CHAPTER—4

ANALYSIS OF DATA

Under the reform process retail sector is exposed to international competition which forced them to introduce new methods of production, impart quality inputs along with modern technology to improve its working and efficiency. Retail growth is recognized as a key feature of economic dynamism and the industrial growth driven mainly by input growth is inevitably subject to diminishing returns to scale which may not be sustainable in the long run. Therefore, the policy makers are now pursuing the industrial growth through improvement and retail driven strategies that lay emphasis on enhancing retail sector growth rather than investment driven growth.

Retail have been playing a pivotal role in country's overall economic growth, and have achieved steady progress over the last couple of years. From the perspective of industrial development in India, and hence the growth of the overall economy, Retail industry has to play a prominent role, given that their labour intensiveness generates employment. The SME segment also plays a major role in developing countries such as India in an effort to alleviate poverty and propel sustainable growth. They also lead to an equitable distribution of income due to the nature of business. Moreover, Retail in countries such as India help in efficient allocation of resources by implementing labour intensive production processes, given the abundant supply of labour in these countries, wherein capital is scarce.

Further, to formulate the strategy for retail sector development, the knowledge for production structure and factor substitution in retail sector helps the planners to achieve the desired goals of balanced regional industrial development along with high level of efficiency. In this context, the present chapter endeavors to examine the customer's perception, their views regarding purchasing, bargaining skills, structure and analyze the level of their educational level to enhance retail sector NCR region in India.

Technological change holds the key to retail enhancement; it is the only way to bring about increases in output worth the same level of inputs. In today's globalized world higher retail growth is a prerequisite to achieve and maintain international competitiveness. The basic functions of technology is to facilitate humans in using the resources in different ways to save time and enable them to alter their natural environment in numerous ways, all of which enables them to specialize, increase their own retail and produce goods and services in quality and quantity much more than their own needs. That, in turn allows them to exchange their own production for production of others in the market, thus enabling them not only to be more productive, but also to be more efficient, save cost as well as satisfy more of their needs and the needs of others.

Retail industry is the driving force of every economy. The quest for better utilization of human labour and efficient use of Natural resources is an endless one. It is, therefore, often said that the March of human history can be measured by the advancement of technology. It is also widely recognized that technology has often determined the turn which history took at critical junctures along with this technological capabilities ultimately translate economic strength and influence the standing of a nation in the international community to enhance the growth rate of retail industry not only in India but also at international globe.

Technological change can be either exogenous, that is external or endogenous which is internal. If technological progress is exogenous, then the higher rate of growth of output, the higher is rate of growth in retail. This is so because faster output growth would allow addition of new and better quality machines. When the output growth is faster, endogenous technological progress also access and improvement in the methods of production takes place. Retail growth in Indian manufacturing is a key factor in determining the growth in this sector.

In any economy retail growth is the basis of efficient economic growth because of the enormity of the change the transition from the old globally inefficient to a new more efficient structure would be characterized by a slowdown in (measured) retail growth and GDP growth in the sectors undergoing this structural transformation?

Retail growth is the only plausible route to an increase in the standard of living. Retail growth lowers labour costs and production, etc. on the other hand, a firm is said to be technically efficient if it is producing maximum output from the given bundle of inputs, maintenance of higher level of technical efficiency requires not only the adoption of best practice technology, but also the use of that technology to produce maximum output from the given bundle of inputs.

It is evident from above discussion that for obtaining the arithmetic index of total factor retail and estimating a production function requires a well-defined set of output and input variables. In the present study, we considered only one output (gross output at constant prices) and two inputs (gross fixed capital at constant prices and number of employees). The required data have been downloaded from the official web site India Stat along with summary results of Annual Survey of Industries (ASI), various reports of Center for Monitoring Indian Economy (CMIE), Economic Surveys, Reports on Currency and Finance, Reserve Bank of India Bulletins, National Accounts Statistics and Handbook of Statistics on Indian Economy. The present study is confined to the period from 2001-02 to 2012-13 in case of organize retail sector. The choice of terminal year is governed by the availability of latest data from the Ministry of Statistics and Program Implementation (MOSPI). All monetary data have been deflated by using appropriate price deflators. The gross output figures at constant prices have been utilized as an index of output.

4.1 RETAIL INDUSTRY AND PRESENT INDIA

Small and Medium Enterprises significantly contribute to industrial, economic, technological and regional developments in all economies, developed and developing. The Indian SME market is placed at USD 5 billion. The Retail make a substantial contribution in terms of creation of employment, output and exports. They are capable of producing quality goods and contribute around 35% to total exports.

Economic Globalization refers to the integration of national economies into the international economy through trade in goods and services, foreign direct investment, capital flows, migration, and the spread of technology. Globalization has made it necessary for the Retail to be competitive. It has become a survival issue and they have faced the heat well so far. Retail need to be vitalized for competitiveness and sustainable growth under new world trade rules and faster technological changes.

In India a majority of the Retail are still in the unorganized sector and have to face internal and external challenges. While the external challenges such as cost of capital, infrastructural facilities, competitive procurement, technology transfer from developed countries and talent attraction will need government support, the internal challenges need to be focused on equally.

The Retail in India are either family run businesses or run by first generation entrepreneurs who may not have the backing of collateral or family assets. In times of severe competition, Retail need to have global preparedness and more importantly discover their own unique source of sustainable competitive advantage and build it at a significantly higher level. This is possible by having a clear vision, focused measurable goals, developing the potential of the people resulting in higher retail.

Change needs to begin at the top and percolate down to the lowest level in an organization. An entrepreneur today needs to play the role of the effective leader who forges confidently toward the future and emerges with a high-performance organization. The internal challenge to business owners and entrepreneurs is the development of the people who manage the business and drive the organization. The focus of their vision has to be propelled by clearly defined goals which are communicated to their teams. Most entrepreneurs wrongly perceive any initiative taken to bring about a behavioral or attitudinal change begins bottom up. The drivers for change are really the owners /senior management team and hence the transformational change process needs to begin at the top.

Retail is the wellspring of success and a part of human nature, yet many lack the direction they need to utilize their full potential and improve retail. This improvement can be brought about by a change in behaviors. However, our current behaviors are a result of past conditioning and hence are habits and thoughts that are extremely difficult to change. Hence the process of change takes time. It needs a spaced approach with time to apply concepts and track results. An external Coach can help organizations stay focused on their goals while still working on bringing about a change within the organization.

There are a lot of different management styles but the master method of motivation is attitude. People perform best when they are self-motivated. In spite of all external challenges they will go the extra mile when they believe in what they are doing and they are empowered to bring new ideas and be creative. This is where the entrepreneur will have to encourage the professionals to demonstrate their capability despite the external factors. Their personal motivation and self-image will be key to how they perform, respond and lead. Involving others and encouraging them to take ownership instills a sense of pride that can unleash the performance.

Culture and values have a very strong impact on recruitment and retention of talent, which is going to be one of the top priorities of entrepreneurs in the coming years. It is important for them to understand what values are most important to have associated with their services. Another area that entrepreneurs need to focus on is the ability to create a brand through an effective marketing and sales strategy. Market trends change rapidly and hence market research at regular intervals to ascertain buying patterns is mandatory. Researching clients is a key factor in understanding the growth trends, financial state, culture and buying practices. It will become increasingly important to have a target marketing strategy of key customers, make effective use of the internet and improve the level of customer insight.

4.2 GROWTH OF RETAIL INDUSTRY IN ORGANIZED SECTOR

The decade gone by would be considered as a golden era for Foreign Direct Investment in India in the context of retail sector. Between year 2000-11, India attracted cumulative FDI inflow of US$237 billion and this represented a growth rate of 23 percent on a CAGR basis. In 2010-11, about 64 percent of inflows came via this route The most direct metric to measure FDI is an increase in foreign exchange (forex) reserves. Post the liberalization impetus of the 90s, India’s reserves swelled from a meager

USD 1.2 billion (January 1991) to a comfortable USD 280.7 billion (July 2013). However there is still considerable scope to expand FDI.

India Inc. witnessed an increase of 25 percent (YoY basis) to record USD 2.32 billion of FDI in April 2013. Regarding the attractiveness of sectors, investment figures show a clear bias of towards Software & IT services, Industrial Machinery & Equipment, Business services, Consumer goods, Hotels & tourism, Pharmaceuticals and Chemicals.

These positive signs can be attributed to the foreign investment policy, which ironically is also a hot topic of debate for some left out sectors. National security and monopolistic reasons have restricted sectors like Aviation, Retail, Banking, Infrastructure and real estate and Broadcasting and Media from attracting FDI.

Policy makers need to look at FDI as a holistic fiscal tool that has an added advantage of upping the ante for the country. Attracting foreign investors is a multi-layered issue for India and it is not as simple as just improving accessibility. There are other stumbling blocks like weak infrastructure and complex regulatory ‘red tape’ which Indian policy makers need to address and improve to make the country attractive to foreign investment. Unless solid measures are introduced to arrest and stabilize inflation, improve the

Balance of Payments situation and get GDP growth back above 7 percent, foreign investors are likely to remain cautious about the India.

4.3 LIBERALIZATION OF FOREIGN DIRECT INVESTMENT LIMITS IN 12 SECTORS WITH RESPECT TO ORGANIZED RETAIL SECTOR

Foreign Direct Investment (FDI) in India is subject to certain Rules and Regulations and is subject to predefined limits ('Limits') in various sectors which range from 20% to 100%. There are also some sectors in which FDI is prohibited. The FDI Limits are reviewed by the Government from time to time and as and when the need is felt and FDI is allowed in new sectors where the limits of investment in the existing sectors are modified accordingly.

Some of the important changes made in the Existing FDI Limits are provided below:

- FDI Limit in Telecom Sector is increased from 74 per cent to 100 percent, out of which up to 49 per cent will be allowed under automatic route and the remaining through Foreign Investment Promotion Board (FIPB) approval. A similar dispensation would be allowed for asset reconstruction companies and tea plantations.
- FDI in single brand retail is to be allowed up to 49 percent under the automatic route and beyond that shall be through FIPB.

- In credit information firms, 74 per cent FDI under automatic route will be allowed.
- In respect of courier services, FDI of up to 100 per cent will be allowed under automatic route. Earlier, similar amount of investment was allowed through FIPB route.
- FDI cap in defense sector remained unchanged at 26%, however higher limits of foreign investment in state-of-the-art manufacturing would be considered by the Cabinet Committee on Security (CCS). Technically, the decision leaves it open for CCS to even allow 100% foreign investment in what the defense ministry will define as "state-of-the-art" segments with safeguards built in to ensure that the technology and equipment are not shared with other countries.

Some of the sectors in which FDI limits were expected to be increased but did not were, civil aviation, airport, media, multi-brand retail and brown field (existing firms) pharmaceuticals.

Table 4.1: Tabular representations of the key changes proposed under the FDI Limits are as follows:

Sector/ Activity	Before the proposal		After the proposal	
	% of FDI /Equity	Entry Route	% of FDI / Equity	Entry Route
Defence Sector	26%	Government Route	No Change	Higher limits of foreign investment in "state of-the-art" manufacturing would be considered by the CCS
Insurance Sector	26%	Automatic Route	49%	Automatic Route
Telecom Services	74%	Automatic up to 49% Government route beyond 49% and up to 74%	100%	Automatic up to 49% Government route beyond 49% and up to 100%
Tea Plantation	100%	Government Route	100%	Automatic up to 49% Government route beyond 49% and up to 100%
Asset Reconstruction Company	74% of paid-up capital of ARC (FDI+FII)	Government Route	100%	Automatic up to 49% Government route beyond 49% and up to 100%
Petroleum & Natural Gas	49%	Government Route	49%	Automatic Route
Commodity Exchanges	49% (FDI & FII) + [Investment by Registered FII under Portfolio Investment Scheme (PIS) will be limited to 23% and Investment under FDI Scheme limited to 26%]	Government Route (For FDI)	49%	Automatic Route
Power Exchanges	49% (FDI &FII) FDI limit of 26 per cent and an FII limit of 23 per cent of the paid-up capital	Government Route (For FDI)	49%	Automatic Route
Stock Exchanges/ Clearing Corporations	49% (FDI &FII) FDI limit of 26 per cent and an FII limit of 23 per cent of the paid-up capital	Government Route(For FDI)	49%	Automatic Route
Credit Information Companies	49% (FDI & FII)	Government Route	74%	Automatic Route
Courier Services	100%	Government Route	100%	Automatic Route
Single Brand product retail trading	**100%**	**Government Route**	**100%**	**Automatic up to 49% Government route beyond 49% and up to 100%**

Various surveys and industry experts have revealed that India is amongst the top destinations for investments across the globe. Certain facts and figures, pertaining to latest FDI developments, have been discussed hereafter.

4.4 GLOBAL TRENDS IN FDI INFLOWS

Improved macroeconomic conditions, particularly in the emerging economies, which boosted corporate profits coupled with better stock market valuations and rising business confidence augured well for global FDI prospects. According to UNCTAD, these favorable developments may help translate MNC's record level of cash holdings (estimated to be in the range of US$ 4-5 trillion among developed countries' firms alone) into new investments during 2011. The share of developing countries, which now constitutes over 50 per cent in total FDI inflows, may increase further on the back of strong growth prospects. However, currency volatility, sovereign debt problems and potential protectionist policies may pose some risks to this positive outlook. Nonetheless, according to the Institute of International Finance (January 2011), net FDI flows to EMEs was projected to increase by over 11 per cent in 2011. FDI flows into select countries are given in Table 4.2

Table 4.2: Countries with higher estimated level of FDI inflows than India in 2013

	Amount (US$ billion)				Variation (Percent)		
	2010	**2011**	**2012**	**2013 (Estimates)**	**2011**	**2012**	**2013 (Estimates)**
World	**2100.0**	**1770.9**	**1114.2**	**1122.0**	**-15.7**	**-37.1**	**0.7**
Developed Economies	**1444.1**	**1018.3**	**565.9**	**526.6**	**-29.5**	**-44.4**	**-6.9**
United States	266.0	324.6	129.9	186.1	22.0	-60.0	43.3
France	96.2	62.3	59.6	57.4	-35.2	-4.3	-3.7
Belgium	118.4	110.0	33.8	50.5	-7.1	-69.3	49.4
United Kingdom	186.4	91.5	45.7	46.2	-50.9	-50.1	1.1
Germany	76.5	24.4	35.6	34.4	-68.1	45.9	-3.4
Developing Economies	**564.9**	**630.0**	**478.3**	**524.8**	**11.5**	**-24.1**	**9.7**
China	83.5	108.3	95.0	101.0	29.7	-12.3	6.3
Hong Kong	54.3	59.6	48.4	62.6	9.8	-18.8	29.3
Russian Federation	55.1	75.5	38.7	39.7	37.0	-48.7	2.6
Singapore	35.8	10.9	16.8	37.4	-69.6	54.1	122.6
Saudi Arabia	22.8	38.2	35.5	-	67.5	-7.1	-
Brazil	34.6	45.1	25.9	30.2	30.3	-42.6	16.6
India	**25.0**	**40.4**	**34.6**	**23.7**	**61.6**	**-14.4**	**-31.5**

Source: World Investment Report, 2013 and Global Investment Trends Monitor, UNCTAD.

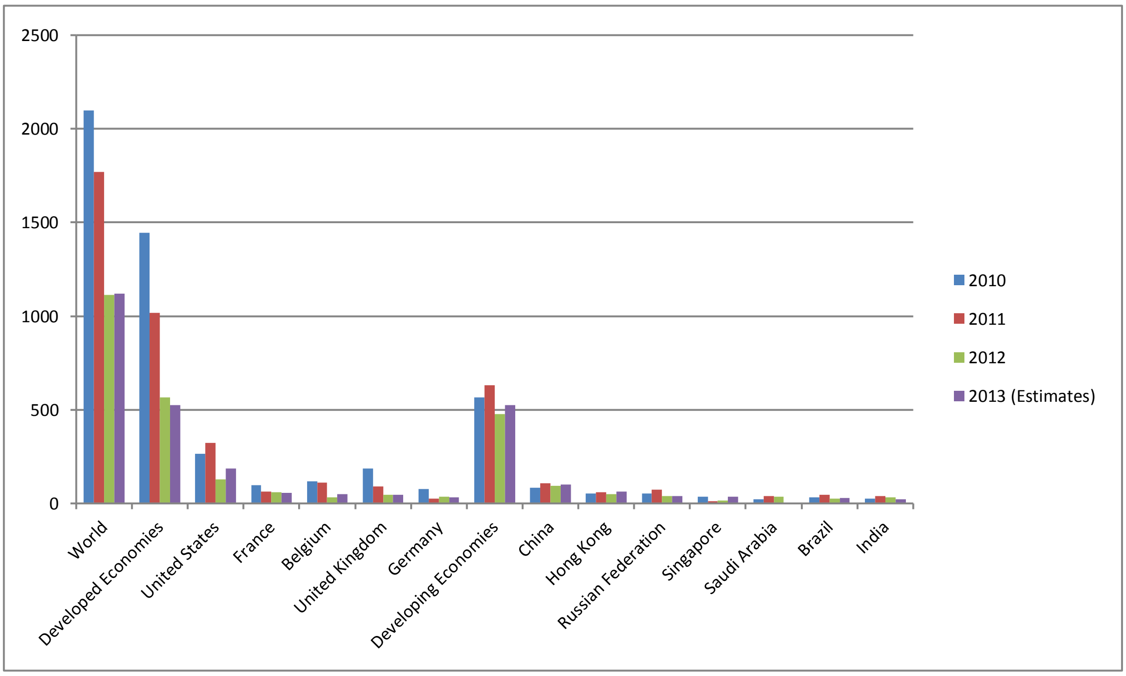

Fig. 4.1: Graphical representation of Countries with higher estimated level of FDI inflows than India in 2013

4.5 DETERMINING INDIA'S ECONOMIC TRAJECTORY

India's record GDP growth throughout the last decade has lifted millions out of poverty and made the country a favored destination for foreign direct investment. However, the sharp downturn in Europe and the United States, coupled with significant domestic challenges, has slowed this trend and stands to disrupt future growth.

The scale economies of organized retailing would likely have offered consumers a wider variety of products at lower prices, with safeguards like quality control and checking for counterfeit products, including infringed American goods. Organized retailers would also have to buy products directly from Indian farmers and producers, paving the way for better price realization. The provision of 50% FDI from the United States and elsewhere in back-end infrastructure for storage, logistics, and better extension services would substantially reduce wastage in India's farm produce, which is one of the highest in the world.

Countering these positive aspects, however, the initial impact of multi-brand retailers entering India's market is expected to have a negative impact on the over 12 million unorganized shops and countless kirana (mom-and-pop) stores, as they lack the financial muscle to challenge major retailers in terms of variety, quality, packaging, and other offers.

The government should have discussed the retail FDI matter with opposition parties and its alliance partners before getting approval from the cabinet. It eventually succumbed to outside pressure and suspended FDI in multi-brand retailing, and is unlikely to reopen the issue until after the 2012 state elections in Uttar Pradesh, Punjab, Uttrakhand, Manipur, and Goa. The Singh government would like to weigh its political position in these states after the elections before it makes tough decisions on issues such as FDI in multi-brand retailing. The flip-flop in retail FDI has created more uncertainty among investors and created doubts about further big-ticket market reforms in the near future.

To move forward, it is time that the Singh government talks to opposition and alliance partners about the benefits of multi-brand retail FDI. However, the political climate will be much clearer after parties position themselves leading to the state elections early this year. In addition, the government also needs to educate stakeholders like producers and consumers about the beneficial effects of FDI in multi-brand retailing, as not enough has been done on this front.

The Indian economy's biggest strength is that India is still the second-fastest growing nation next to China, with an annual growth rate of over 7%, and its growth is mostly led by domestic demand. Therefore, the government needs to do everything possible to sustain investors' confidence and a positive market sentiment. To indicate that India is serious about market reform, the government should put on the fast track some of the other big-ticket reforms such as retail FDI, banking, pension, insurance, civil aviation, labor reforms, land acquisition, and clarity over environmental issues. Movement toward reform and good governance are necessary to bring back investor confidence in the Indian economy.

From a sectoral perspective, FDI in India mainly flowed into services sector (with an average share of 41 per cent from the 2006-07 to 2010-11) followed by manufacturing (around 23 per cent). However, the share of services declined over the years from almost 57 per cent in 2006-07 to about 30 per cent in 2010-11, while the shares of manufacturing and others largely comprising electricity and other power generation increased over the same period.

Table 4.3: Equity FDI Inflows to India - Sector Wise

Equity FDI Inflows to India (Per cent)					
Sectors	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Sectoral shares (Per cent)					
Manufactures	17.6	19.2	21.0	22.9	32.1
Services	56.9	41.2	45.1	32.8	30.1
Construction, Real estate and Mining	15.5	22.4	18.6	26.6	17.6
Others	9.9	17.2	15.2	17.7	20.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Equity Inflows (US$ billion)					
Manufactures	1.6	3.7	4.8	5.1	4.8
Services	5.3	8.0	10.2	7.4	4.5
Construction, Real estate and Mining	1.4	4.3	4.2	6.0	2.6
Others	0.9	3.3	3.4	4.0	3.0
Total Equity FDI	**9.3**	**19.4**	**22.7**	**22.5**	**14.9**

B: Performance of Retail Industry in organized sector:

In this category respondents are being tested on the behalf of statistical tools, which may be explored such as:

1. **To know about the Customer profiling and how they perceive retail store as a brand:-**

For knowing the customer profile, demographic details of customers were sought on variables such as gender, occupation and education. The details are summarized in Table 4.4 and Figure 4.2 below.

$H_0$1: Males and females differ in their perception of comfortable arrangement of racks and shelf's.

t = 1.5968, df = 182.21, p-value = 0.112

mean in group Female	mean in group Male
3.769231	3.618687

$H_0$2: Males and females differ in their perception of the price charged by retailers.

t = -1.559, df = 137.83, p-value = 0.1213

mean in group Female	mean in group Male
3.942308	4.095960

For testing this hypothesis, an independent t-test was performed taking gender as a predictor variable and question no. 9 as an outcome variable. The t-test performed obtained a t value of t = -1.559, df = 137.83,

Table 4.4: Demographic Data (n=500)

Gender

Female	Male
104	396

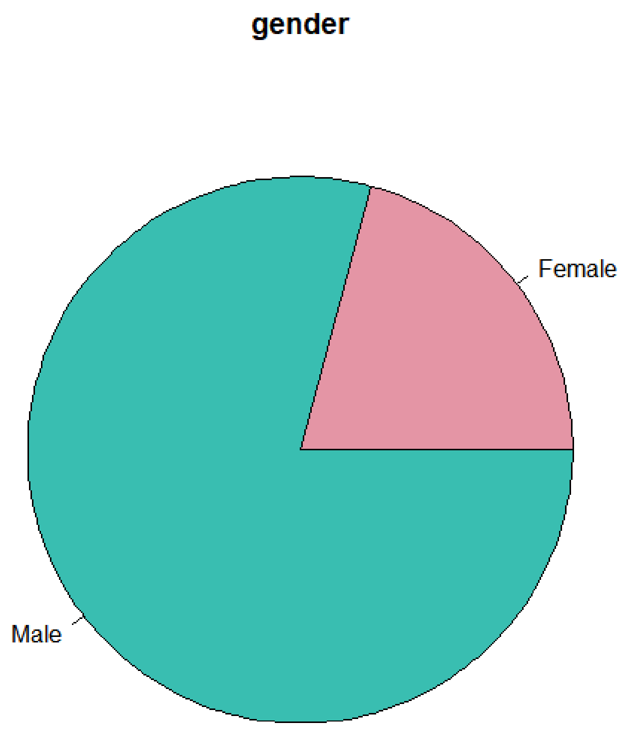

Fig. 4.2

Table 4.5: Occupation Data (n=500)

Occupation

any other	Business	house wife	service
258	68	12	162

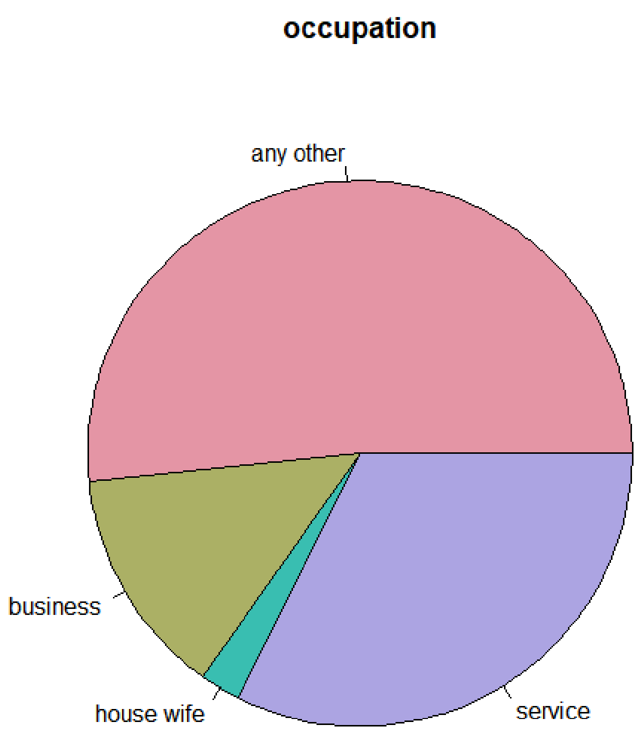

Fig. 4.3

Table 4.6: Demographic Data (n=500)

Age

21-30	31-40	41 and above	up to 21
327	30	16	127

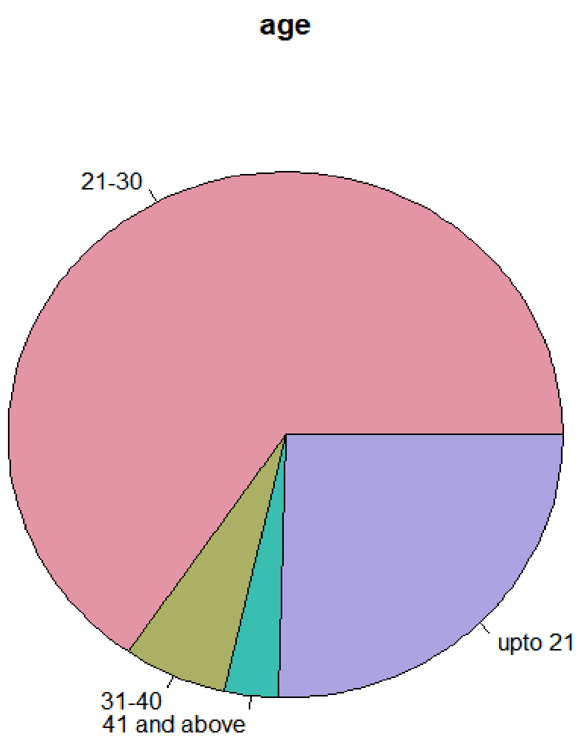

Fig. 4.4

Table 4.7: Demographic Data (n=500)

Education

Doctorate	Graduate	Post Graduate	Under Graduate
26	275	60	139

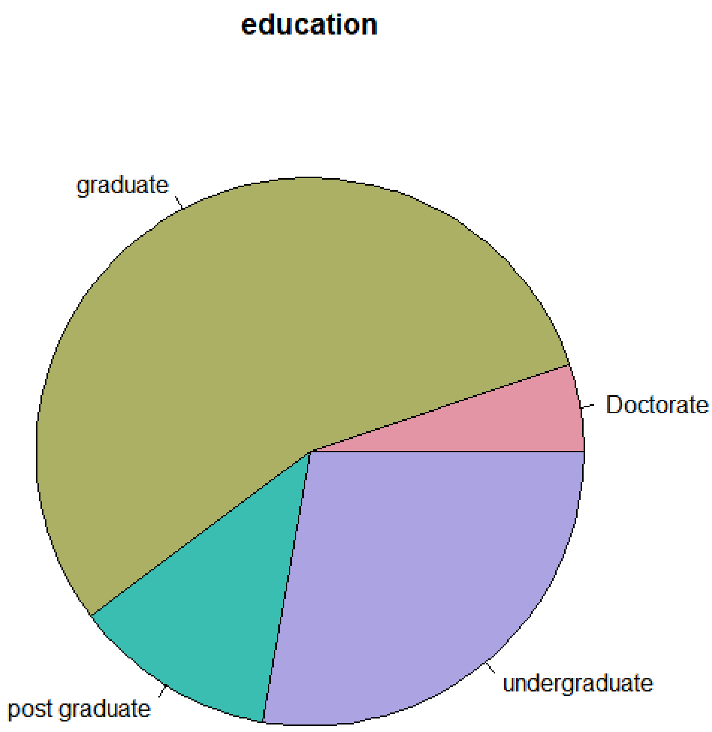

Fig. 4.5

p-value=0.1213. Since the p-value is greater than 0.05 for 5% significance level therefore, there is no significant difference in the perception of price charge by retailers between males and females. Hence the null hypothesis stands rejected.

In case of objective 1 and objective t-test has been employed because there is categorical data: Male and female where t-test is very much appropriate, if it were more than two category, ANOVA may be applicable where we may compare different dimensions or multiple factors.

$H_0$3: Education level has a significant effect on the feeling towards big retailers like Walmart entering the market.

For testing this hypothesis, one way ANOVA was performed for comparing the means of different education levels write to their scores on question no. 36.

The following results were obtained:

Table: 4.8

	df	Sum Sq	Mean Sq	F value	Pr(>F)
Education	3	2.7	0.9072	1.062	0.365
Residuals	496	423.8	0.8545	---	---

Table 4.9

	Mean	**Sd data**	**N**
Doctorate	3.807692	0.8494342	26
Graduate	3.570909	0.9951842	275
Post Graduate	3.633333	0.8629211	60
Under Graduate	3.712230	0.8097647	139

The F ratio obtained F= 1.062 (df = 3, 496), has a p-value of 0.365, which is greater than 0.05, indicating an insignificant F ratio. Thus, education level of the respondent has no significant effect on theirfeeling towards big retailers like Walmart entering the market. Hence the null hypothesis stands rejected.

$H_0$4: Education level effects consumers' perception of better social image while shopping at modern retail outlets.

For testing this hypothesis, one way ANOVA was performed, the following results were obtained:

Table 4.10

	df	**Sum Sq**	**Mean Sq**	**F value**	**Pr(>F)**
Education	3	0.17	0.0565	0.107	0.956
Residuals	496	260.78	0.5258	---	---

Table 4.11

	Mean	Sd data	n
Doctorate	3.846154	0.6126864	26
Graduate	3.905455	0.7085037	275
Post Graduate	3.866667	0.7694741	60
Under Graduate	3.877698	0.7562343	139

The F ratio obtained F= 0.107, has a p value of 0.956, which is greater than 0.05, thus education has no significant effect on consumers' perception of better social image while shopping at modern retail outlets. The hull hypothesis stands rejected.

2. **To have overview of competition prevailing in the same sector through Competitive analysis of major retail outlets:-**

For inquiring on this objective, respondents were asked to mention why they have shifted their purchasing to organized retail outlets. The frequencies associate with each option are listed below.

What was the reason to shift from traditional retailer to modern retailer? (n=500)

Table 4.12

Any other	Fun while shopping	More options	One stop shop	Quality products	Saving on purchase	Status
2	42	64	77	101	175	39

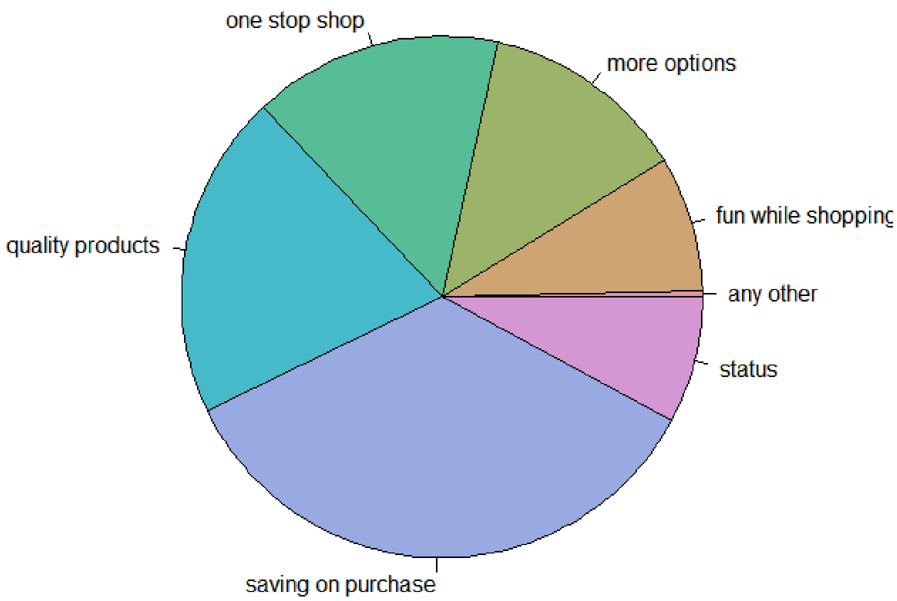

Fig. 4.6

The above frequency counts reveal that one of major competitive advantages that organized retail has is that they offer savings in purchases, this may due to various promotional offers, quantity discounts and tie ups with brands. Second most important factor is availability of quality products, this is also possible because many organized retail stores have tie ups with good quality brands. Thirdly, organized retail stores are a one stop shop, this is again possible as they have tie ups with various brands which span across many product categories.

3. **To study the effectiveness of the Store Branding in formulating marketing strategies:-**

For inquiring on this objective, the respondents were asked a series of question regarding how the store is laid out as well how well the staff renders its services. For this respondents were asked to give rating on a 5-point Likert scale. The statements and their mean and std. deviation values are summarized below.

Table 4.13

Statement	Mean	Std. Deviation
Do the sales attendants help you in searching for product if needed?	3.772	0.8930908
Whether arrangement of shelves and racks is comfortable	3.650	0.9323296
Whether area and space provided for each category of products is sufficient?	3.740	1.1675300
Give your opinion about space for movement provided between shelves?	3.094	1.4592542
Customer help desk provided here handless customer problems efficiently.	3.822	0.9121294
Are you satisfied with the billing procedure followed here?	3.676	1.0005129
Do you find timing of this store convenient for you?	3.750	1.0647852
Whether electronic, electrical products are being tested here before selling?	3.882	1.1200827
Are the staff and managers appropriately and smartly dressed?	3.738	0.9794256
N= 500		

Further, a regression model was made to measure the level of satisfaction among the respondents from store branding.

H0: Satisfaction with price charged by retailers is significantly affected by service orientation of the retailers.

For testing this hypothesis, a multiple linear regression analysis was performed. Satisfaction with price charged by retailers (question no. 9) was taken as a dependent variable and question nos., 25, 24, 31, 30, 27, 26, 35, 32, 33 were taken as independent or predictor variables.

Residual standard error: 0.7679 on 490 degrees of freedom

Multiple R-squared: 0.04308, **Adjusted R-squared:** 0.0255

F-statistic: 2.451 on 9 and 490 DF, **p-value:** 0.009777

The model summary for the regression analysis is shown above. As per analysis, the model explains 4.308% (multiple R-Squared = 0.04308) variation in satisfaction. The F statistic for the model F(9, 490) = 2.451 with p= 0.009 (p > 0.05) indicates that the model is better in predicting the outcome i.e. satisfaction, as compared to just using means as best guesses.

Table 4.14: Coefficients

	Estimate	Std. Error	t-value	Pr(>|t|)
(Intercept)	3.701372	0.252509	14.658	<2e-16***
Comfortable arrangement of Shelf's	-0.033249	0.040812	-0.815	0.4156
Helpful staff	-0.004282	0.042683	-0.100	0.9201
Satisfaction with billing	0.077860	0.036758	2.118	0.0347*
satisfaction with customer support	-0.005919	0.041285	-0.143	0.8861
space for movement	0.004741	0.023902	0.198	0.8429
space provided for ach products sufficient	0.024628	0.030577	0.805	0.4209
staff smartly dressed	-0.093134	0.036662	-2.540	0.0114*
store timing convenient	0.063310	0.035591	1.779	0.0759
testing of electronics before sale	0.061950	0.032773	1.890	0.0593

From the above analysis on the beta coefficients for satisfaction with billing and smartly dressed staff are significant ($p<.05$), rest all the independent variables have p-values greater than 0.05 (5% significance level). Thus, these coefficients are not statistically different from zero. Thus, from the above analysis, we can conclude that Satisfaction with price charged by retailers is significantly affected staff and managers appropriately and smartly dressed & satisfaction with the billing procedure followed.

4. **To study the effectiveness of promotional offers made by Retail store.**

To explore this objective, respondents were asked to mention how much they spend in retail stores in a month and what course of action they take when a brand of product they require is not available at a store.

How much do you spend at modern retail stores every month?

Table 4.15: Spending Pattern (N=500)

upto 1000	1000 to 2000	2000 to 3000	above 3000
150	166	96	88

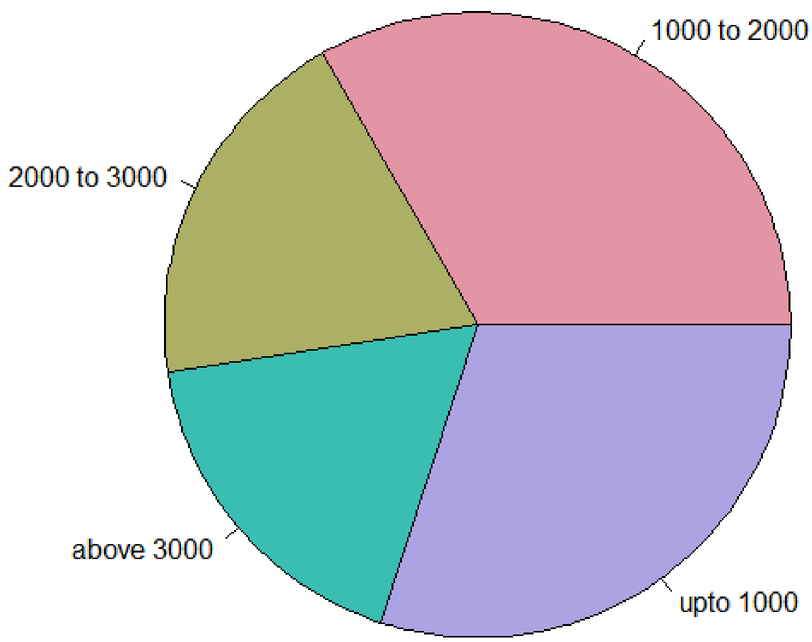

Fig.4.7

Select appropriate

(a) I purchase only the things in list: 84

(b) In addition to things listed, I purchase many things after coming here: 230

(c) I decide products to purchase after coming here, with the help of display: 69

(d) I like to save time while purchasing: 66

(e) I like to enjoy shopping while going through all shelves with ample time:51

The above question 1 reveal that on an average most customers spend an average of 1000 to 2000 INR a month. Secondly, they were what type of purchase behaviour they indulge in when they go to a retail store. 230 respondents replies that they purchase many things after coming to the store, which is the highest rated option (frequency =230), thus we can say that a consistent spending pattern and thinking about purchasing things after coming to the store, indicate that the promotional offers of the stores are effective.

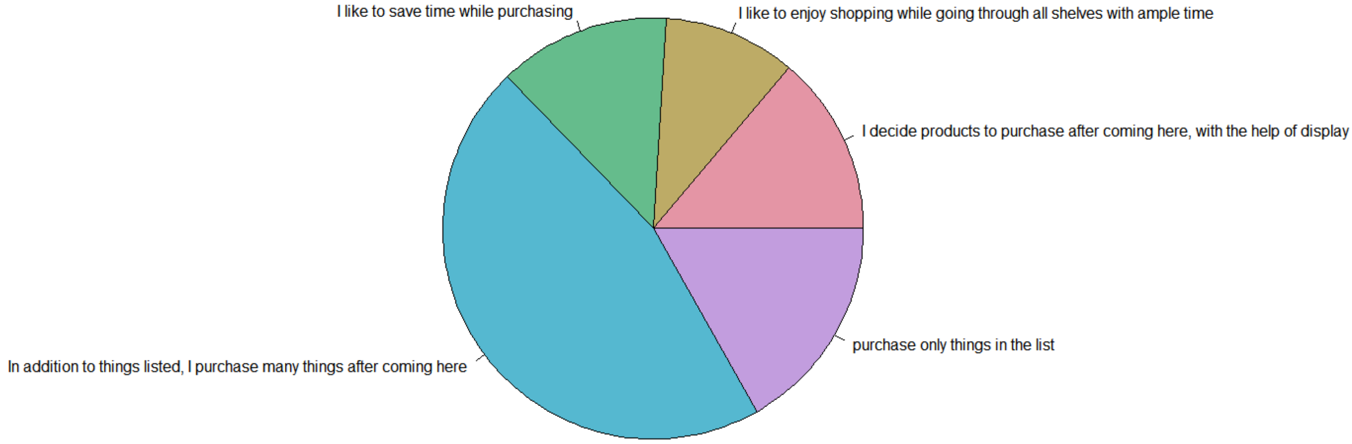
I like to save time while purchasing
I like to enjoy shopping while going through all shelves with ample time
I decide products to purchase after coming here, with the help of display
purchase only things in the list
In addition to things listed, I purchase many things after coming here

Fig 4.8

5. **To study the loyalty programs and various tie ups of Retail stores with other brands.**

For this objective qualitative approach was adopted.

For exploring this objective, 25 retail stores were asked question about what type of loyalty program they offer to their customers. The following table presents the major types of loyalty programs in action in these retail stores.

Type of Program	Frequency Count
Points loyalty program	4
Cash back loyalty program	4
Membership card	11
Power club	3
Gift cards	3

Secondly, the stores were asked whether tie ups with other brands benefits their retail business.

Yes: 19, No: 6

Thirdly, the stores were asked whether tie ups are a win-win scenario for both brands and retailers:

Yes: 21, No: 4

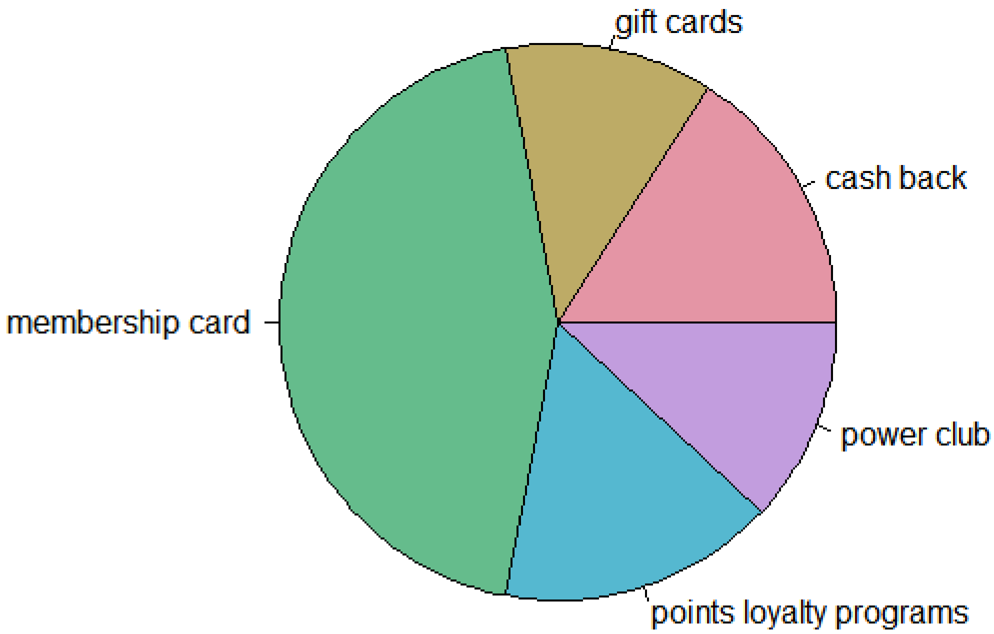

Fig.4.9

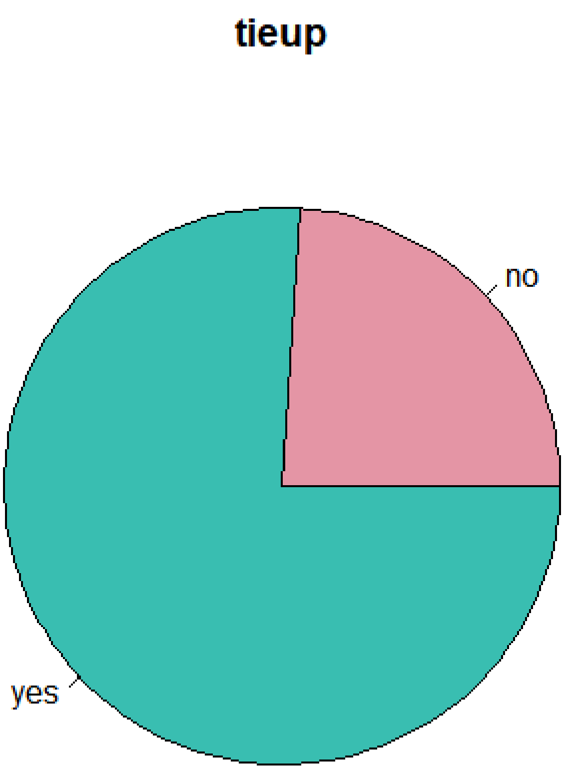

Fig.4.10

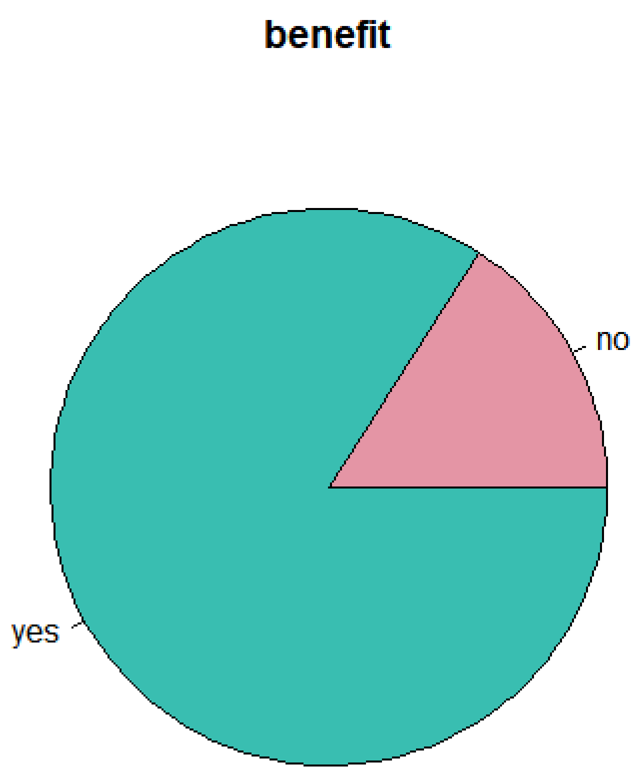

Fig.4.11

Further a Chi-square test was conducted to see whether, benefits of tie ups and win-win scenario of tie ups are associated.

Pearson's Chi-squared test

X-squared = 15.079, df = 1, p-value = 0.0001031

Since the p value associated with the chi-square statistic is significant, there exists a relationship between benefits of tie ups and win-win scenario for retail stores. Thus, tie ups are associated with win-win scenario for both brands and retail stores.