Chapter 4

Data Collection, Research Methodology and Investor Study Analysis

4.1 Introduction to Data Collection & Methodology:

Eriksson & Wiedersheim-Paul(1997) described the scientific approach to study by two fundamental perspectives namely rationalism and empiricism. Under the rationalistic approaches, the researcher bases the study on a theory, creates a Hypotheses and reaches a logical conclusion. In the empiricism perspective, the researcher collects data and then relates findings to theory.

This research falls under a combination of empirical and rationalism perspective. Here, in case of investor and intermediary studies, the researcher studies the basic theoretical framework in consumer awareness and distribution studies, analyses the empirical data collected and then relates findings to existing theories. These theories are based on inductive framework whose conclusions are based on empirical data.

A method can be described as an instrument in solving problems and in arriving at new knowledge of the subject in question. The results arrived at should generate an increased comprehension and understanding of the problem (Holmer & Solvang, 1996). The research further states that the method of research study can be quantitative or qualitative. A quantitative method is a formalized and structured. A qualitative method is characterized by a verbal description instead of a purely numeric data.

In this research investor data was collected through a quantitative method and intermediary data was collected through a quantitative and qualitative method. The intermediary questionnaire had a descriptive section.

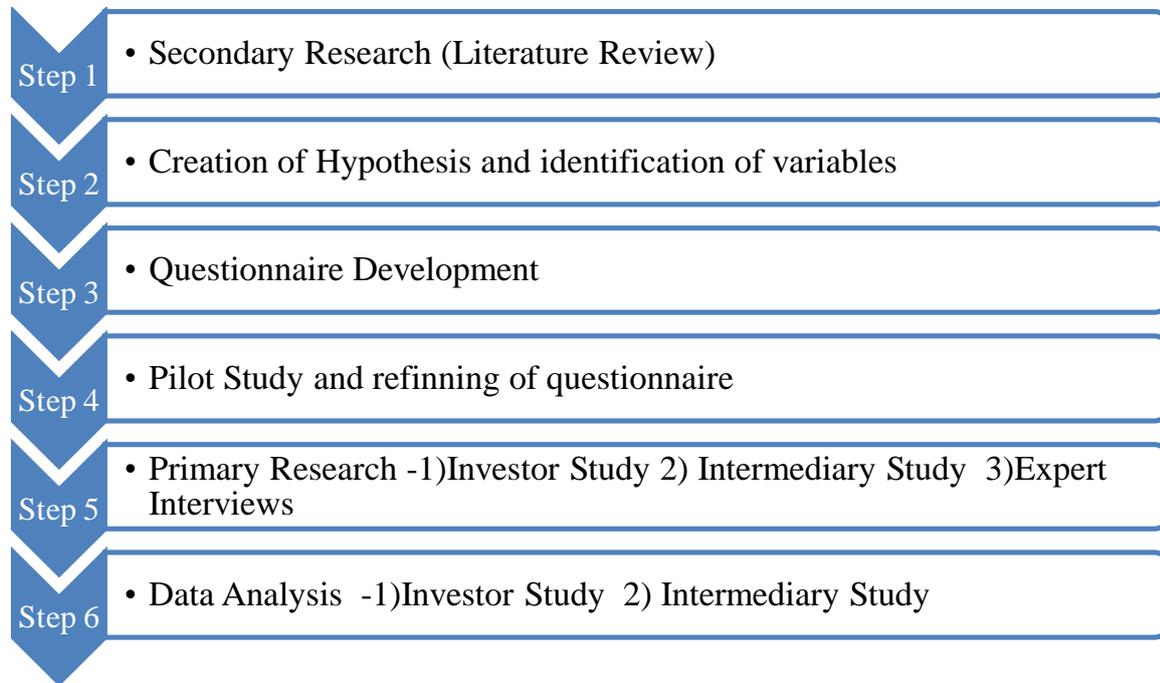**4.2 Data Description and collection:**

Primary data refers to the data which is collected for a specific purpose and which is required to complement the secondary data. Secondary data refers to the existing collection and summarized material of the subject in question (Eriksson & Wiedersheim-Paul, 1997).

The data collection for this research has been divided into two sections:

- A study of investor perceptions through analysis of mutual fund investor responses.
- Understanding of the evolving Intermediary model through intermediary interviews primarily Independent Financial Advisors (IFA) and Banks.

The research methodology for both the investor and intermediary study involved in this project is outlined hereunder:

Figure 1 : Research Methodology

Step 1	• Secondary Research (Literature Review)
Step 2	• Creation of Hypothesis and identification of variables
Step 3	• Questionnaire Development
Step 4	• Pilot Study and refinning of questionnaire
Step 5	• Primary Research -1)Investor Study 2) Intermediary Study 3)Expert Interviews
Step 6	• Data Analysis -1)Investor Study 2) Intermediary Study

Beri (2000) has defined sample as a part of a population or a subset from a set of units, which is provided by some process or other usually by a deliberate selection with the object of investigating the properties of the parent population.

Jankowicz (1995) has defined sampling as the deliberate choice of a number of people, the sample, who are to provide you with data from which you will draw conclusions about some larger group, the population, whom these people represent. As per Toll *et al.* (1984) the sampling process consists of the following steps:

1. Define the population

2. Identify sampling frame

3. Specify the sampling unit

4. Specify sample design

5. Determine sample size

6. Select the sample units

7. Collect the data from the sample units

4.3 Investor Behavior Study:

Research Statement:

The problem studied in the present context is entitled - "Impact of SEBI regulatory changes[*] on behavior of Mutual Fund Investors and Distributors ". This is the first study in this thesis. The study has been undertaken to find the answers to the following questions:

- What is the investor awareness and response regarding the regulation on ELR and Advisor Agent guidelines?
- How has the regulation affected his investment pattern?
- How does the investor select his intermediary now?
- What is the fee structure that is emerging in the mutual fund space in India?

The research Hypotheses are:

1. There are no significant differences in the awareness regarding the genesis of the Entry Load Removal Regulation among different demographic groups.

2. There are no significant differences in the understanding that the regulation on Entry Load Removal (ELR) is good among the different groups

3. There are no significant differences in Increase in MF allocation post the regulation on Entry Load Removal among the different groups.

4. Selection of type of Intermediary (Bank & IFA) is independent on the Type of Fees.

5. The investor's understanding of the implications of the entry load removal and selection of intermediary are independent of each other

Research Design:

Here, the researcher has used the descriptive research design in this study.

Objective of the Study:

Main objective:

Study the mutual fund investor's awareness of the regulations – ELR and Agent Advisor guideline and its impact on his investment behavior.

Secondary Objective:

Study the investor's choice of intermediary selection and awareness of mutual fund charges.

Understand the investor's behavior related to knowledge, market awareness, and portfolio monitoring habit.

4.3.1: Data Description: In the next subsections the sampling process, data analysis tools related to the investor study are discussed.

4.3.1.1 Sampling Process:

In this research the population includes Mutual Fund investors of Pune city. The sampling frame is the intermediary / AMC setup and events where investors are met. The individual mutual fund investor is the sampling unit. The purposive sample technique was used to select the sample. The sample size was based on the results of the Kothari formula (Kothari, 2004).

Sample Size Confirmation:

A Pilot Study was conducted with 50 Mutual Fund Investors in Pune City and they were asked about Entry Load Removal Regulation (ELR). Of these, 42 were aware and 8 were unaware. The Aware response was treated as p, and the unaware response (1-p) as q. Using the Kothari Formula the sample size was calculated (Kothari,2004).

Sample size (N) = Zsq * (*p*) * (1-*p*)/*C*sq

Where

Z = Z value (1.96 for a 95% confidence interval)

p =0.84

C = confidence interval =.05

This yielded a sample size (N) =207

Total investor sample of this research was 355. (> 207)

Representativeness of the population:

Ennew(1992) in her investor perception study of Independent Advise in UK, had used sample characteristics to determine the representativeness of the population and to generalize the results. A similar sample mapping is undertaken here to check the representative aspect of our sample.

Table 1 : Investor Sample study

Investor Income (%)	Pune Regional* (%)	Our Sample (%)
< 10 Lac	45	47
10-25 Lac	24	34
26-50 Lac	23	8
>50 Lac	8	11

P=0.270

Pune Regional*: Registrar name withheld on request.

The income distribution of this sample seems to resemble that of the Pune investor population. A chi-square test suggests that these sample characteristics are *not significantly different* from that of the population. Accordingly the sample was *viewed as sufficiently representative to generalize results.*

4.3.1.2 Nature of Data and Sources of Data: This study covered both primary and secondary data. Primary data was collected with the help of a structured questionnaire which was administered to investors. The researcher participated in 5 investor camps organized by intermediaries and an Asset Management company investor meet for collecting data. The secondary data has been collected from newspapers, magazines, websites, journals and published data of Sebi, Amfi and Mutual Fund companies.

4.3.1.3Questionnaire Design: The questionnaire was based on inputs taken from the FSA's – Consumer awareness of the FSA and Financial Regulation (2011) UK along with inputs from subject experts to adapt the same to Indian context and research work. The questionnaire had

two sections; the first section relates to demographical profile of respondents and the second part relates to the perception study of investors. In this section questions related to Entry Load Regulation, Agent-advisor guideline, mutual fund charges and fees, attributes for intermediary selection along with reasons for investing in mutual funds, portfolio monitoring habits were included.

4.3.1.4 Primary Research: The primary research was first conducted with a pilot of 50 mutual fund investors to validate the questionnaire and the methodology. This was followed by actual primary research in which 401 mutual fund investors were contacted.

4.3.1.5 Data Scaling and Measurement: In order to increase accuracy of research work, qualitative data scaling techniques such as nominal scale and ordinal scale are used.

4.3.1.6 Tools and Methods of Data Analysis

4.3.1.6.1 Tabulation and Classification of data: The data was collected through a structured questionnaire and tabulated. The data has been classified on the basis of age, education, qualifications, occupation, and gender, income, held by the respondents. Cross tabulation has been done according to different variables.

4.3.1.6.2 Framework for Data Analysis: Statistical package for social science (SPSS.11) was used to analyze the data.

4.3.1.6.3 Tests used : Kruskal-Wallis & Chi Square:

Kruskal Wallis Test and Chi-Square Test was applied for testing the Hypotheses1, 2, 3 and 4, 5 respectively. Data was analyzed using tables, charts and diagram. Statistical techniques like percentile, median, mean were also used to analyze the data.

The Kruskal-Wallis test is a non-parametric test that examines differences among three or more independent groups on one dependent group. It is used when a one factor ANOVA cannot be applied due to violations of the ANOVA normality assumptions. The Kruskal-Wallis statistic is = [12/ (N (N+1)] SUM [Ri**2/Ni] - 3(N+1)

This test compares mean values of more than two sets of data where data either is chosen from a limited set of values, or *if data doesn't follow a normal bell-curve distribution*. (Keller & Warack, 2002). Data in this case did not follow a normal distribution and is Ordinal in case of Hypotheses 1, 2 and 3.

Hypotheses 4 and 5 tests nominal data and hence here we use the Chi Square test.

*4.3.1.7 Scope of this study***:** The present study is an attempt to study the impact of the Sebi Regulation on the investors' perception. It is a Regulatory impact assessment study limited to Pune city mutual fund investors. While these studies are undertaken regularly in developed economies of the world, in India that is not the case. The study involved understanding of the basic concept of mutual fund, regulations in India, evolution of these regulations and gauging the investor understanding of these regulation and decision making process.   Similar studies on this line may be conducted on a Pan India basis and would then constitute a national Regulatory Impact Assessment (RIA).

*4.3.1.8: Limitations of the investor study***:**   For this research work, data was collected and interpreted with utmost reliability and consistency.   Due to investor prejudices, certain limitations of the study are as follows:

1. The study depicts the present scenario in Pune, and hence the result may not be applicable to another period of time.

2. This investor study is limited to 355 respondents of the city.

3. Answer to the questionnaire is subjected to investor bias.

4. We have assumed   that the respondents are honest in expressing their views and have filled the questionnaire without any bias.

5. The present study is restricted to information collected about the Mutual Fund investors with the help of questionnaire.

4.3.2 Intermediary Study Research Methodology: The researcher interacted with intermediaries primarily Banks and IFAs in Pune to conduct this study.

4.3.2.1 Research Statement:

The problem studied in the present context is entitled - "Impact of SEBI regulatory changes[*] on behavior of Mutual Fund Investors and Distributors ". This is the second study in this thesis and the researcher focus is to do an impact assessment of the ELR and Advisor Agent guideline on the distributor business model. The study has been undertaken to find the answers to the following questions:

What is the business model that is evolving across the intermediaries?

What are intermediary's future business plan?

What are characteristics for building a sustainable intermediary channel specifically IFAs.

The Hypotheses examined here are 6, 7, and 8.

Research Design:

Here, the researcher has used the descriptive research design in this study.

Objective of the Study:

Main objective:

Study the impact of the Entry Load Regulation (ELR) and Investment Advisor guideline on the distribution channel specifically on Banks and IFAs.

Secondary Objective:

What attributes contribute to building a strong customer relationship?

What portfolio monitoring style is currently adopted by investors?

4.3.2.2 Nature of Data and Sources of Data:
Primary as well as secondary data are used for this study. Primary data is the data that is collected for the first time and that is original in nature. This data has been collected through a structured questionnaire administered to intermediaries. Secondary data has been collected from newspapers, magazines, websites, journals and published data of Sebi, Amfi, Mutual Fund companies and trade bodies.

4.3.2.3 Tools for Data Collection: The study covers both primary and secondary data. Primary data was collected with the help of questionnaire which was administered to active IFAs and Banks. The researcher took inputs from registrar – an agency which processes mutual fund applications to determine sample size and generalize data. Based on the inputs from a Leading Pune Registrar representative *(this leading national registrar manages over 50% of the industry AUM)* the number of Independent Advisors (IFA) in Pune with <u>minimum 30 or above transactions in a month</u> are 150. These are called as Active IFAs by the Registrar. These actives IFAs were contacted and with two rounds of follow up over 52 responded. These constitute nearly 38% of the Active IFA population. The characteristics of this sample were compared with the national sample and it was found not significantly different and hence this sample maybe considered representative. In Pune, the number of Banks with active Mutual Fund Distribution proposition identified based on registrar inputs were 18 numbers of which 6- Public Sector, 6 – Private Sector and 6 – Foreign Banks. Of these 10 Banks responded with partial data. In recent times, due to extremely stringent disclosure norms, Banks also showed unwillingness to disclose or discuss existing practices even in an academic context. Partial responses were documented in their cases.

4.3.3 Sample Design:

Convenience sampling method is used to collect data. A structured questionnaire was administered to over 150 Mutual Fund active intermediaries – IFA and Banks in Pune.

(A) Population: Population includes Mutual Fund intermediaries of Pune city.

(B) Sample element: - Mutual Fund intermediary are the sample element.

(C) Sampling technique: - Convenience sample technique is used to select the sample.

(D) Sample size: - The sample size of 52 IFAs and 10 Banks whose responses was considered.

(E) Questionnaire design: - The questionnaire was based on inputs taken from from subject matter experts and research guide. The questionnaire had two sections; the first section captured data related to intermediary firm characteristic and the second part relates to the impact study of regulations on the distributor business and emerging business trend. Along with this, portfolio monitoring practice, attributes for customer relationship management were also captured.

4.3.4 Data Scaling and Measurement: In order to increase accuracy of research work, qualitative data scaling techniques such as nominal scale and ordinal scale were used.

4.3.5 Tools and Methods of Data Analysis

4.3.5.1 Tabulation and Classification of data: The data was collected through a structured questionnaire and tabulated. The data has been classified on the basis of Scope of Service, Ticket size, Firm Vintage, No of families managed and model being adopted. Cross tabulation has been done according to different variables.

4.3.5.2 Framework for Data Analysis and Test used: Statistical package for social science (SPSS.11) was used to analyze the data. SPSS is the one of the most widely used amongst statistical software packages. It covers a broad range of statistical procedures that allows summarizing data, determining whether the differences between groups are statistical significant or not. SPSS also contains several tools for analyzing data, including functions for recording data and computing new variable as well as merging and aggregating data files.

Chi-Square Test was applied for testing the Hypotheses6, 7, and 8 at 5% level of significance. Data was analyzed using tables, charts and diagram. Statistical techniques like percentile, median, mean were also used to analyze the data.

4.3.6Questionnaire and Variables: In the annexure section the variables of the intermediary questionnaire are mentioned.

4.3.7Scope of the Study: The present study is an attempt to study the impact of the Sebi Regulation on the intermediary business model. It is a Regulatory impact assessment study. These studies are undertaken regularly in developed economies of the world. It involved understanding of the basic concept of mutual fund, regulations in India, evolution of these regulations and gauging the intermediary's understanding of these regulation and decision. Similar studies on this line may be conducted on a Pan India Basis and would then constitute a national Regulatory Impact Assessment (RIA).

4.3.8: Tests used: Chi Square.

As data did not follow a normal distribution and was nominal for Hypotheses 6, 7 and 8 the Chi square test was used.
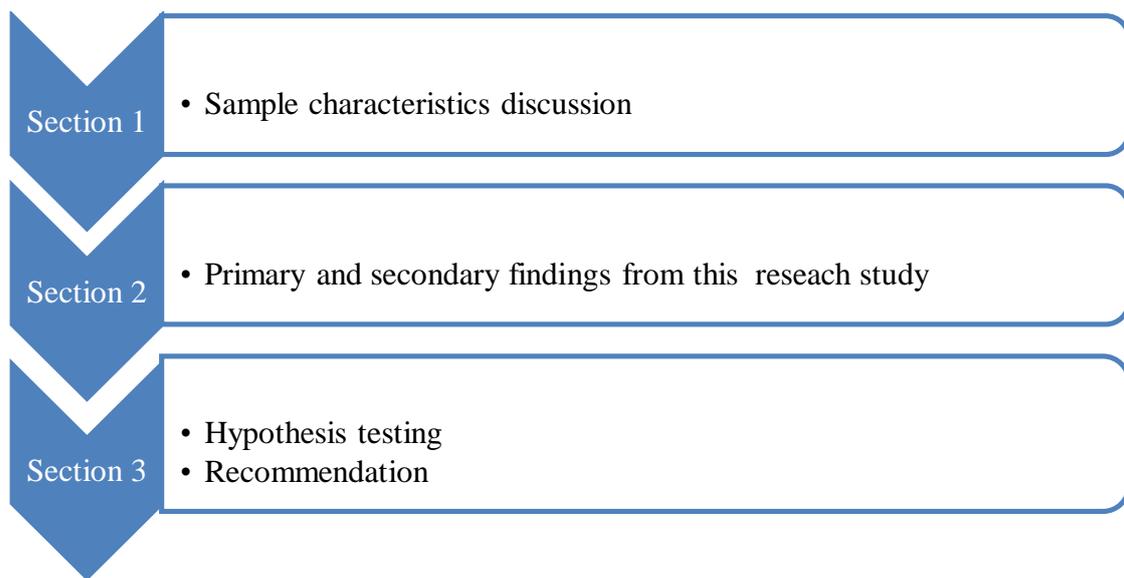
4.3.9 Limitations of the study: For this research work, data was collected and interpreted with utmost reliability and consistency. Due to investor prejudices, certain limitations of the study are as follows:

1. The study depicts the present scenario in Pune, and hence the result may not be applicable to another period of time.

2. This intermediary study is limited to 52 IFA and 10 Bank respondents of the city.

3. Answer to the questionnaire is subjected to intermediary bias.

4. The researcher has assumed that the respondents are honest in expressing their views and have filled the questionnaire without any bias.

5. The present study is restricted to information collected about the intermediary business with the help of questionnaire.

4.4: Investor Behavior and ELR Study

This regulatory impact assessment study on investor behavior is organized in the following manner. In the first section, the sample characteristics are discussed. In the second section discussion on the primary and secondary findings followed by Hypotheses testing. This is followed by recommendations to policy makers.

Figure 2 : Investor Study chapter flow

Section 1	• Sample characteristics discussion
Section 2	• Primary and secondary findings from this reseach study
Section 3	• Hypothesis testing • Recommendation

4.4.1 Sample characteristic Description

Table 2: Gender wise classification of the respondents

Gender	Number	Percentage
Female	75	21%
Male	280	79%
Total	355	

The investor sample comprises of 75 female and 280 male investors. Women constitute 21% and men 79% of this sample.

Table 3: Age wise classification of respondents

Age group in Years	Number	Percentage
20-35	92	26%
>35-50	128	36%
>50	135	38%
Total	355	

The investor sample comprises of 92 investors in the age group 20-35 years (considered youth), followed by 128 in the age group > 35-50 years and 135 investors above 50 years of age. This sample has the largest constituent i.e. 38% in the age group above 50 years.

Table 4 : Education wise classification of respondents

Education	Number	Percentage
Vocational	1	0.3%
HSC	8	2.3%
Graduate	168	47.3%
Post Graduate	161	45.4%
Doctoral	17	4.8%
Total	355	

Table 4   above depicts the education background of the sample. It comprises of 168 graduates, 161 post graduates and 17 doctoral investors.   The sample has a large domination by graduates 47.3% and maybe considered a well-educated sample, fulfilling one of the criteria of a sophisticated investor.

Table 5: Occupation wise classification of respondents

Occupation	Number	Percentage
Salaried	212	59.7%
Self Employed	85	23.9%
Others	58	16.3%
Total	355	

Table 5 above shows the professional background of the sample.   The sample is dominated by salaried individuals who constitute the large chunk of 59.7%. The average as shared by experts in individual category is 45% and this research sample represents more professionals then the average.

Table 6: Income wise classification of respondents

Income	No	Percentage
< 10 L	168	47%
10L-25L	121	34%
26L-50L	29	8%
>50L	37	11%
Total	355	100%

Table 6 above shows the sample classification as per income. The 4 slabs are < 10 Lacs, 10Lacs-25Lacs, 26Lacs-50Lacs and > 50 Lacs. Investors with income less than 10 Lacs (maybe retail investors) constitute 46% of this sample and are the most dominant.

Table 7: Source of MF purchase

Intermediary	Number	Percentage
Banks Only	5	1.7%
Banks and Direct Channel	1	.3%
Banks and Independent Financial Advisor	38	12.8%
Banks, Independent Financial Advisor and Direct Channel	36	12.2%
Banks, Independent Financial Advisor and Others	1	.3%
Independent Financial Advisor Only	104	35.1%
Independent Financial Advisor and Direct	111	37.5%

Table 7 above reflects, the source of Mutual Funds purchase for investors. Here investors had the option to tick more than channel and hence the tally is not 100.

Investors using only a single channel for purchase were 1.7% only through Banks and 35.4% Independent Financial Advisors. These investors relied only on a single channel for their purchase of mutual fund.

A strong multi-channel usage behavior was observed in the mutual fund investor's purchasing decision. In multi-channel, two or dual channel was the most observed behavior. In the multi-channel usage category, the IFA channel along with the direct channel was the highest used channel for purchase of mutual funds with 37.5% showing usage of these two channels jointly. This shows that individual investors are opting for usage of the direct channel along with an advisor channel and the direct channel may emerge as the biggest competition to the regular

channels.   Investors opting for IFA along with Banks as a distribution channel came in next with almost 13% of the sample opting for these two channels together.

Table 8: Source of Mutual Fund investments

Source of Funds	Number	Percentage
Business Income	76	21.4%
Salary Proceeds	228	64.2%
Sale of Asset	9	2.5%
Inheritance	6	1.7%
Profits & Other Income	36	10.1%
Total	355	100.0

Table 8 above shows Salary as most dominant source of investments. This is followed by Business Income at 21.4%   There is a difference here as in *Others* as occupation included Retired people, who had pension which is mentioned as Salary while identifying source and individuals in Business who take a fixed salary.   Table 9 below further explains the distribution.

Table 9: Occupation and Investible income analysis

Investible Income	Occupation			Total
	Salaried	Business	Others	
Business Income	0	75	1	76
Salary Proceeds	209	5	14	228
Sale of Asset	0	4	5	9
Inheritance	2	1	3	6
Profits & Other Income	1	0	35	36
Total	212	85	58	355

Table 10: Investor income group and type of fees paid

Investor Income	No Charge	Transaction fee less than equal to 1%	Transaction fee greater than 1%	Flat Fee	AUM Fee	Total
<Rs. 10 L	79	81	4	2	2	168
Rs.10 L- 25L	71	48	2	0	0	121
Rs.26L-50L	11	6	12	0	0	29
>Rs.50L	8	8	20	1	0	37
Total	169	143	38	3	2	355

Table 10depicts the type of fees paid by different income groups among investors in the sample. A very large chunk, 47.6 %(169 out of 355) of the investors *do not pay any fees*, remaining 52.4% pay some form of fees.

40% (143 out of 355) investors pay transaction fee less than 1% and 10.70% investors pay higher than 1% transaction fee. Other fee structures like flat fee for managing investments or AUM based fee is adopted by less than 2% of the sample.

Individuals with income less than 10 Lacs are observed to be predominantly in either a no charge or transaction charge less than equal to 1%. The second slab of 10Lacs to 25 Lacs income owners shows 58.6% paying No charge and 39.66% (48/121) paying less than 1% charge. In the slab 26Lacs to 50 Lacs and income above 50Lacs, over 41% investors and 54% respectively pay a transaction *fee less greater 1% respectively*. This may be attributed to the intermediary's differential pricing as per income slabs.

Table 11: Intermediary and type of fees

Intermediary	Type of Fees in Percentage					
	No Fee	Transaction Fee less than Or equal to 1%	Transaction Fee greater than 1%	Flat Fee	AUM	Total
Bank	9	12	9	0	0	30
IFA	38	29	1	1	1	70
Total	47	41	10	1	1	100

Charge structure which emerges is that of Banks having Transaction charges in a wider range while IFAs in addition to transaction fee also follow other fee structures. Type of Fee being charged constitutes an important parameter in decision making for mutual fund investments across Income groups. Over 47% investors *do not* pay any charges for investing through their intermediary. 41% investors pay a transaction fee less than 1%. Researcher's discussion with AMCs, IFA and Banks further quantified this fee at 0.5%. The figure below depicts the detailed fee structure breakup across intermediaries based on the sample based on Table 11
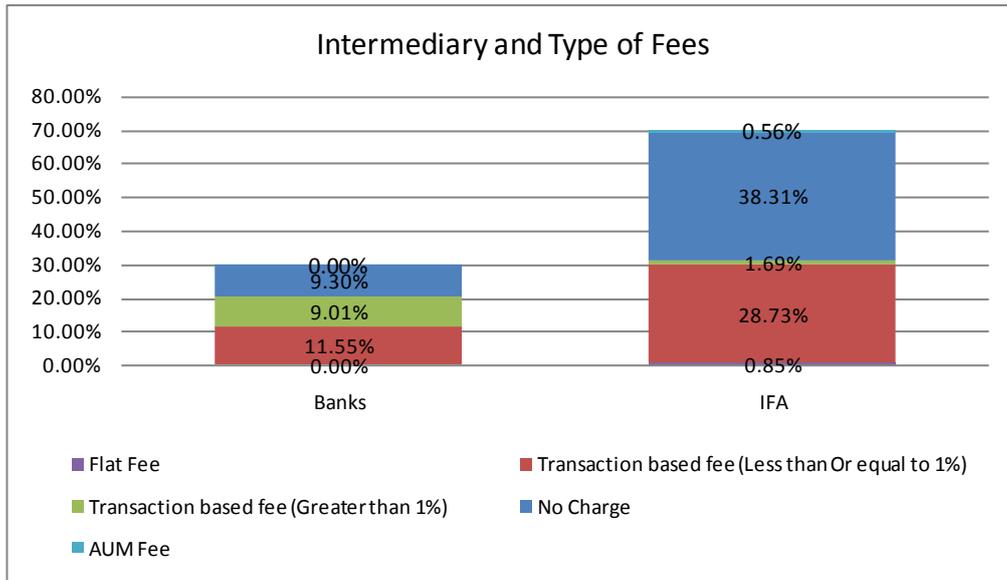
Figure 3 : Intermediary fee analysis

Table 12: Portfolio monitoring habits

	Frequency	Percentage
Monthly	156	43.9
Quarterly	67	18.9
Daily	26	7.3
Financial Advisor Driven	106	29.9
Total	355	100

44% investors prefer a monthly monitoring strategy, whereas 30% have a hands off approach and the intermediary / Financial Advisor calls them and suggests discussion. A very small percentage 7.3% monitors their portfolio daily. This is an important data as it highlights the huge influence that intermediary has on the Investor.

4.4.2 Findings and Hypotheses testing

This section consists of 3 parts A, B and C. In Part A, a discussion on the primary and secondary finding emerging directly from the investor data are covered. In Part B statistical analysis is undertaken to test the Hypotheses. In Part C recommendations from the analysis are covered.
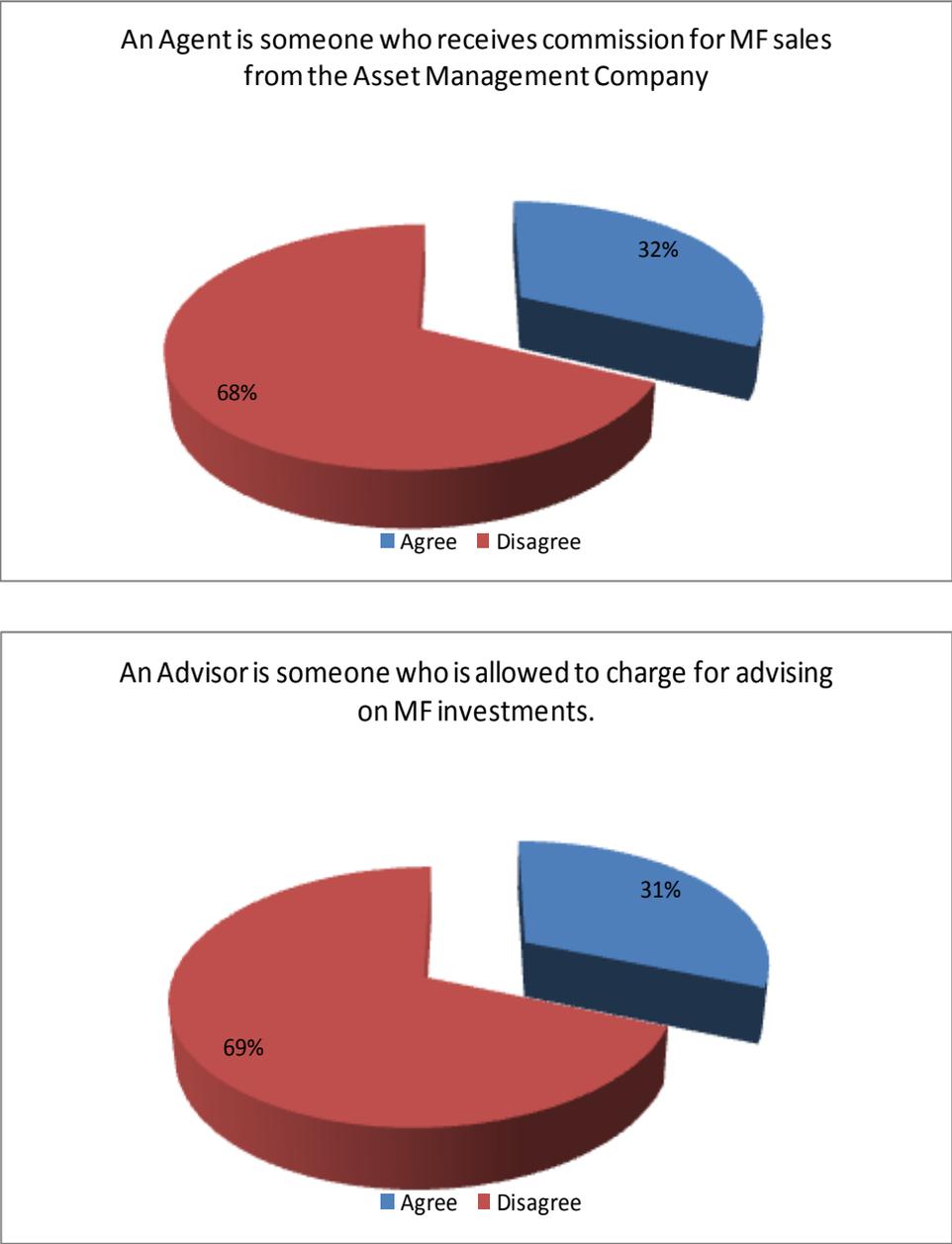
Part A

Table13: Market awareness

	Entry Load Removal	Direct Platform	MF Advisor	MF Agent	Regulator	Financial Markets
	Investors' Awareness					
N=355	296	226	201	102	346	346
%						
	83%	64%	57%	29%	97.70%	97.70%

A large component of the total Mutual Fund investors at 97.7% are aware of the Financial Regulator Sebi and about the various Financial Markets (Debt/Equity/Commodity). Out of the Sample size considered of 355 Mutual Fund Investors, 296 were aware of the Entry Load Removal regulation. Thus 83% of Mutual Fund Investors are *aware of the Removal of the Entry Load Regulation.* This is a substantially large chunk. In the latter section, an analysis of these investor demographics is done to better understand the behavior.

Also, while 83% of the overall investor base is aware of the Entry Load Removal regulation, and 64% of the Direct Platform, there is haziness and confusion about the terminology of *Mutual Fund Advisor and Agent*. Investors were given the correct definition of Advisors and Agent and asked to respond. Investors *were not at all clear* about these terms and used the term interchangeably while filling up the questionnaire. The correct definition of agent and advisor was known only to 32% and 31% respectively and the Figure 4below clearly shows that there is low awareness about the understanding of basic definition of who an agent is and who an advisor.

Figure 4: Definition of Agent & Advisor (Investor perception)

An Agent is someone who receives commission for MF sales from the Asset Management Company

- 32% Agree
- 68% Disagree

An Advisor is someone who is allowed to charge for advising on MF investments.

- 31% Agree
- 69% Disagree

There is a lot of confusion in the investor mind about this nomenclature. It clearly shows a need for Investor education.

Figure 5 : Type of Mutual Funds invested in
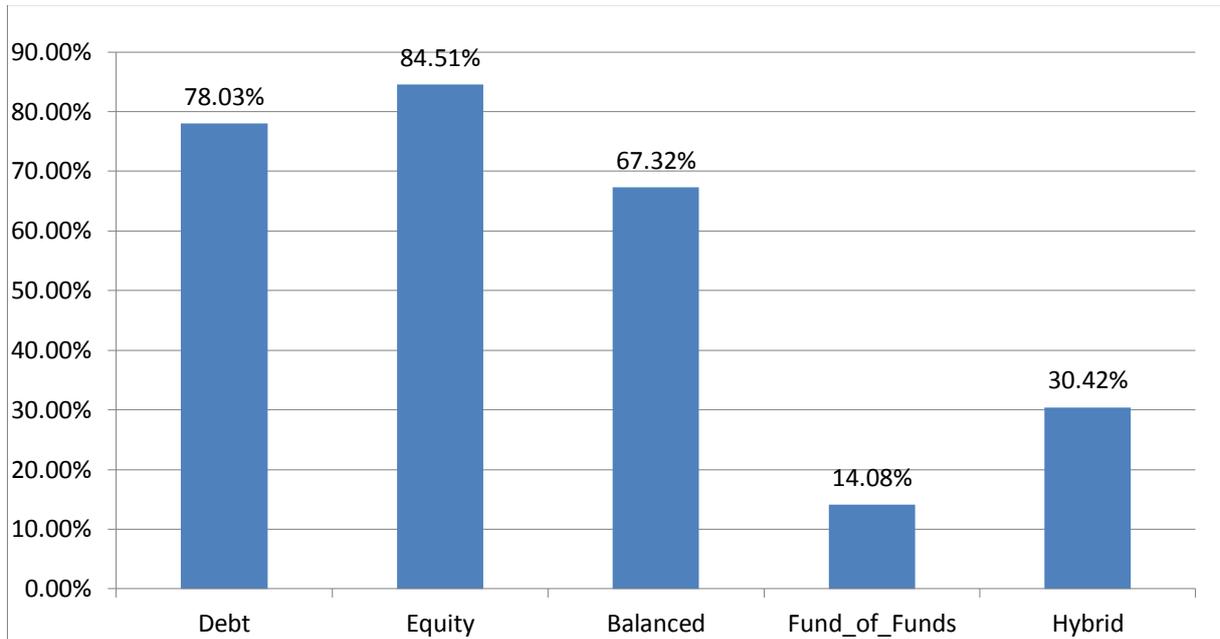
Sample has Equity MF (84.5%) followed by debt mutual funds at 78.03% as the main holding of the clients.

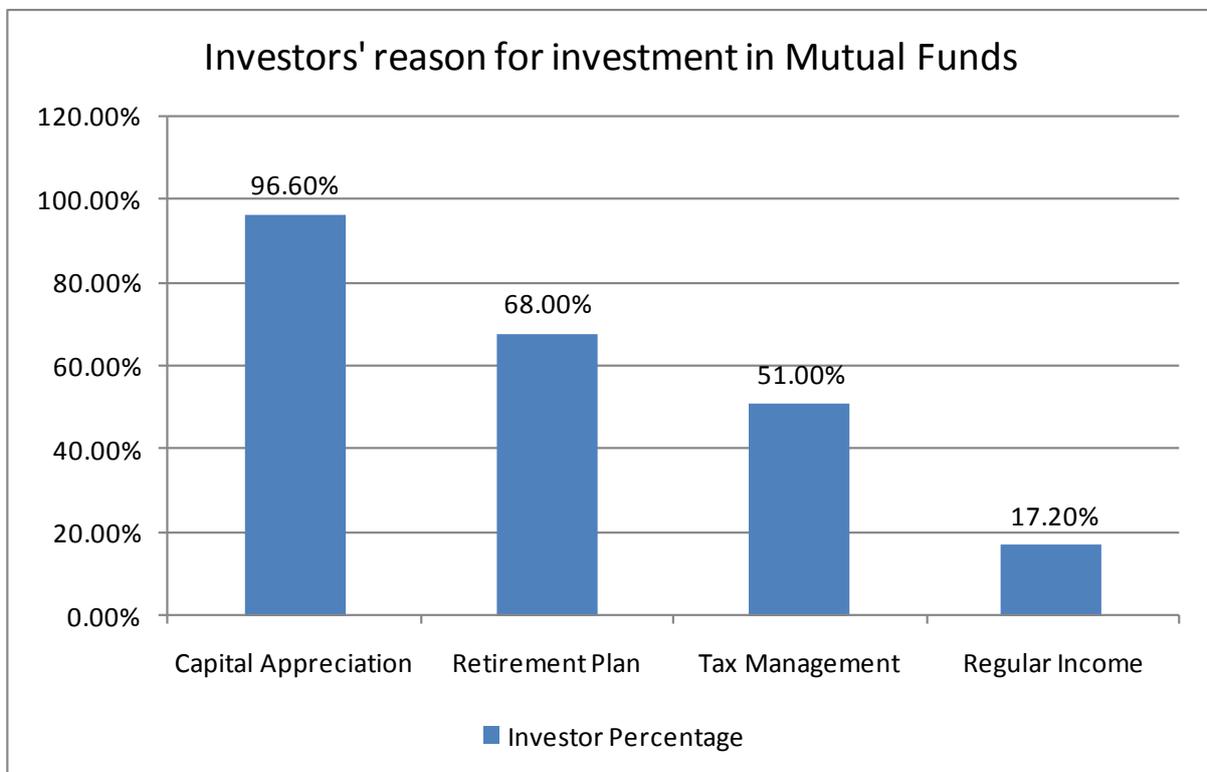Figure 6 : Investors' reason for investing in Mutual Funds

Figure 20 above shows that in the investor sample, the main reason for mutual fund investment is capital appreciation (96.6%) followed by retirement planning, tax management and regular income.

Table 14 : Characteristics of a preferred financial advisor

		Trust	Timeliness	Convenience	Charges	Competitiveness
N	Valid	355	354	353	355	354
	Missing	0	1	2	0	1
Mean		4.31	4.08	4.09	2.89	3.82
Std. Deviation		.486	.625	.618	1.042	.750
Rank		**1**	**3**	**2**	**5**	**4**

Analysis of the desired characteristics of the Financial Advisor, puts Trust as the Foremost factor, followed by convenience i.e. provision for ease of operation, timeliness, competitiveness and lastly by costs or charges. While investors consider these qualities as preferred in a Financial Advisor, their final decision may be influenced by charges that the intermediary charges other things remaining same.

4.4.3 Primary Findings: Investor Study
Investor Behavior regarding the Entry Load Removal Regulation:

Figure 7 : Investor Behavior Study
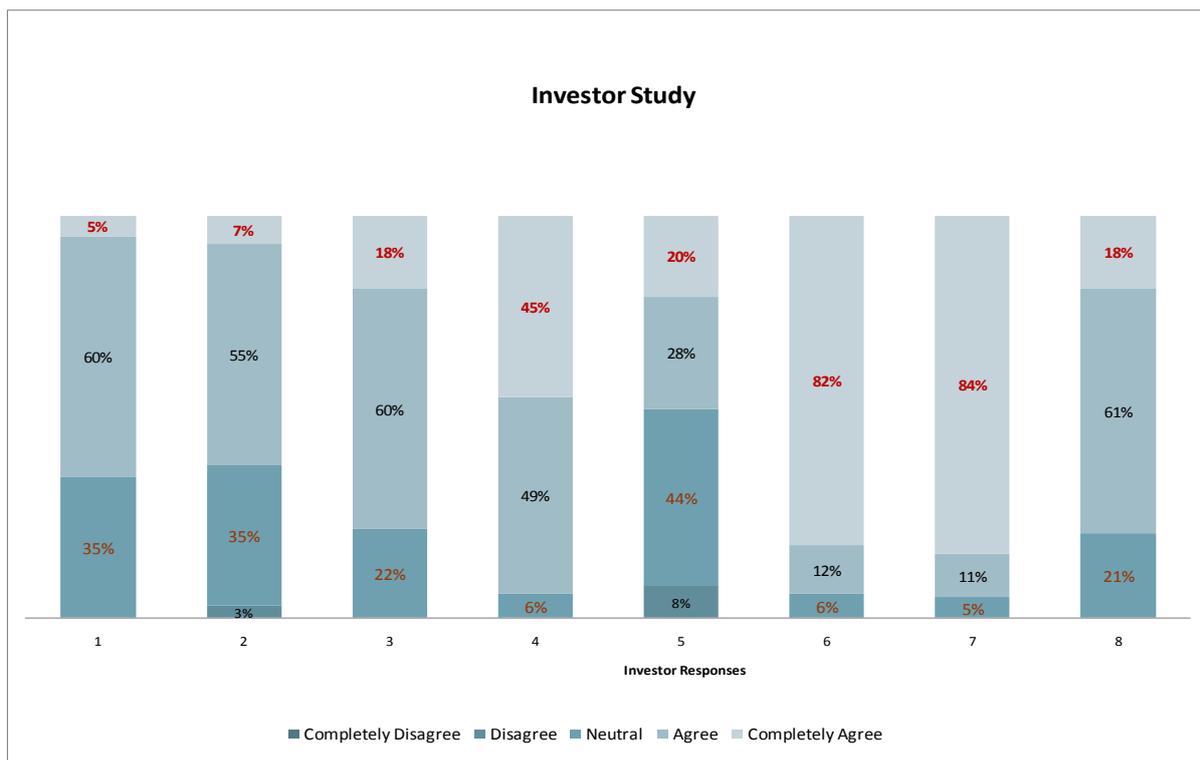
Investor Study

1	The Entry Load Regulation is an outcome of the Regulators research on market practices to curb mis-selling
2	The Entry load recovered earlier from me may have been partly paid back to the intermediary as commission
3	Removal of Entry load has made me more comfortable in investing in MF
4	The regulation on Entry Load Removal is good
5	Post ban on Entry Load, I have increased my Mutual Fund investments
6	Mutual Funds as an asset class has become more attractive post the Entry Load Removal
7	Entry load Removal is the right initiative towards investor protection
8	Removal of Entry load has benefitted me

1. **The Entry Load Regulation is an outcome of the Regulators research on market practices to curb mis-selling** : A large majority of over 65% (60%-Agree + 5%-Completely Agree) of the investors believe that the Ban on Entry Load is an outcome of the regulators initiative to curb rampant mis-selling that happened in the prior period.

While 35% were Neutral in their responses, none of the investors disagreed about the mis-selling curb. This conveys that **the Entry Load Ban regulation is clearly considered as a tool to do away with the mis-selling practice by investors at large and was also considered to be based on the research done by the regulator on the previously prevailing Mutual Fund Selling practices.**

2. **The Entry load recovered earlier from me may have been partly paid back to the intermediary as commission:** Investors have responded with a 60% Agreement on this aspect. However 36% have been neutral – probably being unsure and 3 % have disagreed. A total 40% maybe considered as Neutral. An overwhelming majority felt that the commission paid out to the intermediary was through the Entry Load being charged to him. Since, in actual that is the case, we can consider that investors had the correct perception about payout of commission to intermediary through Entry load. European survey by Chater *et al.* (2010) had revealed that limited investors actually knew that the intermediary received commission for the financial product sale. Here, we may say that in the Indian context, with the Entry Load Removal Regulation and widespread debate thereafter, along with media coverage, among the Indian Mutual Fund investors in 2013, a larger proportion are aware about the commission payout that happened during the existence of the Entry Load.

3. **Removal of Entry load has made me more comfortable in investing in Mutual Funds:** A large chunk of investors over 78% confirm that Removal of Entry load has made them more comfortable in investing in Mutual Funds. We need to clarify here, that this 78% of the 83% have actually responded affirmatively for this. By large Sebi regulation is viewed as Investor friendly by the investor himself.

4. **The Regulation is good:** 95% of the investors confirmed that the regulation was good. This is a very large chunk it reveals that the investors **view it in a positive light.**

5. **Post Ban on entry load I have increased my allocation to Mutual Funds**: Here over 45% investors shared that their Mutual Fund (Financial Asset Class) increased in their overall portfolio allocation. The percentage that remained neutral and lessoned their allocation is larger 55%. A macro analysis here reveals that, the Indian investor similar to global investors worldwide, post 2008 financial crisis has moved away from Financial Asset classes and invested in perceived safer asset classes namely Gold and Real Estate.

Analysis of NCAER (2011) data also reveals that overall post 2008, allocation to two Real Asset classes has increased namely Gold and Real Estate.

6. **Mutual Funds as an asset class has become more attractive post the Entry Load Removal:** 94% of the investors responded with an affirmation on this. Hence we may say that, Sebi's initiative has definitely made Mutual Funds as an Asset Class more attractive to the investor and he may be looking at it with increased interest.

7. Entry Load Removal is the right initiative towards investor protection: Investors gave a 95% agreement to this response.

8. **Removal of Entry load has benefitted me:** A large chunk 96% of investors feel that this regulation has been beneficial to them.

9. In the next section, a statistical analysis of the investor data is undertaken to test the Hypotheses and identify key trends.

Part B: Statistical Analysis

Table 15 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.803
Bartlett's Test of Sphericity	Approx. Chi-Square	3262.080
	Df	28
	Sig.	.000

The Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy and the Bartlett's Test of Sphericity are two important parts of Factor Analysis. A value close to 1 for KMO statistic indicates that pattern of correlation are relatively compact and Kaiser (1974) recommended accepting values >0.5. Further, values between >0.8 and <0.9 were considered great. For the data under consideration, KMO is >0.8 and hence we should be confident that factor analysis is appropriate for this data.

Bartlett's Measure tests the null Hypotheses that the original matrix is an identity matrix. For factor analysis to work there should be a relationship between the variables. Hence this test has to be significant (have sig value <.05). For this data, Bartlett's test is highly significant (<.001) and hence Factor Analysis is appropriate.

Table 16: Factor Analysis

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.479	68.488	68.488	5.479	68.488	68.488	3.540	44.250	44.250
2	1.213	15.162	83.650	1.213	15.162	*83.650*	3.152	39.400	83.650
3	.530	6.623	90.273						
4	.375	4.688	94.962						
5	.192	2.405	97.367						
6	.133	1.668	99.035						
7	.072	.894	99.929						
8	.006	.071	100.000						

Extraction Method: Principal Component Analysis.

Table 17: Rotated Component Matrix

	Component	
	1	2
The Entry Load Regulation is an outcome of the Regulators research on market practices to curb mis-selling	.833	.315
The Entry load recovered earlier from me may have been partly paid back to the intermediary as commission	.785	.415
Removal of Entry load has made me more comfortable in investing in MF	.752	.448
The regulation on Entry Load Removal is good	.773	.393
Post ban on Entry Load, I have increased my Mutual Fund investments.	.887	.074
Mutual Funds as an asset class has become more attractive post the Entry Load Removal.	.341	.920
Entry load Removal is the right initiative towards investor protection	.334	.923
Removal of Entry load has benefitted me	.231	.906

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Investors in the survey were presented with a range of statements concerning Entry Load Regulation and were asked to respond to these on a Likert scale. This data set was subject to a factor analysis in order to identify the dimensions of investor attitudes to regulation and to

reduce the data set to manageable proportions for subsequent analysis. The results of this factor analysis are presented in Table 17. A principal components extraction identified two factors which together accounted for some 84 per cent of the variance in the original dataset. The extracted factors were subject to an oblique rotation to produce the final set of factor loadings shown in the table above. The factor analysis on the 8 variables yields two factors. Factor 1 refers to Perceptivity, and reflects the understanding of the investors towards the regulation related to its genesis, reason, and application. Factor 2 refers to attractively of this instrument as an Asset Class post ELR.

The first of these factors relate mainly to the overall understanding of the investor regarding the Entry Load. Namely the reason for the Entry Load Removal, prior usage of the Entry Load, investor understanding about its immediate benefit to him. A 0.75 score on this factor indicating that respondents believe that ELR has been a well-researched and is an investor friendly regulation.

The second factor is interpreted as relating to attractiveness of the Asset Class due to the Entry Load Removal Regulation.

Summarizing key findings based on results from factor analysis:

1) Perceptivity :
    1. Entry Load Ban regulation is clearly considered as a tool to do away with the mis-selling practice by investors at large and was also considered to be based on the research done by the regulator on the previously prevailing Mutual Fund Selling practices.
    2. The Indian Mutual Fund investor is aware about the commission payout that happened during the existence of the Entry Load. 70% investors were aware of this.
    3. The Sebi regulation is viewed as Investor friendly by the investor himself.
    4. A very large percentage of investors confirmed that the regulation was good.
    5. 92% investors were inclined towards mutual funds as an asset class, though they may not have invested in the immediate period. In the post 2008 period, inflows to Non-Financial Asset Classes namely Gold and Real Estate has increased, which is a separate analysis.
2) Attractivity :
    1. Over 90% of investors view the ELR as beneficial, good for the markets and made Mutual Funds an attractive asset class.

Table 18: Reliability statistics

Cranach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.956	.960	8

The CronBach's Alpha for the 8 items was found to be 0.95 and hence the questionnaire on reliability maybe considered as highly reliable.

The next section tests the Hypotheses which came out from the literature review on investor studies. Hypotheses 1, 2 and 3 test the awareness across demographic characteristics regarding *genesis of ELR*, whether the *ELR is considered good* and if the *investor has increased his allocation post ELR* respectively. For testing Hypotheses 1, 2 and 3, the Kruskal-Wallis test was applied as the data did not follow a normal distribution and was ordinal.

4.4.4 Investor Behavior Study - Hypotheses Testing:

Hypothesis 1

Ho: There are no significant differences in the awareness regarding the genesis of the Entry Load Removal Regulation among different demographic groups.

H1: There are significant differences in the awareness regarding the genesis of the Entry Load Removal Regulation among different demographic groups.

Table 19: Hypothesis 1-Investor awareness of the Entry load regulation

Demographic	Sig	Conclusion	Further Analysis
Gender	0.112	Not Statistically Significant	NA
Age Group	0.139	Not Statistically Significant	NA
Education	0.201	Not Statistically Significant	NA
Income Group	< 0.001***	Statistically Significant	Across income slabs
Occupation	0.670	Not Statistically Significant	NA

Source: Primary Data; *** Significant at .01 Level, ** Significant at .05 level, * Significant at .1 level

a) Gender: Table 19above shows that there is *no* significant difference in the understanding towards the genesis of the Entry Load Removal Regulation across different genders. It means that men and women have similar awareness regarding the

reason for implementation of the Entry load removal regulation.   Contrary to analysis by Goldsmith and Goldsmith (2006), this sample does not show that the male gender has more understanding about the need for ELR.

b) Age Group: In our study, the investor age groups were grouped. ($<$ 20 years, 20-35 years, $>$35-50 years,$>$50 Years). The tests showed that there is a no significant difference in the awareness about the *reason* for implementation of ELR regulation among different age groups.

c) Education: There is No significant difference in the awareness of the genesis of the ELR based on Education levels of investors. The reason could be attributed to the fact that overall the awareness regarding the regulation is driven through two major factors: Clients self-drive (Internal) or Intermediary Push (External). We have seen that the intermediary influence is high, in this investor data   30 % investors require the intermediary's stimuli even for a routine portfolio monitoring.   Though Education is considered a strong influencer for driving understandings in this case it does not seem so.

d) Income Group: There have been 4 income slabs used in this study ($<$Rs.10 Lacs, Rs.10 Lacs-Rs.25 Lacs,$>$Rs.25 Lacs –Rs.50 Lacs and $>$Rs.50 Lacs). The Table above shows that there is a significant difference in the awareness towards the reason of the ELR across Income Groups.   Income plays a very   important role in the individual's involvement in his investments and the regulations affecting it. It directly impacts the surplus available for investment. Here, further testing was done on the slabs. There was significant differences between income greater than INR 25 Lacs and INR 50 Lacs income group and the rest of the slabs. Those with higher disposable income were found to be more likely to find out about financial service regulations. ***Hence, the regulator and the AMCs may want to be more aggressive in their awareness campaigns towards the lower income groups.***

e) Occupation: Table 19 above shows that there is no significant difference in the understanding towards the genesis of the Entry Load Removal Regulation across different professions.

Hypothesis 2:

Ho: There are no significant differences in the understanding that the regulation on Entry Load Removal (ELR) is good among the different groups.

H1 : There are significant differences in the understanding that the regulation on ELR is good among the different groups.

Table 20 : Hypothesis 2-Entry load removal regulation is good**.**

Demographic	Sig	Conclusion	Further Analysis
Gender	0.125	Not Statistically Significant	NA
Age Group	0.316	Statistically Not Significant	NA
Education	0.155	Statistically Not Significant	NA
Income Group	$< 0.001^{***}$	Statistically Significant	Across Income Slabs
Occupation	$<0.05^{**}$	Statistically Significant	Across Occupations

Source: Primary Data; *** Significant at .01 Level, ** Significant at .05 level, * Significant at .1 level

a) Gender : Table 20 above shows that there is no significant difference in the understanding that the regulation on Entry Load Removal (ELR) is good. The reason could be that with Education and Income levels at par, gender behavioral differences are diminishing.

b) Age Group: The Table shows that there is no significant difference in the understanding that the regulation on Entry Load Removal (ELR) is good among different age groups.

c) Education: There is no significant difference in the understanding of that the regulation on Entry Load Removal (ELR) is good. A possible explanation for**b) and c)** above, finding could be that removal of entry load is already considered as set in the eyes of the public. Hence, the investors, regardless of their age and education, shared similar feelings and insights on whether ELR is good. A large chunk 95% of the investors had confirmed that the regulation is good.

d) Income Group: The Table shows that there is a significant difference in the understanding that the regulation on Entry Load Removal (ELR) is good across Income Groups. Further, analysis across income slabs, revealed a more favorable response from the higher income bracket (greater than INR 25 Lacs and greater than INR 50Lacs). A possible explanation for d) findings could be that those with higher disposable income may be more likely to understand financial service regulation and hence respond more favorably. *Hence, the stakeholders may want to be more focused in creating and driving awareness campaigns towards the income groups less than INR 25 Lacs.*

e) Occupation: Table above shows that there is a significant difference in the understanding that the regulation on Entry Load Removal (ELR) was good across different Occupations. Here, further the slabs were tested, salaried across others and self-employed across others and salaried across self-employed. Investors in the salaried and the others category which included retired, housewives, students were found to show lower favorable responses while the Self Employed category showed a favorable response. Hence, *salaried and other investors* could be the target audience for awareness and education regarding financial reforms and regulations by AMC and regulator.

Hypothesis 3:

Ho: There are no significant differences in Increase in MF allocation post the regulation on Entry Load Removal   among the different groups.

H1: There are significant differences in Increase in MF allocation post the regulation on ELR among the different groups

Table 21: Hypothesis 3-Investor Increase in allocation to MF post ELR

Demographic	Sig	Conclusion	Further Research
Gender	0.016** (p<.05)	Statistically Significant	Across Genders.
Age Group	0.308	Not Statistically Significant	NA
Education	0.629	Not Statistically Significant	NA
Income Group	<0.000***	Statistically Significant	Across Income Groups
Occupation	0.02**(p<.05)	Statistically Significant	Across Occupation

Source: Primary Data; *** Significant at .01 Level, ** Significant at .05 level, * Significant at .1 level

a) Gender: Table above shows that there is a significant difference in the Increase in MF allocation post the regulation on Entry Load Removal across **different genders**. Thus allocation or investment in mutual funds post ELR may be influenced by an individual's gender. According to (Graham, Stendardl Jr, Myers, & Graham, 2002), men are financially more savvy than women, placing a greater importance on financial planning

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and choice of instruments. This could explain why there is a difference in allocation to mutual funds between men and women.

b) Age Group and Education: The Table shows that there is no significant difference in Increase in MF allocation post the regulation on Entry Load Removal based on Age and education. Investments being highly influenced by Agents/Advisors as reviewed in literature, hence age or education is not a factor influencing higher allocation to mutual funds.

c) Income Group: The Table shows that there is a significant difference in the Increase in MF allocation post the regulation on Entry Load Removal across Income Groups. Further analysis across slabs showed that those with higher disposable income (INR 25 Lacs and above) were seen as more favorable to allocate investments into MF post the ELR. *Hence, stakeholders may target the lower income groups with more focused approach in their marketing campaigns to drive participation.*

d) Occupation: Table above shows that there is a significant difference in the Increase in MF allocation post the regulation on Entry Load Removal across different Occupation. Here, further the slabs were tested, i.e. salaried across others, self-employed across other and salaried across self-employed. Here, the self-employed and others category showed a more favorable response than the salaried. This behavior could be explained as a cautious approach exhibited by the salaried investor towards the asset class. *Hence, the stake holders may target the salaried class for increasing allocations to mutual funds.*

For findings c) and d) above it maybe also be noted that in this investor sample, 45% investors only had responded that they increased their share of mutual fund allocation, a larger chunk remained neutral or lessoned their allocation. *Hence, mutual fund allocations may not have gone up. This is in line with the NCAER (2011) data which revealed that other asset class's namely real assets like real estate and gold have received higher allocations post 2008.*

Hypothesis 4 and 5 tested nominal data and hence we have used the Chi Square test.

Hypothesis 4:

Ho: Selection of type of Intermediary (Bank & IFA) is independent of the Type of Fees charged by them.

H1: Selection of type of Intermediary (Bank & IFA) is dependent of the Type of Fees charged by them.

Table 22 : Intermediary and Type of Fees

	Type of Fees charged					
Intermediary	No Fee	Transaction Fee less than Or than equal to 1%	Transaction Fee greater than 1%	Flat Fee	AUM	Total
Bank	33	41	32	0	0	106
IFA	136	102	6	3	2	249
Total	169	143	38	3	2	355

Table 23 : Hypothesis 4 – Selection of intermediary and type of fee

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	64.439[a]	4	.000
Likelihood Ratio	61.454	4	.000
Linear-by-Linear Association	28.805	1	.000
N of Valid Cases	355		
a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .60.			

Analysis: As the result of the Chi square test on the variables Intermediary and type of fees is statistically significant hence we reject the Null Hypotheses.

Here, the types of fees considered were namely No Charge, Transaction fee ($<=1\%$), Transaction Fee ($>1\%$), AUM based fee and Flat Fee.

We can conclude that investors' selection of an **intermediary** maybe dependent on the *type of fees* being charged by the intermediary.

The next Hypotheses relates to the investor's understanding of ELR and selection of intermediary.

Hypothesis 5:

Ho: The investor's understanding of the implications of the entry load removal and selection of intermediary are independent of each other

H1: The investor's understanding of the implications of the entry load removal and selection of intermediary are dependent on each other.

Table 24 : Hypothesis 5 –ELR and intermediary selection

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	77.980[a]	30	.001

Here as $P=0.001 < 0.005$, and is Statistically Significant hence we reject Ho and we accept H1. Hence the Indian investor maybe selecting the intermediary based on his understanding of the implications of the Entry Load Removal.

Conclusion:

A summary of the findings of the investor study are enclosed:

- The Indian Investors view the regulation as a positive move towards investor protection and also feels more comfortable to deal with Mutual Fund as an Asset Class.
- Mutual Fund allocations have not substantially increased since ELR implementation, though this regulation is considered a giant leap in moving towards a transparent regime for the investor.
- Income and Occupation emerge as the key factors that affect the investment behavior of the investor towards ELR regulation and his allocations.

- The investor study also reveals that the investor uses his knowledge of ELR and commissions when deciding on choice of intermediary for his investments.
- The investor also selects his intermediary based on the type of fees that the intermediary charges.

The next chapter covers the intermediary study of the research.