in India.
7.2.6 Profile of respondents

The majority of respondents were males (n=166, 82%) and with regards to educational qualification, there are 30% professional degree, 20% post graduate, 30% under graduate and the rest is pre degree. The three categories of employment the respondents belong were studied are private enterprise, public enterprise and self employed. The self employed with 44%, public enterprise with 21% and private enterprise was 35%.

The descriptive statistics include the mode, mean and standard deviation of the raw score of each of the variables as given the respondents. The mean values for the 7 variables on Likert scale ranged from 2.87 to 4.07 and the S.D ranged from 0.55 to 1.04. the highest mode and maximum mean were found to be the same for the variable, Customer Expectation, with the standard deviation being above average.

Overall customer satisfaction is a more fundamental indicator of the firms past, current and future performance. Cronbach’s alpha is equal to 0.774 the value of 0.7 considered at normal level of scale reliability and internal consistency value 0.7 is considered acceptable. A value of Alpha in excess of 0.9 is considered very good level of scale reliability and customer loyalty is very good and considered acceptable.

Testing the Goodness of Fit of Factor Models with Exploratory Factor Analysis, we let the data suggest the number of factors and thus interpretation find choice of Model could only be justified subjective criteria and “rule of thumb”. The Factor Analysis was applied to the responses obtained from Passenger Car customers on various aspects related to customer satisfaction and expectation. Using SPSS version 19.0 the factors underlying customer expectation were identified.

Applying the latent root criterion of retaining factors with Eigen values greater than 1.0, the 4 factors will be retained, (Customer Loyalty 6.52, Perceived Quality 2.91, Word of Mouth Praise 1.94 and Word of Mouth Activity 1.2). In viewing the Eigen value, for the fifth factor, it is low value 0.927, relative to the latent root criterion value of 1.0 precluded its inclusion.
The four factors retained represent 66.272 percentage of the variance of the 7 variables deemed sufficient in terms of total variables are significant each other. Combined all these criterion together leads to the conclusion retain four factor for further analysis.

Seven factors emerge and they are Customer Loyalty, Perceived quality, Perceived Value, Word of mouth Praise, Word of Mouth Activity, Customer satisfaction and customer expectations. The variance extracted by these 7 factors is 78%.

According to our Hypothesis, Structural Equation Model (SEM) was developed to assess the statistical significance of the proposed relationships between overall Customer satisfaction and its dimensions. Word of Mouth Communication and Word of Mouth Activity is negative and concluded that they did not have a direct significant influence on customer satisfaction.

7.2.7 Hypothesis and Model Result

The results provided strong support for all the variables which indicates positive and direct role of all the variables affecting customer satisfaction. However, Word of Mouth Praise and Word of Mouth Activity were found to have either very low or negative parameter estimates.

Therefore, it was concluded that they did not have a direct significant influence on Brand of Cars, Customer Satisfaction. Therefore all null hypothesis were rejected except H7. The inter correlation between all the variables Customer Loyalty, Perceived Quality, Customer Expectation, Perceived Value and Customer Satisfaction were significant and positive. Hence, Word of Mouth Activity and Word of Mouth Praise might affect Customer satisfaction by influencing Customer Loyalty there by select Car Brand.
7.3 SUGGESTIONS AND RECOMMENDATIONS

Though the automobile industries have been in luxury segment, since entry in India over a decade age, it need to widen its product portfolio to expand presence and increase market share of car products and car sales. When evaluating the opportunities emerging in different segments, including the compact car segment, the industry has to invest more to enhance the production capacity in the coming years to introduce new models.

No centralized data warehouse/agency on vehicle registration and related parameters exist. This makes timely access and retrieval of information a daunting task. In the absence of centralized data availability, the manufactures face a problem whenever they need to recall any model/batch vehicles to rectify major manufacturing defects.

Major benefits of the availability of centralized registration details (owner, address, phone numbers and other details) will enable to recall of the exact vehicle by problem, especially pertaining to safety of the vehicles owner as well as other road users. Keeping in view of demand structure for styling and engineering design, centers, it is suggested that the studying centre may be a part of National Institute of Design act as model centre for providing data base for engineering design also education and training to orient R & D to meet customer’s demand.

With the increasing number of production and sales, demand, the system of vehicle registration in the country needs to be modernized. Till date, no hydrogen-powered cars have been introduced into the Indian market and till now in India, production of clean cars with hybrid and electric drive trains are limited to some car manufacturers. India can depend on its technology and manufacturing base. This will definitely push many carmakers to manufacture their own clean cars. Presently, the priorities of the Indian car industry are to made affordable. A wide product portfolio, competitive pricing, expectation of high fuel efficiencies, presence of diesel versions and modern designing have been some of the factors that have helped players to compete successfully in this segment.
7.3.1 Car manufacture and their Car Models: (Diesel and Petrol)

According to the data collected from the Car Owners 90 percent respondent’s opinion about their cars including new model car, quality, reliability, colour, maintenance, spare parts availability, etc. (Middle Class People-High Class and Travel/Business)

20 percent response from the car users is on executive cars, 15 percent response for Luxury cars, 30 percent for super luxury, 15 percent for Big and small Hatch Bags cars including all types of car and models.

7.3.2 Some of the specific measures suggested are as follows

The cascading impact of the taxes need to be removed in order to make these units competitive. Most segments in the automotive industry are highly capital intensive and promises new employment opportunities. Since most auto-component manufacturing companies are SMEs, it is imperative to create a Modernisation and technology up gradation fund to facilitate development of world-class, state-of-the-art production facilities. The funds could be provided by the Government.

7.3.3 Investment Plan

The year wise investment required to be made in the public/private sectors during the period 2011-12, keeping in view funds required for up gradation of technologies for achieving international competitiveness, in-house R&D and new products required for meeting the demand-supply gap in the long run.

The Automotive Industry offers huge growth potential in terms of sales volume (including exports) and also immense employment opportunities. This would happen only if the sector gets adequate attention in terms of investment. It is estimated that the automotive sector requires an incremental investment of Rs 11,000 -12,000 crores per annum to realise its full growth potential.
Out of this the automobile sector requires an incremental investment of Rs 9,000-10,000 crores and the auto component sector requires Rs 2000 crore. It is estimated that the total turnover of the automotive industry in India would be of the order of US$ 75.3 billion in 2012.

7.3.4 The future challenges for the Indian automobile industry

In achieving the National Vision would primarily consist of developing a supply base in terms of technical and human capabilities, achieving economies of scale and lowering manufacturing costs, overcoming infrastructural bottlenecks, stimulating domestic demand and exploiting export and international business opportunities.

7.3.5 Recommendation to the Government for Automotive Industry development

Manufacture and export of small cars, MUV, two and three wheelers, tractors, components to be promoted. Specific measures will be taken for expansion of domestic market. Policy initiatives for competitiveness and developments of technology would be taken.

Closer partnership between industry, research institution and academia for innovation to be encouraged. R & D, product, process and technology to be incentivized and exports to be encouraged. Ministry of Petroleum and Natural Gas to ensure availability of fuel as committed in Auto Fuel Policy and also to prepare a Road Map for Fuel Policy beyond 2010.

Incentivizing to promote designing and R & D for new product development in India. Creation of virtual SEZ for auto component industry and Auto Parks to promote exports with special emphasis on SMEs. The industry has a very large number of SMEs. In order to promote the development of SMEs, it is crucial to effectively integrate them into the supply chain as Tier 2 and 3 suppliers. (The Tier 1 is the complete system supplier, followed by the lower Tier companies).
7.4 INDICATIONS FOR FUTURE RESEARCH

For the Indian automobile industry in achieving the National Vision would primarily consist of developing a supply base in terms of technical and human capabilities, achieving economies of scale and lowering manufacturing costs, overcoming infrastructural bottlenecks, stimulating domestic demand and exploiting export and international business opportunities.

Hence, performance measurement in all type of foreign made cars like Lamborghini, in all over the world and fuel efficiency for some special types of brand cars should be considered in future research.

Brands like ACVRA, DAIHATSU, SEAT, MERCURY, JAGUAR of German and Us companies and JV of Chinese partner companies Chrysler-Soueast Motor, Cadillac Shanghai GM, Buick-Shangai GM, Peugeot- Peugeot Citroen, Kia-Kia Automotive, Dodge-Soueast Motor, Citroen- Peugeot Citroen Automotive etc should consider for future research in India.

7.5 LIMITATIONS

1. The research study measured the Customer Satisfaction and Customer expectation of foreign made passenger cars, limited to some of the car owners in India, so there is scope to expand the study to all the cities in India, to avoid the significant regional gaps in consumer’s attitude, their expectation in purchasing and using the foreign made passenger cars.

2. For a careful economic analysis of the effects of foreign investment, considerable detailed statistical information is required both at the aggregate and at the passenger vehicle production firm level or at the industry level. In their absence, much of our analysis is indicative in nature, raising questions for further enquiry.

3. Availability of data for passenger car production and company wise trends in sales available only from 2003 and automobile industry trends only after 2000 is the another limitation to find out the significant growth of the automobile industry.