Customer Satisfaction on Foreign Made Passenger Car Segment in India

Dr. K. Rajalakshmi,
Asso. Professor, Prof.Dhanapalan college for Women, Chennai

Abstract:
The Indian system of administration and governance is impregnated with flaws like shortages of power, bureaucratic hassles, political uncertainty, and infrastructural deficiencies. In spite of all these political shortcomings, India is perceived to be one of the most lucrative grounds for investing, in the eyes of the wealthy European as well as American investors. This is the true reason why the researches made into the sector establishes more and more foreign investors coming to India and investing liberally into the various sectors of the Indian economy. Various Indian market sectors have experienced a recent progress and boom, owing to the investment made in them as well as due to the relaxation of rules and regulations that have been levied on the foreign direct investment in India, by the Indian government. Mauritius is the most preferred route for directing FDI into India while Singapore is the second largest contributor.

Foreign Direct Investment (FDI) is, however, expected to continue to grow at a healthy pace. This is because the Indian economy is likely to grow at a faster pace than most international economies. Here the researcher using three statistical tool for analyzing the study, Structural Equation Model to assess the statistical significance of the proposed relationships between overall Customer satisfaction and its dimensions and 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. Hence this study necessitated the causes and impact of FDI flows in automobiles sector FDI flows in passenger car segment and recent FDI trend in this sector on customer satisfaction were discussed.

Key words: FDI inflows, automobile sector, passenger car, customer satisfaction.

1. Introduction
The FDI in Automobile Industry has experienced huge growth in the past few years. The increase in the demand for cars and other vehicles is powered by the increase in the levels of disposable income in India. The options have increased with quality products from foreign car manufacturers. The introduction of tailor made finance schemes, easy repayment schemes has also helped the growth of the automobile sector. However, the growing world market and domestic market lives scope for future expansion and introduction of domestic manufacturing facility in Mexico for the automobile products by means of joint venture form various other developing countries that works in line to the inherent strategic interest of Mexico. Developing countries like India, which has similar macro socio-economic characteristic like democratic political system, dynamic growing economic and social structure should come together to have new ventures in the automobile sector where presently no domestic company exists in Mexico despite of 80 years of Automobile industry evolution. Mexico future domestic automobile companies has a scope to look beyond the USA and European MNC like someone like Indian companies TATA, Mahindra & Mahindra and Hindustan Motors for their future investment and strategic opportunity to have the strong domestic supply and expand to export market beyond North America. (Ganesh Babu, 2011).

In order to further improve the automobiles in the Indian domestic market, to provide world class facilities of automotive testing and certification and to ensure a healthy competition among the manufacturers at a level playing field, ministry has undertaken to lay down the road map for future development of the industry in the form of ‘Automotive Mission Plan 2006-2016’ (Dr. Ramesh Chand 2006).

Currently, India’s increasing per capita disposable income which is expected to rise by 106% by 2015 and growth in exports is playing a major role in the rise and competitiveness of the industry. Tata
Motors is leading the commercial vehicle segment with a market share of about 64%. Maruti Suzuki is leading the passenger vehicle segment with a market share of 46%. Hyundai Motor India and Mahindra and Mahindra are focusing expanding their footprint in the overseas market. Hero Honda Motors is occupying over 41% and sharing 26% of the two wheeler market in India with Bajaj Auto. Bajaj Auto in itself is occupying about 58% of the three wheeler market.

2. Need for the Study
The automobile sector is also growing but at a higher pace. Indeed it forms one of the fastest growing sectors in the Indian economy and so is the popularity of automobiles in India. A number of cars and other automobiles are imported and exported every year. It has successfully developed and modernized at its own pace. There are various major players in automobile sector in India. Indian automobile industry is the tenth largest in the world. Every year new and advanced model of cars and other vehicles are launched by various leading manufacturers suiting the consumer needs. With the increase in per capita income, the purchasing power of people has also increased. More and more people are turning to private vehicle and have become a successful affordable mode of transportation. The auto majors are envisaging India as the epicenter of small cars, which would drive exports of cars out of India in Indian Passenger Vehicle Industry. Hence, this study necessitates analysing the impact on FDI in automobile industry with reference to passenger car segment.

3. Industry Composition
Passenger cars and utility vehicles are the main segments of the Indian passenger vehicle industry with the former accounting for 80% of the total volumes. Within the passenger car segment, the mini and compact segment together accounts for around 80% of total volumes. Over the last 5-years the compact car segment in particular has been the focus for most OEMs, leading to a large number of product introductions and the segment has outperformed the rest of the industry in terms of growth. Being the largest segment by volume, the compact car segment is also intensely competitive with the presence of seven players with as many 16 offerings. The segment has also witnessed the highest number of launches over the past 12-months with major ones being Ritz, A Zen Estilo (from MSIL), i10, i20 (from HMIL) and Indica Vista (from Tata Motors Limited -TML). This segment has also been the bread and butter for India’s small car exports, especially from MSIL and HMIL. Overall, the top three market players in the passenger car segment–MSIL, HMIL and TML –Currently dominate the segment. In 2014, this segment is likely to witness the entry of General Motors, Volkswagen, Ford India and Nissan. Going forward, all serious players in the Indian market are expected to introduce products in the compact segment, leading to some fragmentation of the overall segment. The overall market share for the top players is likely to get further fragmented since a number of global majors have significant plans for the Indian market. (Anjan Ghosh et al 2014)

4. Passenger Car Market In India
Car manufacturing has entered into another dramatic phase in India in recent times. The global auto majors like Ford, Toyota, Suzuki and Hyundai have set up manufacturing plants in India and are using India as an important production base to source their market requirements both for India as well as the global market. The growth of auto parts manufacturers in India has also been phenomenal on the sidelines of automobile manufacturing has come a long way in India since its beginning in late 1940s. The two auto manufacturers Hindustan Motors and Premier Automobiles that started off in the 1940s have enhanced their production, technological and manufacturing process that enable them to offer better and efficient cars to the consumers of this age. Mahindra & Mahindra, Tata Motors and a host of foreign car makers like Ford, Toyota, Suzuki, Honda, Hyundai and Skoda are gradually enhancing their scale of operations and presence in the country sensing the growing business opportunity for the car makers in India.
The first car ran on India's roads in 1897. Until the 1930s, cars were imported directly, but in very small numbers. India is believed to be the fourth largest passenger car market in Asia comprising a
range of cars belonging to different price segments. According to Passenger Vehicles analysis in the year 2012-13, Most of the automotive players have plan for expending their activities in India.

5. CUSTOMER SATISFACTION ON FOREIGN MADE CARS IN INDIA

To explore the relationship between Customer satisfaction, Customer Loyalty and Word of mouth (WOM) Communication in the passenger car segment in India, the framework of this study was developed based on American customer satisfaction Index by Claes Fornell and et al (1996). The brands chosen are from the companies like BMW, Mercedes Benz, Volkswagen, Maruthi Suzuki, Hyundai and Fiat. The variables used are Perceived Quality, Perceived Value, customer Loyalty, Customer Satisfaction and customer expectation and these variable are borrowed from American customer satisfaction Index by Claes Fornell and et al (1996). The purpose of this study is to identify the relationship between FDI Investments in the above mentioned companies, customer satisfaction and its antecedents and consequences. To identify the customer expectations, perceived quality, perceived value, customer satisfaction, and customer loyalty were measured by 18 questions (Fornell, Johnson, Anderson, Cha, & Bryant, 1996).

5.1. 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%.

Table 1: Descriptive Statistics

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.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Expectations</td>
<td>4.07</td>
<td>0.5</td>
<td>3</td>
</tr>
<tr>
<td>Perceived Quality</td>
<td>3.96</td>
<td>0.65</td>
<td>3</td>
</tr>
<tr>
<td>Perceived Value</td>
<td>3.82</td>
<td>0.61</td>
<td>2</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>3.55</td>
<td>0.66</td>
<td>2</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>2.87</td>
<td>1.05</td>
<td>2</td>
</tr>
<tr>
<td>Word of Mouth Activity</td>
<td>3.73</td>
<td>1.04</td>
<td>2</td>
</tr>
<tr>
<td>Word of Mouth Praise</td>
<td>3.33</td>
<td>0.96</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2. Varimax Rotated Component Matrixa

<table>
<thead>
<tr>
<th>Items In the Questionnaire</th>
<th>Customer Loyalty</th>
<th>Perceived Quality</th>
<th>Word of Mouth Praise</th>
<th>Word of Mouth Activity</th>
<th>Customer Expectation</th>
<th>Perceived Value</th>
<th>Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.Likelihood of Repurchase</td>
<td>0.855</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.Price Decrease Repurchase</td>
<td>0.833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.Price Increase Repurchase</td>
<td>0.789</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.Personal Requirements</td>
<td>0.849</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. Reliability Experience | 0.735 |
10. Quality Experience | 0.732 |
26. Good things to say | 0.833 |
27. Proud to Say | 0.798 |
25. Talk about Company | 0.689 |
22. Mention about Car | 0.881 |
23. Told More People | 0.868 |
24. Seldom miss an Opportunity | 0.579 |
8. Requirements | 0.839 |
7. Overall Expectations | 0.809 |
9. Reliability | 0.698 |
14. Price for Quality | 0.774 |
13. Quality for Price | 0.744 |
16. Fall Short or Exceed Expectations | 0.786 |
17. Ideal Product/Services | 0.659 |

**Extraction Method: Principal Component Analysis.**

The VARIMAX rotation is used when the research goal is data reduction (Hair Et al P151), two items were deleted due to low factor loadings i.e., Less than 0.50 (Hair and Et al) and cross loadings. Loadings 0.50 or greater are considered practically significant (Hair & et al). 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%.

### 5.2. Confirmatory Factor Analysis (CFA):

CFA enables us to test how well the measured variables represent the constructs. A conceptual grounded theory can be tested using CFA explaining different measure items represent important psychological, social or business measures. Post hoc analysis helps us to fit the model better and thereby two items got eliminated.

### 5.3. Parameter Estimates, t-Values and Goodness of- Fit Measures for the constructs.: A confirmatory Factor Analysis (CFA) with AMOS 5.0 Graphics software (SEM version 19.0) for the measurement model with five constructs was performed.

**Table 3. AMOS Output**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Significant/Not Significant</th>
<th>Squared correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer_Loyalty_1</td>
<td>1.00</td>
<td></td>
<td>0.840</td>
</tr>
<tr>
<td>Customer_Loyalty_2</td>
<td>0.864 (15.096)</td>
<td>Significant</td>
<td>0.757</td>
</tr>
<tr>
<td>Perceived_Quality_1</td>
<td>1.00</td>
<td></td>
<td>0.697</td>
</tr>
</tbody>
</table>
Perceived_Quality_2  0.948 (11.781) Significant  0.593
Perceived_Quality_3  0.857 (12.006) Significant  0.612
Word Of Mouth_Acivity_1  1.00  0.890
Word Of Mouth_Acivity_2  0.932 (12.315) Significant  0.737
Word Of Mouth_Praise_1  1.00  0.655
Word Of Mouth_Praise_2  0.801(9.323) Significant  0.438
Word Of Mouth_Praise_3  0.986 (11.554) Significant  0.686
Customer_Expectations_1  1.00  0.309
Customer_Expectations_2  1.257(6.995) Significant  0.573
Customer_Expectations_3  1.344(7.033) Significant  0.663
Perceived_Value_1  1.00  0.604
Perceived_Value_2  1.098 (10.653) Significant  0.689
Customer_Satisfaction_1  1.00  0.604
Customer_Satisfaction_2  0.869 (8.440) Significant  0.453

NOTE: t-values are in parentheses; all are significant (t > 2.00) (J. Anderson-1987). All factors loadings were significant and varied from 0.45 to 0.75 satisfying the convergent validity criteria, as show in the above Table.

Table.4. Regression Weights: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived_Quality</td>
<td>&lt;---</td>
<td>Customer_Expectation</td>
<td>0.705</td>
<td>.137</td>
</tr>
<tr>
<td>Perceived_Value</td>
<td>&lt;---</td>
<td>Perceived_Quality</td>
<td>0.755</td>
<td>.083</td>
</tr>
<tr>
<td>Customer_Satisfaction</td>
<td>&lt;---</td>
<td>Perceived_Value</td>
<td>0.881</td>
<td>.108</td>
</tr>
<tr>
<td>Customer_Loyalty</td>
<td>&lt;---</td>
<td>Customer_Satisfaction</td>
<td>1.061</td>
<td>.154</td>
</tr>
<tr>
<td>Word Of Mouth_Communication-Praise</td>
<td>&lt;---</td>
<td>Customer_Loyalty</td>
<td>0.664</td>
<td>.081</td>
</tr>
<tr>
<td>Word Of Mouth_Communication-Activity</td>
<td>&lt;---</td>
<td>Customer_Expectation</td>
<td>0.787</td>
<td>.203</td>
</tr>
<tr>
<td>Word Of Mouth_Communication-Activity</td>
<td>&lt;---</td>
<td>Word Of Mouth_Communication-Praise</td>
<td>0.589</td>
<td>.104</td>
</tr>
<tr>
<td>Word Of Mouth_Communication-Praise</td>
<td>&lt;---</td>
<td>Word Of Mouth_Communication-Activity</td>
<td>-0.085</td>
<td>.097</td>
</tr>
</tbody>
</table>

Regression Weights: ** *indicates P< 0.001 is significant and positive. 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.

Table.5. SEM Model fit summary

<table>
<thead>
<tr>
<th>Goodness of fit Statistics</th>
<th>Values</th>
<th>Desirable values</th>
</tr>
</thead>
<tbody>
<tr>
<td>χ² value with 111 df</td>
<td>203.515</td>
<td></td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>1.833</td>
<td>Less than 2 is desirable</td>
</tr>
</tbody>
</table>
RMR = Root mean square residual, GFI = Goodness-of-Fit Index; AGFI = Adjusted Goodness of Fit Index; RFI = Relative Fit Index; CFI = Comparative Fit Index ;IFI = Incremental Index of fit; and RMSEA = root mean square error of approximation.

Table.6

<table>
<thead>
<tr>
<th>Relationship between constructs</th>
<th>Supported/Not Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td>Customer Expectations</td>
</tr>
<tr>
<td>Perceived Value</td>
<td>Perceived Quality</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Perceived Value</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Customer Satisfaction</td>
</tr>
<tr>
<td>Word of mouth Praise</td>
<td>Customer Loyalty</td>
</tr>
<tr>
<td>Word of mouth Activity</td>
<td>Customer Expectations</td>
</tr>
<tr>
<td>Word of mouth Activity</td>
<td>Word of mouth Praise</td>
</tr>
<tr>
<td>Word of mouth Praise</td>
<td>Word of mouth Activity</td>
</tr>
</tbody>
</table>

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.

5.4. Parameter Estimates, t-Values and Goodness of Fit Measures for the constructs

A confirmatory Factor Analysis (CFA) with AMOS 5.0 Graphics software (SEM version 19.0) for the measurement model with five constructs was performed. All factors loadings were significant and varied from 0.45 to 0.75 satisfying the convergent validity criteria. The variables are Customer Loyalty, Perceived Quality, Word of Mouth Activity, Word of Mouth Praise, Customer Expectations, Perceived Value and Customer Satisfaction.

RMR = 0.041(Root mean square residual), GFI =0.910( Goodness-of-Fit Index); AGFI =0.859(Adjusted Goodness of-Fit Index); RFI = 0.864 (Relative Fit Index); CFI =0.952(Comparative Fit Index); IFI = 0.952( Incremental Index of fit); and RMSEA = 0.065 (Root mean square error of approximation). The goodness-of-fit statistics indicated that most criteria met the recommended value in the measurement model [(χ²)/df = 1.861 at p = 0.000].

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.

6. Model specification

When SEM is used as a confirmatory technique, the model must be specified correctly based on the type of analysis that the researcher is attempting to confirm. When building the correct model, the researcher uses two different kinds of variables, namely exogenous and endogenous variables. A variable that regresses on a variable is always an endogenous variable, even if this same variable is also used as a variable to be regressed on. Endogenous variables are recognized as the receivers of an
arrowhead in the model. It is important to note that SEM is more general than regression. In particular a variable can act as both independent and dependent variable.

6.1. MODEL Hypotheses and Result using SEM.
All the null hypothesis were rejected except H7
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 Activities 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 and Customer Satisfaction.

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. Future Plans
The Government has prepared a ten-year Automotive Mission Plan (AMP) to draw a future plan of action and remove obstacles in the way of competition, such as that required infrastructure be put in place well in time to alleviate its constraining impact on the growth. The plan envisages a tax holiday for the industry on investments exceeding $225,000, 100% tax deductions of export profits, and deductions of 50% on foreign-exchange earnings. To bring down the cost of power and fuel, which accounts for 6% of the manufacturing costs in the auto sector, captive power generation would be encouraged to enable industries to access reliable, quality and cost-effective power. (Business Line, 2013).

Ford India’s plan is to crowd the market with eight new cars by 2015. This segment is the fastest-growing in the industry, and has cars such as Maruti’s Swift and Ritz, Hyundai’s i10 and i20, Skoda’s Fabia, Nissan’s Micra, and Volkswagen’s Polo. Apart from Fabia, the other cars have brought major gains for their companies. The i20, for instance, priced at Rs 5-7 lakh, has been a roaring success, matching the much cheaper Figo in sales last year. The Ford company will meet its ambitious goals for growth in China and India by greatly expanding its product offerings. GM is also likely to bring in a Chinese hatchback based on the Chevrolet Sail platform this year. Toyota and Honda are giving final touches to their hatchbacks, Etios Liva and Brio, respectively. Both are slated for launch this year, and are expected to give tough competition to incumbents, including Maruti and Hyundai. Even Maruti is planning to launch the new Swift (and Dzire) sometime this year. (Boneham, 2011).

Government of India has to play a pivotal role to earmark necessary financial incentives to kick start the whole paradigm shift toward electric mobility in the country in the years to come. (Kaustubh shinde, 2013)

8. Conclusion
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. 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. 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 sale.

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. The results provided strong support for all the variables which indicates, positive and direct role of all the variables affecting customer satisfaction. Therefore, it was concluded that they did not have a direct significant influence on Brand of Cars and Customer Satisfaction.


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.

9.1 Car manufacture and their Car Models

- 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) to produce quality of car based on safety and reliability. (safety of the vehicles owner as well as other road users.
- 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 opined that to rectify major manufacturing defects.
- 60 percent response of car users need more diesel cars for more mileage and to avoid petrol variance. But Japanese car makers Toyota, Honda, Suzuki, Nissan and Korean counterparts Hyundai have invariably preferred making petrol cars have to give more production of small sedans diesel cars.
- European companies such as Volkswagen, Mercedes Benz, BMW, Renault, Peugeot and Opel have traditionally been the flag bearers on the diesel engine only luxury cars, it is difficult to purchase for middle class people.

10. Reference


