

**STUDY ON THE PERCEPTION AND BEHAVIOUR OF  
RETAIL INVESTORS TOWARDS MUTUAL FUND  
INVESTMENT-A STUDY AMONG MUTUAL FUND  
INVESTORS IN COCHIN**

*Thesis Submitted to*  
**Cochin University of Science and Technology**  
*for the Award of the Degree of*  
**Doctor of Philosophy**  
*under the Faculty of Social Sciences*

*by*

**Sindhu George**

*Under the Supervision of*  
**Prof. (Dr). Antony G.**



**SCHOOL OF MANAGEMENT STUDIES  
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY  
KOCHI – 682 022**

**September 2017**

**STUDY ON THE PERCEPTION AND BEHAVIOUR OF RETAIL INVESTORS  
TOWARDS MUTUAL FUND INVESTMENT-A STUDY AMONG MUTUAL  
FUND INVESTORS IN COCHIN**

*Ph.D. Thesis under the Faculty of Social Sciences*

*Submitted by*

**Sindhu George**

School of Management Studies  
Cochin University of Science and Technology  
Kochi – 682022, Kerala, India  
Email: Sindinika @gmail.com

*Supervising Guide*

**Dr. Antony G.**

Professor (Rtd.)  
School of Management Studies,  
Cochin University of Science and Technology  
Kochi – 682022, Kerala, India  
Email: antonygregory@gmail.com

September 2017



**School of Management Studies**  
**Cochin University of Science and Technology**  
Kochi - 682 022, Kerala, India



---

**Dr. Antony G.**  
*Professor (Rtd.)*

0484 – 2622169  
antonygregory@gmail.com

---

## Certificate

This is to certify that the thesis entitled “**STUDY ON THE PERCEPTION AND BEHAVIOUR OF RETAIL INVESTORS TOWARDS MUTUAL FUND INVESTMENT-A STUDY AMONG MUTUAL FUND INVESTORS IN COCHIN**” is an authentic record of research work done by Ms. Sindhu George (Reg. No. 3358) under my supervision and guidance. The thesis is the outcome of her original work and has not formed the basis for the award of any degree, diploma, associateship, fellowship or any other similar title and is worth submitting for the award of the degree of Doctor of Philosophy under the Faculty of Social Sciences of Cochin University of Science and Technology. All the relevant corrections and modifications suggested by the audience during the pre-submission seminar and recommended by the Doctoral Committee have been incorporated in the thesis.

Kochi-22  
15/09/2017

**Dr. Antony G**  
Supervising Guide



## *Declaration*

I hereby declare that the thesis entitled “**STUDY ON THE PERCEPTION AND BEHAVIOUR OF RETAIL INVESTORS TOWARDS MUTUAL FUND INVESTMENT-A STUDY AMONG MUTUAL FUND INVESTORS IN COCHIN**” is a record of the bona fide research work done by me and that it has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or any other title of recognition.

Kochi - 22  
15/09/2017

**Sindhu George**



---

## Acknowledgement

*At the very outset, mind is flowing with gratitude to God Almighty, for showering all his endless blessings on me during the tenure of this research work without which I would not have been competent to withstand all the critical situations without departing my buoyancy and enthusiasm.*

*Very many hands were in support and instrumental in contributing advice, support and cooperation in moulding this work, I will get defeated in my efforts if I do not remember all these contributors with heartfelt gratitude.*

*I am truly privileged to have Dr. Antony G., Professor (Retd.), School of Management Studies, Cochin University of Science and Technology, as my research guide and supervisor. I owe my most sincere gratitude towards him for giving me maximum support, continuous encouragement and precise guidance. This work wouldn't have been a success but for him.*

*I am grateful to Dr. Molly P. Koshy, Director and member of my Doctoral Committee for many meaningful suggestions and fruitful discussions at various stages of my research. I record thanks to her for providing me a lot of inputs given throughout the progress of the work.*

*I specially thank all members of the faculty, School of Management Studies for providing me lot of inputs and productive suggestions during progress presentations and otherwise throughout my research period.*

*I am thankful to all the non-teaching staff members and staff members of the Library, School of Management Studies, for their support and kind consideration.*

*I profusely thank all my fellow research scholars for giving constant encouragement and offering creative criticisms.*

*I sincerely owe to Dr. Sreejesh for helping me with statistical analysis throughout my quest.*

*I am extremely grateful to the Chairman, Management committee members, Principal and Vice Principal of FISAT, for motivating me to pursue research and providing all the necessary facilities to complete it. I thank Dr. George V Antony, Dean FISAT Business School, for his understanding and care.*

*I am deeply indebted to all the individual financial agents and other officials from UTI, Franklin Templeton, Birla Sunlife, Geojit Financial services and Hedge equities. I am extremely grateful to respondents from whom the data for this study was collected, for their co-operation and patience in responding to the research*

*Next, still closer to my heart, are my beloved parents, husband Josekutty, Kids Inika and Edric and well wishers, without their support, love and tolerance this work would not have been possible.*

*I would like to express my love and gratitude to all my colleagues in FISAT, for their support. A special word of gratitude to Mrs. Delma Thaliyan, Dr. Dhanya M, Dr. Jose Varghese, Dr. Dhanya Alex, Dr. Saraswathy, Dr. A.J. Joshua, Dr. Anoo Anna Antony and my former colleague Smarty Mukundan.*

*Finally I wish to acknowledge the contribution of those whose names have not been pointed out but who have, nevertheless, played their part in making this research work successful.*

*Sindhu George*



# Contents

## *Chapter 1*

<b>INTRODUCTION AND THESIS OVERVIEWS.....</b>	<b>01 - 12</b>
1.1 Introduction.....	01
1.2 Background of the Study .....	02
1.2.1 Mutual funds fuel the economy.....	02
1.2.2 Global trends in mutual fund industry.....	02
1.2.3 Mutual Funds Growth in India.....	04
1.2.4 The AUM as Percent of GDP.....	05
1.2.5 Retail investor contribution.....	05
1.3 Aims of the Study .....	07
1.4 The Study Design.....	08
1.5 Thesis Overview .....	09
1.6 Contributions of the Study .....	10
References .....	11

## *Chapter 2*

<b>GROWTH TRENDS IN GLOBAL AND INDIAN MUTUAL FUND INDUSTRIES.....</b>	<b>13 - 61</b>
2.1 History of Mutual Fund Industry .....	13
2.1.1 Predecessors of Mutual Funds.....	14
2.1.2 Mutual Funds in UK.....	15
2.1.3 Mutual Funds in the US .....	15
2.1.4 Mutual funds in India .....	17
2.2 Mutual Funds Growth – Global Scenario .....	17
2.2.1 Global Trends in Mutual Fund Industry.....	17
2.2.2 Growth Trends in Different Regions.....	19
2.3 Mutual Funds in Developed Countries .....	21
2.3.1 Mutual Funds trend in United States .....	21
2.3.2 Trend of Mutual Fund Asset under Management in Europe .....	22
2.3.3 Mutual Fund Assets under Management in Japan .....	24
2.4 Mutual Funds in Asia Pacific Region .....	25
2.5 Mutual Funds in Emerging Economies .....	27
2.5.1 Asset under Management in BRICS Countries .....	28
2.5.1.1 Mutual Funds in Brazil.....	28
2.5.1.2 Asset under Management in Russia .....	30
2.5.1.3 Asset under Management in China .....	31
2.5.1.4 Mutual Funds in South Africa.....	32
2.5.1.5 Review of AUM in BRICS Countries.....	33
2.6 Mutual Funds in Africa .....	33

2.7	Mutual Fund Contribution to GDP .....	36
2.7.1	Mutal Fund Contribution to GDP - Global Scenario .....	37
2.7.2	The Share of Mutual Fund in the GDP: World Scenario .....	38
2.8	Mutual Fund Contribution to GDP in Developed Countries .....	39
2.9	Mutual Fund Contribution to GDP in Emerging Economies.....	41
2.9.1	Mutual Fund Asset Contribution to GDP in Emerging Economies .....	41
2.9.2	GDP –AUM Ratio in BRICS Countries.....	43
2.10	Mutual Funds in India .....	43
2.10.1	Growth in MF Industry.....	43
2.10.2	Mutual Fund Growth in Recent Years.....	49
2.10.3	Regulatory frame work of mutual fund in India .....	50
2.11	Mutual Fund Contribution to GDP in India .....	55
2.12	Economic Growth and Mutual Fund Investment .....	56
2.13	Retail Investments in Mutual Fund Industry: World vs. India .....	57
2.13.1	Global Trends in Retail Investment in Mutual Fund .....	58
2.13.1.1	Retail Mutual Fund Contribution in Selected Countries.....	59
2.13.1.2	Retail Mutual Fund Contribution in Europe .....	59
2.13.2	Retail Mutual Fund Contribution in India .....	60
2.13.2.1	Asset Size Held by the Institutional and Individual Investors in India .....	62
2.14.	Summary .....	62
	References .....	63

### **Chapter 3**

<b>REVIEW OF LITERATURE .....</b>	<b>67 - 134</b>	
3.1	Introduction: Research Tradition in Mutual Funds.....	67
3.1.1	Introduction.....	67
3.1.2	Behaviour of Mutual Fund Investors: Implications for Stakeholders .....	68
3.1.3	Mutual Fund Research: Tradition and Trends.....	69
3.1.4	Mutual Fund Research in Developing Countries .....	70
3.2	Research on Performance of Mutual Funds .....	70
3.3	Choice of Investment Options .....	75
3.3.1	Concept of Mutual Funds.....	75
3.3.2	Investment Options .....	76
3.4	Fund Related Factors Influencing Mutual Fund Investment.....	77
3.4.1	Fund Related Factors Influencing Mutual Fund Investment.....	78
3.4.1.1	Past Performance.....	79
3.4.1.2	Cost of Mutual Fund Investment .....	81

3.4.2	Investor Centered Factors Influencing Mutual Fund Investment .....	82
3.4.2.1	Demographic Factors of Mutual Fund Investors .....	82
3.4.2.2	Attitude of Investors .....	83
3.4.2.3	Knowledge of the Individual Investor .....	84
3.4.2.3	Perceived Risk and Mutual Fund Purchase .....	85
3.4.2.4	Source of Information .....	85
3.5	Perceptions on Mutual Fund Marketing Issues and the Behavioural Intentions of Investors .....	86
3.5.1	Marketing Issues .....	90
3.5.1.1	Product Issues .....	91
3.5.1.2	Price Related Issues .....	93
3.5.1.3	Promotion Issues .....	94
3.5.1.4	Distribution Issues in Mutual Funds Sector .....	98
3.6	Influence of Service Quality .....	102
3.6.1	Mutual Fund Service Quality .....	102
3.6.2	Perceived Quality and Mutual Fund Purchase .....	103
3.6.3	Influence of Service Quality in the Mutual Fund Purchase Decision.....	104
3.6.4	Technical and Functional Service Quality .....	106
3.6.4.1	Gronroos Model of Service Quality .....	107
3.6.5	Service Quality and Customer Satisfaction.....	109
3.6.6	Service Quality and Customer Loyalty .....	110
3.6.7	Investment Expertise and Customer Loyalty .....	112
3.7	Service Quality and Behavioural Intention.....	113
3.7.1	Behavioural Intentions .....	113
3.7.2	Influence of Service Quality on Behavioural Intention .....	114
3.8	Outcome of Literature Review.....	115
3.9	Summary .....	116
	References .....	117

## ***Chapter 4***

<b>RESEARCH METHODOLOGY .....</b>	<b>135 - 156</b>	
4.1	Research Problem .....	135
4.2	Significance of the Study .....	136
4.3	Objectives of the Study .....	137
4.4	Hypotheses of the Study .....	139
4.5	Research Design.....	143
4.5.1	Desk Research and Secondary Data.....	143
4.5.2	Pilot Study .....	144
4.5.3	Sample Survey .....	145
4.5.4	Sample Size .....	145
4.5.5	Sampling Method .....	146

4.5.6	Data Collection.....	146
4.5.7	Research Instrument.....	147
4.5.8	Data Analysis.....	147
4.5.9	Validity and Reliability of Measures.....	148
4.6	Limitations of the Study.....	150
4.7	Operational Definitions.....	152
	Reference.....	155

## **Chapter 5**

### **DATA ANALYSIS - DYNAMICS OF MUTUAL FUND**

#### **INVESTMENT DECISIONS: PERCEPTIONS AND**

#### **PREFERENCES OF RETAIL INVESTORS..... 157 - 218**

5.1	Introduction.....	157
5.1.1	Structure of the Chapter.....	158
5.1.2	Survey and Data Analysis.....	158
5.2	Demographic Profile of the Respondents.....	159
5.2.1	Gender Distribution of Respondent.....	159
5.2.2	Age Distribution of the Respondent.....	160
5.2.3	Categories of Respondents Based on Education.....	161
5.2.4	Occupational Categories of the Respondents.....	163
5.3	Investment Options and Perceptions on Risk, Return and Liquidity.....	164
5.3.1	Investment Preference in Respect of Different Investment Options.....	164
5.3.2	Perceptions on Risk, Return and Liquidity of Investment Options.....	165
5.3.3	Risk Perceptions on Investment Options.....	165
5.3.3.1	Risk Perception: Gender- Wise Analysis.....	166
5.3.3.2	Risk Perception and Age.....	167
5.3.3.3	Risk Perception and Education.....	168
5.3.3.4	Risk Perception and Occupation.....	170
5.3.4	Perception on Return from Different Investment Options.....	171
5.3.4.1	Perception on Return and Gender.....	172
5.3.4.2	Perception on Return and Age.....	173
5.3.4.3	Perception on Return and Education.....	174
5.3.4.4	Perception on Return and Occupation.....	175
5.3.5	Perception on Liquidity of Different Investment Options.....	177
5.3.5.1	Perception on Liquidity and Gender.....	177
5.3.5.2	Perception on Liquidity and Age.....	178
5.3.5.3	Perception on Liquidity and Education.....	180
5.3.5.4	Perception on Liquidity and Occupation.....	181
5.4	Investment Pattern of Mutual Fund Investors.....	182
5.4.1	Amount of Investment in Mutual Funds.....	182

5.4.1.1	Amount of Investment in Mutual Funds and Its Relationship with Gender .....	184
5.4.1.2	Amount of Investment: Age- Wise Analysis.....	185
5.4.1.3	Amount of Investment: Education - Wise Analysis .....	186
5.4.1.4	Amount of Investment: Occupation-Wise Analysis.....	187
5.4.2	Year of Experience of the Investors .....	188
5.4.2.1	Total Years of Mutual Funds Experience: Age - Wise Analysis .....	189
5.4.3	Investment in Different Mutual Fund AMCs (Asset Management Companies).....	190
5.4.3.1	Number of AMCs for Investment: Gender -Wise Analysis .....	191
5.4.3.2	Number of AMCs for Investment: Age- Wise Analysis .....	192
5.4.3.3	Number of AMCs for Investment: Education- Wise Analysis .....	193
5.4.5	Channel Preference for Mutual Fund Purchase .....	194
5.4.5.1	Preferred Source of Mutual Fund Purchase: Gender-Wise Analysis .....	195
5.4.5.2	Preferred Source of Mutual Fund Purchase: Age- Wise Analysis .....	196
5.4.5.3	Preferred Source of Mutual Fund Purchase: Education - Wise Analysis .....	198
5.4.5.4	Preferred Source of Mutual Fund Purchase – Occupation - Wise Analysis .....	199
5.5	Fund Preference of Retail Mutual Fund Investors .....	200
5.5.1	Preference for the Type of Funds: Gender - Wise Analysis.....	201
5.5.2	Preference for the Type of Fund: Age- Wise Analysis .....	202
5.6	Fund Benefit Expectation of Retail Mutual Fund Investors.....	204
5.6.1	Fund Benefit Expectation of Retail Mutual Fund Investors: Gender -Wise Analysis.....	204
5.6.2	Fund Benefit Expectation of Retail Mutual Fund Investors: Age- Wise Analysis.....	205
5.6.3	Fund Benefit Expectations of Mutual Fund Investors: Education -Wise Analysis .....	207
5.6.4	Fund Benefit Expectation of Retail Mutual Fund Investors –Occupation Wise Analysis .....	208
5.7	Source of Information for Mutual Fund Investment Decision .....	209
5.8	Product Selection Criteria of Mutual Fund Investors .....	210
5.8.1	Product Selection Criteria for Mutual Fund Investment.....	210
5.8.2	Product Selection Criteria for Mutual Fund Investment: Factor Analysis .....	212

5.8.3 Selection Criteria Used by Respondent Who Prefer Equity Funds versus Fixed Income Funds .....	214
5.8.4 Summary .....	217

**Chapter 6**

**STRUCTURAL EQUATION MODELING ON INFLUENCE  
OF MUTUAL FUND MARKETING ISSUES AND  
SERVICE QUALITY ON THE BEHAVIOURAL  
INTENTIONS OF MUTUAL FUNDS INVESTORS .....219 - 250**

6.1 Introduction.....	219
6.2 Mutual Fund Marketing Issues and Behavioural Intentions: Structural Equation Model .....	220
6.2.1 Research Instrument and Rating Scale.....	221
6.2.2 Exploratory Factor Analysis.....	223
6.2.3 Behavioural Intention .....	225
6.2.4 Standardization of Data .....	226
6.2.5 Conceptual Model: Mutual Funds Issues and Behavioural Intention (Model 1).....	227
6.2.6 Measurement Model .....	228
6.2.7 Convergent Validity for Reflective Constructs .....	228
6.2.8 Discriminant Validity for Reflective Constructs.....	230
6.2.9 Reliability for Reflective Constructs .....	231
6.2.10 Multicollinearity.....	231
6.2.11 Model Fit Indices and P Value .....	232
6.2.12 Structural Model .....	233
6.3 Perceived Service Quality and Behavioural Intention: Structural Equation Model .....	236
6.3.1 Perceived Service Quality of Mutual Fund Service Providers .....	236
6.3.2 Conceptual Model (2) .....	238
6.3.3 Measurement Model .....	239
6.3.4 Convergent Validity for Reflective Constructs .....	239
6.3.5 Discriminant Validity for Reflective Constructs.....	240
6.3.6 Reliability for Reflective Constructs .....	241
6.3.7 Multicollinearity.....	241
6.3.8 Model Fit Criteria and P Value .....	242
6.3.9 Structural Model .....	242
6.3.10 Linkage between Perceived Service Quality and Behavioural Intention under Moderating Influence of Investment Expertise.....	245

6.4 Summary .....	249
References .....	249

## ***Chapter 7***

### **SUMMARY OF FINDINGS AND RECOMMENDATIONS ... 251 - 274**

7.1 Introduction.....	251
7.1.1 Context of the Study.....	251
7.1.2 Methodology .....	251
7.1.3 Chapter Structure.....	252
7.1.4 Recommendations .....	253
7.2 Findings of the Empirical Analysis .....	253
7.2.1 Profile of Respondents .....	253
7.2.2 Preference for Different Investment Options .....	254
7.2.3 Investor's Perceptions on Risk, Return and Liquidity .....	254
7.2.3.1 Risk Perceptions.....	254
7.2.3.2 Perception on Return.....	255
7.2.3.3 Perception of Investors on Liquidity of Different Investment Options .....	255
7.2.4 Investment Pattern of Mutual Fund Investors .....	256
7.2.4.1 Amount of Investment .....	256
7.2.4.2 Years of Experience .....	257
7.2.4.3 Number of AMC's (Asset Management Companies).....	258
7.2.4.4 Channel Preference for Mutual Fund Purchase.....	259
7.2.5 Types of Funds Preferred and Fund Benefit Expectation .....	259
7.2.5.1 Types of Funds Preferred .....	259
7.2.6 Fund Benefit Expectations of Mutual Fund Investors.....	259
7.2.7 Source of Information .....	260
7.2.8 Product Selection Criteria for Mutual Fund Investment .....	260
7.2.8.1 Selection Criteria Used by Respondent who Prefer Equity Funds Versus Fixed Income Funds .....	261
7.2.9 Influence of Mutual Fund Marketing Issues on Behavioural Intentions of Mutual Funds Investors: Structural Equation Model.....	261
7.2.10 Perceived Service Quality and Behavioural Intention: Structural Equation Model .....	264
7.2.11 Linkage between Perceived Service Quality and Behavioural Intention under Moderating Influence of Investment Expertise.....	264
7.3 Discussions and Strategy Recommendations.....	265
7.3.1 Opportunity for Mutual Fund Growth.....	266
7.3.2 Market Targeting.....	266
7.3.3 High Returns .....	267

7.3.4 Tax Benefit.....	267
7.3.5 Market Segmentation and Targeting .....	267
7.3.6 Product Selection Criteria: Managerial Implications .....	268
7.3.7 Brand Loyalty.....	268
7.3.8 Distribution .....	269
7.3.9 Source of Information: Financial Advisor.....	270
7.3.10 Word- of -Mouth Communication .....	270
7.3.11 Media Advertisements.....	271
7.3.12 Perceived Service Quality: Managerial Implications .....	271
7.3.13 Investor Education.....	272
7.4. Scope for Further Research .....	272
References .....	273

**APPENDICES.....275 - 292**

**LIST OF PUBLICATIONS AND PRESENTATIONS.....293**



## List of Tables

Table 2.1:	Growth in Global mutual fund asset under management (AUM).....	18
Table 2.2:	Mutual fund asset under management in the different region in the world (in Millions of Euros).....	20
Table 2.3:	Trends in mutual fund asset under management in the U.S .....	21
Table 2.4:	European mutual funds assets under management .....	23
Table 2.5:	Mutual fund asset under management (AUM) in Japan.....	24
Table 2.6:	Mutual fund assets under management in selected countries in the Asia Pacific region (USD billion).....	26
Table 2.7:	Asset under management in Brazil.....	29
Table 2.8:	Asset under management in Russia.....	30
Table 2.9:	Asset under management in China (USD billion).....	31
Table 2.10:	South Africa - Evolution of AUM of Collective Investment Schemes- (CIS) ZAR billion.....	32
Table 2.11:	Mutual fund Asset under management in Africa (in South African Rand in billions).....	35
Table 2.12:	GDP –AUM ratio in different regions of the world -2015 .....	37
Table 2.13:	The ratio of mutual fund asset to world GDP.....	38
Table 2.14:	Mutual fund asset contribution to GDP in selected developed economies .....	40
Table 2.15:	Mutual fund asset contribution to GDP in emerging economies (Figures in percent) .....	42
Table 2.16:	GDP –AUM ratios in BRICS countries .....	43
Table 2.17:	Net assets of mutual funds and the industry growth during 1964-1987 .....	45
Table 2.18:	Assets under management of the mutual funds industry during 1987-1993 .....	46
Table 2.19:	Assets under management of the mutual funds industry during 1994-2003 .....	47
Table 2.20:	AUM of Mutual Fund Industry in India (2004 – 2012) .....	48
Table 2.21:	The trend of mutual fund asset under management in India .....	49
Table 2.22:	Mutual fund asset contribution to GDP.....	55
Table 2.23:	Retail and institutional contribution in the European Asset under management (in percentage).....	59
Table 2.24:	Retail and institutional contribution in mutual fund investment, 2015-16 .....	61
Table 2.25:	Mutual fund retail contribution India .....	61
Table 4.1:	Validity/Reliability Guidelines in Warp PLS 5.0.....	149
Table 5.1	Survey respondents –Gender wise analysis.....	159
Table 5.2:	Survey respondents –age wise analysis.....	160

Table 5.3:	Survey respondents –education wise analysis .....	162
Table 4.4:	Survey respondents –Occupation wise analysis .....	163
Table 5.5:	Investment preferences of mutual fund investors.....	164
Table 5.6:	Risk perception of investors in respect of different investment options.....	166
Table 5.7:	Risk perception towards different investment options: Gender-wise analysis.....	167
Table 5.8:	Risk perception towards different investment options: Age - wise analysis .....	168
Table 5.9:	Risk perception towards different investment option: Education - wise analysis .....	169
Table: 5.10	Risk perception: Investment options: occupation - wise analysis .....	170
Table 5.11:	Perception of investors on return from different investment options .....	171
Table 5.12:	Perceptions on returns from different investment options: Gender - wise analysis .....	172
Table 5.13:	Perceptions on returns from different investment options: Age- wise analysis .....	173
Table 4.14:	Perceptions on returns from different investment options: Education - wise analysis .....	174
Table 5.15	Perceptions on return from different investment options: Occupation- wise analysis .....	176
Table 5.16:	Perception of investors on liquidity of different financial products .....	177
Table 5.17:	Perceptions on liquidity of different investment options: Gender- wise analysis.....	178
Table 5.18:	Perceptions on liquidity of different investment options: Age- wise analysis.....	179
Table 5.19:	Perceptions on liquidity of different investment options: Education- wise analysis .....	180
Table 5.20:	Perceptions on liquidity of different investment options: Occupation- wise analysis.....	181
Table 5.21:	Amount of investment in mutual funds by individual investors .....	183
Table 5.22:	Amount of investment: Gender -wise Analysis.....	184
Table 5.23:	Amount of investment: Age- wise analysis.....	185

Table 5.24:	Amount of investment: Education- wise analysis .....	186
Table 5.25:	Amount of investment: Occupation- wise analysis .....	187
Table 5.26:	Years of experience in mutual fund investment .....	188
Table 5.27:	Total years of mutual funds experience: Age - wise analysis.....	189
Table 5.28:	Investment in different mutual fund AMCs .....	190
Table 5.29:	Investment in number of AMCs: Gender - wise analysis.....	191
Table 5.30:	Investment in number of AMCs: Age - wise analysis.....	192
Table 5.31:	Investment in number of AMCs: Education - wise analysis .....	193
Table 5.32:	Preferred Source of mutual fund purchase .....	194
Table 5.33:	Preferred source of mutual fund purchase: Gender - wise analysis .....	196
Table 5.34:	Preferred source of mutual fund purchase: Age - wise analysis .....	197
Table 5.35:	Preferred Source of Mutual Fund Purchase: Education - Wise Analysis.....	198
Table 5.36:	Preferred source of mutual fund purchase: Occupation - wise Analysis.....	199
Table 5.37:	Fund preferences of mutual fund investors .....	201
Table 5.38:	Fund preferences of mutual fund investors: Gender - wise analysis .....	202
Table 5.39:	Preference for the type of funds: Age- wise analysis .....	203
Table 5.40:	Fund benefit expectations of mutual fund investors.....	204
Table 5.41:	Fund benefit expectation of retail mutual fund investors: Gender -wise analysis.....	205
Table 5.42:	Fund benefit expectations of retail mutual fund investors: Age -wise analysis.....	206
Table 5.43:	Fund benefit expectation of mutual fund investors: Education - wise analysis .....	207
Table 5.44:	Fund benefit expectations of mutual fund investors: Occupation - wise analysis.....	208
Table 5.45:	Relevance of source of information on mutual fund investment decision .....	209
Table 5.46:	Product Selection criteria for mutual fund investment .....	211
Table 5.47:	KMO and Bartlett's Test.....	212
Table 5.48:	Factor analysis on product selection criteria .....	213

Table 5.49: Mann-Whitney test: Product selection factors used by investors who prefer fixed income funds versus equity funds .....	216
Table 6.1: Variables Used in the Rating Scale .....	222
Table 6.2: KMO and Bartlett's Test.....	223
Table 6.3: Mutual fund issues: Factor analysis .....	224
Table 6.4: Measurement of behavioural intention.....	226
Table 6.5: Item loading for the reflective construct .....	229
Table 6.6: Correlations among latent variable constructs .....	231
Table 6.7: Model fit indices and P value .....	232
Table 6.8: Summary for support for structural model relationships.....	235
Table 6.9: Multi-item scale for measuring the technical and functional service quality .....	237
Table 6.10: Item loading for the reflective construct .....	240
Table 6.11: Correlations among latent variable Constructs.....	241
Table 6.12: Model fit criteria and P value .....	242
Table 6.13: Summary for support for structural model relationships.....	244
Table 6.14: Moderation effect and P value.....	246
Table 6.15: Summary for moderating effect of structural model relationships .....	248

## List of Figures

Figure 2.1:	Global trends in mutual fund asset under management (Millions of Euros) .....	19
Figure 2.2:	Share of different region in the global asset under management as on 2016. ....	20
Figure 2.3:	Trend in mutual fund asset under management in the U.S (Total Asset in billion dollars).....	22
Figure 2.4:	European assets under management (EUR trillion) .....	23
Figure 2.5:	Mutual fund Asset under management in Japan (AUM in USD billion) .....	25
Figure 2.6:	Asset under management in Brazil (AUM in million EUR).....	29
Figure 2.7:	Asset under management in Russia in trillion RUB.....	30
Figure 2.8:	Asset under management in China (USD billion).....	32
Figure 2.9:	Mutual fund asset under management in Africa (in South African Rand in billions).....	35
Figure 2.10:	The share of mutual fund asset in the world GDP (in percent) .....	39
Figure 2.11:	Indian mutual fund AUM trend (In ₹Crore).....	50
Figure 2.12:	Mutual fund asset contribution to GDP.....	55
Figure 3.1:	Gronroos model of Service quality .....	108
Figure 3.2:	Conceptual model: Relationship between the perceived service quality and customer loyalty .....	112
Figure 5.1:	Survey respondents –Gender wise analysis.....	160
Figure 5.2:	Survey respondents –age wise analysis.....	161
Figure 5.3:	Survey respondents –Education wise analysis .....	162
Figure 5.4:	Survey respondents –occupation wise analysis.....	163
Figure 5.5:	Preferred Source of mutual fund purchase .....	195
Figure 6.1:	Conceptual model on mutual funds issues and behavioural intention.....	227
Figure 6.2:	Structural Model.....	234
Figure 6.3:	Conceptual model (2) .....	238
Figure 6.4:	Structural Model Test Results .....	243
Figure 6.5:	Structural model analysis: investment expertise as moderating variable.....	248



## Abbreviations

AMCs	Asset Management Companies
AMFI	Association of Mutual Funds in India
APC	Average Path Coefficient
ARS	Average R Squared
AUM	Asset Under Management
AVE	Average Variance Extracted
AVIF	Average Variance Inflation Factor
Bn	Billion
CAGR	Compound annual growth rate
EFA	Exploratory Factor Analysis
EUR	Euro
GDP	Gross Domestic Product
KMO	Kaiser Meyer Olkin
PLS	Partial Least Squares
RBI	Reserve Bank of India
SEBI	Security Exchange Board of India
SEM	Structural Equation Modeling
VIF	Variance Inflation Factors

.....❧.....





## INTRODUCTION AND THESIS OVERVIEWS

<i>Contents</i>	1.1 <i>Introduction</i>
	1.2 <i>Background of the study</i>
	1.3 <i>Aims of the study</i>
	1.4 <i>The study design</i>
	1.5 <i>Thesis overview</i>
	1.6 <i>Contributions of the study</i>

### 1.1 Introduction

The mutual fund industry has two types of investors: institutional investors and retail or individual investors. The individual investors may represent households and they may invest the household savings. The individual or household investors are often designated as retail investors in the investment industry parlance. This study is an analysis of the behaviour of retail mutual fund investors and the factors that influence the choice of mutual fund schemes / products.

This chapter provides the overall context and perspectives of the study.

## **1.2 Background of the Study**

In order to put the study in its right context, a review of the status of the mutual fund industry around the world and in India would be appropriate.

### **1.2.1 Mutual funds fuel the economy**

The mutual fund industry fulfils three essential economic functions: first, it channels capital from where it is in surplus to where it is in short supply. Mutual funds fuel the economy by providing equity capital in both primary and secondary markets by providing credit to corporations and financial institutions through corporate bonds or money markets and by funding government deficits. Secondly, the industry provides liquidity needed to ensure the sound functioning of the capital markets. Thirdly, it gives investors access to a range of instruments and markets to diversify their portfolios and achieve their investment goals (Costanzo, 2011).

### **1.2.2 Global trends in mutual fund industry**

The global mutual fund industry achieved tremendous growth in the last quarter century, registering over tenfold increase. Global assets in mutual funds increased from \$4.0 trillion in 1993 to \$40.36 trillion by 2016 (ICI Global, 2017). This growth has been achieved despite the negative growth during the years of global economic recession from 2008 to 2011.

The growth in mutual fund assets under management during the period 2012-2016 has been highest in Europe (CAGR: 21.79%) This was followed by the Asia Pacific region with a compound annual growth rate

of 20.55%. In the Americas the CAGR was 18.51 % and in the African region, which has the lowest rate of growth, the CAGR was 14.04% (European Fund and Asset Management Association, 2017).

In the United States the total net assets of mutual funds grew from USD 1.6 trillion in 1992 to \$18.1 trillion in 2015 (Reid et al., 2016). Despite the decline and stagnation during the years of the financial trouble (2008-2011), the European mutual fund sector recorded growth and it grew from EUR 13.6 trillion assets under management (AUM) in 2004 to EUR 19 trillion by 2014, a CAGR of 3.96 % (European Fund and Asset Management Association, 2015)

The global growth of mutual funds was fuelled by several factors. Klapper et.al (2003) finds three factors: (1) increasing globalisation of finance and expanding presence of large multinational financial groups in several countries; (2) well-developed securities markets with a high level of market integrity and liquidity; 3) demographic aging that characterises the populations of most high and middle-income countries and the search for financial instruments that are safe and liquid but also promise high long-term returns.

Plantier (2014) indicates several factors that help to explain the worldwide growth in long-term mutual fund assets and the varied growth experiences across individual countries. These factors include a country's economic development, demographics, and fiscal balance; strong and appropriate regulation; investors' demand for professionally managed, well-diversified capital market products; developed capital markets in the

country; favourable returns on capital market instruments; and the country's defined contribution plan for pension.

Around the globe, the mutual fund industry has seen strong growth in assets in the past two decades. The global mutual fund asset growth, reflects increases in each of four broad regions: the United States, Europe, Asia-Pacific, and the rest of the world (Christopher, 2014). Mutual funds have become an important financial intermediary in a country's economic development. A cross country study shows that the ratio of long-term mutual fund assets to gross domestic product tends to grow as a country's per capita income rises. As wealth and income are expected to increase substantially in developing countries, mutual fund assets are likely to grow considerably.

### **1.2.3 Mutual Funds Growth in India**

Indian mutual fund industry had a slow growth till recently and the asset under management (AUM) has not reached significant levels, considering global bench mark. From ₹ 25 crores in 1964-65, the asset under management increased to ₹ 47734 crores in 1993. With the liberalisation of the Indian economy in early 1990s, a new era started in the Indian mutual fund industry with the entry of private sector funds. The Industry's AUM had crossed the milestone of ₹10 Trillion (₹10 Lakh Crore) for the first time in 2014 and in a short span of less than three years, the AUM size has reached ₹ 20 Trillion in mid 2017 (Economic Times, 2017)

Presently, 44 AMCs are operating in India and these comprise private sector companies, joint ventures (including those with foreign entities), bank-sponsored, etc. The industry has a tiered structure with the top seven AMCs having 70% of the industry Asset under Management [AUM].

#### **1.2.4 The AUM as percent of GDP**

India has one of the lowest mutual fund investments to GDP ratios in the world. Total assets under management of the mutual fund industry have been estimated as 15.29% of the world GDP. According to non banking financial database released by World Bank (2017), the asset under management as percent of GDP was highest in the U.S. (91.04%) in 2014, followed by Canada (72.98%). Of the European countries, Germany, France and UK have substantial AUM as percent of GDP; 51.57% (2013), 49.23% and 47.25%, respectively.

Among the developing countries, Brazil, South Africa and South Korea have relatively high GDP – AUM ratio, 46.21%, 41.87 % and 22.13%, respectively. China's AUM contribution to GDP in 2015 was 11.54 %. However, in India the asset under management ratio to GDP was 7.3 % in 2015 (World Bank).

#### **1.2.5 Retail Investor Contribution**

Mutual fund emerged as an ideal investment option for individual and household investment and it has remained as such in many developed societies. The Indian mutual fund industry has been dominated by the institutional investors and foreign investors. Mutual fund industry in the

US had a total investment of \$18.5 trillion in 2016. Of this, households held about 84 percent, or \$15.6 trillion (Holden Sarah et.al, 2016)

Rao and Mishra (2007) have stated that Indian financial markets are getting more and more institutionalized. Institutional investors hold about 54% of assets, with individual investors having a share of 46 %. The institutional investor group comprises of corporates (85%) as well as Indian and foreign institutions and banks.

Retail investor presence appears smaller when assessed relative to population. A 2011 study from the Indian School of Business (De, Gondhi and Sarkar 2011) estimated that there were around 2.02 million retail investors in India, which was small relative to the Indian population (0.2 per cent).

According to a study sponsored by SEBI (2014), 46 per cent of total individual wealth in India was invested in physical assets such as gold and real estate in 2013-14. Among the contribution of investors in different financial products, the contribution to mutual fund in the asset portfolio has been very low. While the share of insurance products constituted 17 per cent of the total saving, the share of mutual fund was only 3.2 %. It is much lower compared to other financial products. Details of the pattern of growth in the mutual fund sector in India and other countries are discussed in Chapter 2.

### **1.3 Aims of the Study**

The study addresses a wide range of issues with the purpose of identifying the factors that influence the behaviour of retail mutual fund investors, particularly in the context of the limited participation of retail investors in mutual funds.

The major aspects analysed in the study include:

- 1) Preference for different investment options such as bank deposits, mutual fund, insurance and share market
- 2) Investors' perceptions on risk, return and liquidity in these investment options
- 3) Investment pattern of mutual fund investors in terms of the amount of investment, years of experience, number of AMCs used and channel preference for mutual fund purchase
- 4) Fund benefit expectation and types of funds preferred
- 5) Preferred sources of information for mutual fund investment decisions
- 6) Product selection criteria for mutual fund investment
- 7) Relationship between technical service quality and investor's behavioural intention
- 8) Influence of functional service quality on behavioural intention
- 9) The impact of the investor's investment expertise as a moderating influence on the technical service quality and behavioural intention

## **1.4 The Study Design**

Based on the industry analysis and literature survey, the research problem was defined, the objectives of the study have been set and the hypotheses have been formulated. The study is descriptive and analytical in nature. Both primary and secondary data have been used for the study.

For primary data, a sample survey has been conducted among retail mutual fund investors in Cochin. A pilot study was undertaken prior to the sample survey for finalisation of the variables and checking of validity and reliability.

For the sample survey, the respondents were individual mutual fund investors in Cochin. These investors were drawn from the lists of customers of five mutual fund distribution organisations in Cochin. The sample size was 470 respondents. Random sampling has been used to select respondents. A research schedule was prepared and pretested. Structured interviews were conducted with respondents.

The statistical techniques used for hypotheses testing included Factor Analysis, Mann-Whitney U test, Chi square, etc. Structural Equation Modeling was also done. Data analysis has been done using SPSS 20 and Warp PLS 5.0.



## **1.5 Thesis Overview**

### **Chapter 1: Introductions and thesis overview**

The chapter provides an introduction to the mutual fund industry and an overview of the study.

### **Chapter 2: Growth trends in global and Indian mutual fund industries**

This chapter traces the history and development of mutual fund industry in developed and developing countries as well as in India. A comparative study of the ratio of assets under management of the mutual fund sectors in different countries including India is provided. Analysis of the contribution of retail investors to the mutual fund sector also forms part of the content of the chapter.

### **Chapter 3: Review of literature**

The chapter is devoted for review of literature. The review of literature covers broad areas such as the research tradition in mutual funds, research on mutual funds performance, risk- return perceptions, factors influencing mutual fund investment, perceptions on mutual fund marketing issues and influence of service quality on behavioural intention.

### **Chapter 4: Research methodology**

The chapter discusses the research problem, significance of the study, objectives and hypotheses, research design, limitations of the study and scope for further research.

**Chapter 5:** Data Analysis - dynamics of mutual fund investment decisions: perceptions and preferences of retail investors

The chapter provides detailed analysis of data pertaining to preference for investment options and perceptions on risk, return and liquidity, investment pattern of mutual fund investors, their fund preference, fund benefit expectation, preferred source of information for investment decision and product selection criteria.

**Chapter 6:** Structural equation modeling on influence of mutual fund marketing issues and service quality on the behavioural intentions of mutual funds investors

The chapter covers the analysis of the relationship between mutual fund marketing issues and behavioural intentions using structural equation model. The SEM model was used to analyse the impact of perceived service quality on behavioural intention.

**Chapter 7:** Summary of findings and recommendations

The last chapter provides the summary of the major findings of the study, discussions on the findings and the strategy implications.

## **1.6 Contributions of the Study**

Serious academic attention has not been given to the issue of limited retail investment in mutual funds in India. The focus of the study is on the perception and behaviour of retail investors towards mutual fund investment. However, the perceptions and behaviour of the investors have a bearing on the factors influencing and inhibiting retail investment. Hence the issues analysed in the study, using primary and secondary data,

address at least indirectly the problem of limited retail mutual fund investment in the country.

This study focuses on the marketing issues pertaining to mutual funds. Very few studies addressing the marketing issues of the Indian mutual fund sector have been reported. Any study relating the service quality of mutual fund distributors and agents to the behavioural intentions of the investors have not been reported in India.

Further, study provides a comprehensive analysis of the growth and structure of the mutual fund industry, tracing the evolution, growth and current status of the industry globally, in emerging economies and in India. Such a comparative analysis of the mutual fund industry has not been reported in the country.

All issues addressed in the study are in the context of the low response of retail investors towards mutual fund investment and that makes the study relevant to different stakeholders - regulators, industry associations, policy makers in the government and the asset management companies.

## **References**

- [1] Associated Chambers of Commerce and Industry of India, (2015). Indian Mutual Fund Industry: The Road Ahead.
- [2] Costanzo, Gian Luigi. (2011). The Contribution of the Asset Management Industry to long -term growth. *OECD Journal: Financial Market Trends*, (1), September.

- [3] De, Sankar and Gondhi, Naveen R. and Sarkar, Subrata, Behavioral Biases, Investor Performance, and Wealth Transfers between Investor Groups (November 15, 2011). Available at SSRN: <https://ssrn.com/abstract=2022992>.
- [4] EFAMA (2015).8th Annual Review on European Asset Management Report, Facts and Figures. EFAMA.
- [5] EFAMA. (2016).Regulated Open-ended Fund Assets and Flows, EFAMA 2013-2016.
- [6] Fernando, D., Klapper L., Sulla V. and Vittas, D. (2003). The development of mutual funds around the world, *Emerging Markets Review* 5, 1-38.
- [7] ICI (2014), Globalisation and the Global Growth of Long-Term Mutual Funds, *ICI Global Research Perspective*, Vol. 1(1).
- [8] ICI, Global (2017). A Review of Trends and Activities in the Investment Company Industry. ICI fact book ,57 edition.
- [9] Klapper, D Fernando., L., Sulla V., & Vittas, D. (2003). The development of mutual funds around the world. *Emerging Markets Review* 5, 1-38.
- [10] Plantier, L. Christopher.(2014), Globalisation and the Global Growth of Long-Term Mutual Funds, ICI Global, Research Perspective Vol. 1(1).
- [11] PTI. (2017), Economic Times, AUM of the mutual fund industry may cross Rs. 20 trillion in 2017.
- [12] Rao Hanumantha P and Mishra Vijay Kr. (2007). MF Industry in India: A SWOT Analysis. *ICFAI Portfolio organizer*, 5-59.
- [13] Reid, Brian., Sean Collins, Sarah Holden, Judy Steenstra (2016). A review of trends and activities in the US investment company industry. ICI fact book.
- [14] Reid, Brian., Sean Collins, Sarah Holden, Judy Steenstra. (2016). A review of trends and activities in the US investment company industry. ICI fact book.
- [15] World Bank. (2017). Non banking financial database.



### GROWTH TRENDS IN GLOBAL AND INDIAN MUTUAL FUND INDUSTRIES

<b>C</b> <b>o</b> <b>n</b> <b>t</b> <b>e</b> <b>n</b> <b>t</b> <b>s</b>	2.1 <i>History of Mutual Fund Industry</i>
	2.2 <i>Mutual Funds Growth – Global Scenario</i>
	2.3 <i>Mutual Funds in Developed Countries</i>
	2.4 <i>Mutual Funds in Asia Pacific Region</i>
	2.5 <i>Mutual Funds in Emerging Economies</i>
	2.6 <i>Mutual Funds in Africa</i>
	2.7 <i>Mutual Fund Contribution to GDP</i>
	2.8 <i>Mutual Fund Contribution to GDP in Developed Countries</i>
	2.9 <i>Mutual Fund Contribution to GDP in Emerging Economies</i>
	2.10 <i>Mutual Funds in India</i>
	2.11 <i>Mutual Fund Contribution to GDP in India</i>
	2.12 <i>Economic Growth and Mutual Fund Investment</i>
	2.13 <i>Retail Investments in Mutual Fund Industry: World vs. India</i>
	2.14 <i>Summary</i>

#### 2.1 History of Mutual Fund Industry

Economic historians are uncertain about the origins of mutual funds. Mutual funds emerged as an investment fund in the second half of the 18th century in The Netherlands. The origin of investment fund is attributed by some to the closed-end investment companies launched in

the Netherlands in 1822 by King William I (Whinny, 2016). Traditionally, however, the origin is attributed to a Dutch merchant named Adriaan van Ketwich whose investment trust, Eendragt Maakt Magt, (the maxim of the Dutch Republic, “Unity Creates Strength”) created in 1774, might have given the king the idea. Ketwich postulated that diversification would increase the appeal of investments to smaller investors with minimal capital. The idea was to diversify the financial risk by investing across a number of European countries and the American colonies, where investments were backed by income from plantations. The early mutual funds spread were of the closed-end variety where a fixed number of shares were issued. The basic idea was pooling resources and spreading risk using closed-end investments (Brian, 2010).

### **2.1.1 Predecessors of Mutual Funds**

Prior to the eighteenth century, a number of investment vehicles had emerged that created a joint interest in a pool of financial and non-financial assets. The first major type included life annuities and, in particular, tontines and the second type included plantation loans. Although these securities were not identical to modern mutual funds, they manifested many of the same characteristics. These first investment trusts characterised tradable ownership of a financial securities portfolio (Rouwenhorst, 2004).

The performances of the early mutual funds were far from satisfactory. The fortunes of the early funds were closely linked to the fortunes of their predominant investments-plantation loans in the West Indies. The outbreak of the Fourth English War in 1780 held back

colonial shipments to their Dutch commission agents, affecting the income that were pledged as the security for holders of the plantation loans. Despite such setbacks, there were some success stories as well. During the 1780s and 1790s more than thirty investment trusts emerged (Rouwenhorst, 2004).

### **2.1.2 Mutual Funds in UK**

The next wave in mutual funds history started with an investment trust launched in Switzerland in 1849. Gradually mutual funds began to spread to England and France before heading to the U.S. in the 1890s. The first investment trust in the UK was 'Foreign and Colonial Government Trust', established in 1868 in London. It invested in foreign government bonds. By 1875 eighteen trusts had been formed in London (Bullock, 1959). This was followed by similar investment vehicles created in Scotland in the 1880s (Shekhar, 2017).

### **2.1.3 Mutual Funds in the US**

During the 1890s, investment trusts were introduced into the United States. The first closed-end fund in the U.S was the Boston Personal Property Trust, formed in 1893. The establishment in 1924 of the Massachusetts Investors' Trust in Boston heralded the arrival of the modern mutual fund in the U.S. (Shekhar, 2017). It was the first mutual fund with an open-end capitalization, enabling the continuous issue and redemption of shares by the investment company. Within one year, the fund grew to \$392,000 in assets from \$50,000. The launch in 1928 of the Wellington Fund, which was the first mutual fund to include stocks and bonds, was a significant event in the history of the mutual fund.

The growth of the mutual fund industry was facilitated by the introduction of rules and regulators by the U.S. government. The establishment of the Securities and Exchange Commission (SEC), the enactments such as the Securities Act of 1933, the Securities Exchange Act of 1934 and the Investment Company Act of 1940 put in place a system of regulations and institutions that facilitated disclosures and sought to minimise conflicts of interest.

The mutual fund industry continued to expand. At the beginning of the 1950s, there were around 100 open-end funds in the U.S. By the 1960s mutual funds began to grow with the rise of over 100 aggressive growth funds, with billions of dollars in new asset inflows. With the 1980s and '90s came the bull market mania and previously obscure fund managers became superstars. Mutual funds emerged as an important part of the U.S. financial system during the 1990s. Assets held in mutual funds rose from \$ 1 trillion at the beginning of the decade to \$ 7 trillion by the end of the decade (Reid, 2000). Strong economic growth, exceptional corporate profits, low inflation, technological innovation, high stock returns, and relatively low interest rates, all favored mutual funds investments by households and businesses.

However, the burst of the tech bubble and a wave of scandals in 2003, involving some major mutual fund companies, took much of the shine off of the industry's reputation. Despite such scandals and the global financial crisis starting 2008, the story of the mutual fund is far from over. In fact the rise of the industry in recent years has been spectacular.



#### **2.1.4 Mutual funds in India**

The history of the mutual fund industry in India began in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank of India. With the liberalisation of the Indian economy in early 1990's, a new era started in the Indian mutual fund industry with the entry of private sector funds. The industry now functions under the SEBI (Mutual Fund) Regulations, 1996 (AMFI, 2016).

The Indian mutual funds industry experienced slow growth for several decades. However, in the past decade the growth has been significant. The assets under management increased from INR 3.26 trillion in 2007 to INR 20 trillion by mid 2017 (AMFI, 2017).

### **2.2 Mutual Funds Growth – Global Scenario**

#### **2.2.1 Global Trends in Mutual Fund Industry**

The world mutual fund industry has recorded phenomenal growth in the last quarter century, registering more than 10 fold increase. Global assets in mutual funds increased from \$4.0 trillion in 1993 to \$28.9 trillion in September 2013 (Plantier, 2014) and it has reached \$40.36 trillion by the end of 2016 (ICI Global, 2017).

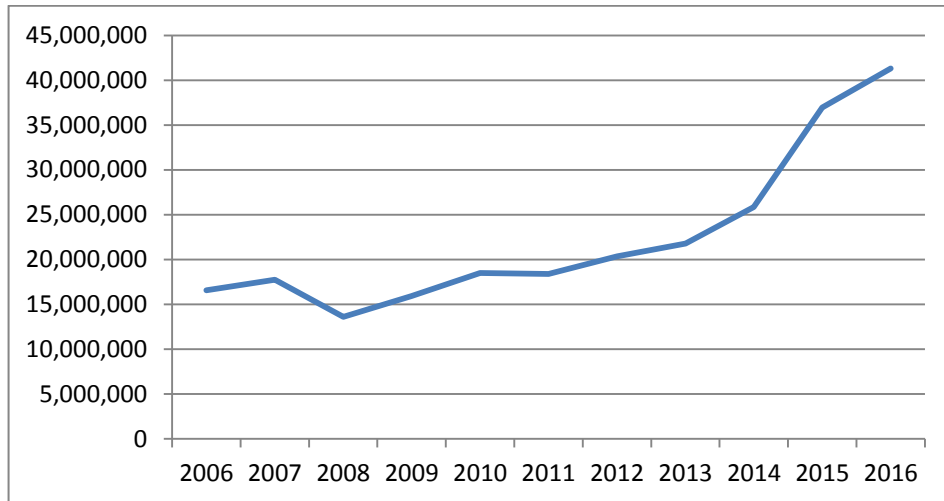
The recent trends in world mutual fund asset and its growth are given in Table 2.1 and Figure 2.1.

**Table 2.1: Growth in Global mutual fund asset under management (AUM)**

Year	Asset under management (Millions of Euros)	Annual increase
2006	16,560,000	
2007	17,751,000	6.71
2008	13,595,000	-30.57
2009	15,928,000	14.65
2010	18,493,868	13.87
2011	18,394,937	-0.54
2012	20,345,930	9.59
2013	21,787,690	6.62
2014	25,847,480	15.71
2015	36,935,094	30.02
2016	41,294,736	10.56
CAGR	8.66	

*Source: EFAMA (2016). Regulated Open-ended Fund Assets and Flows, EFAMA 2013-2016*

Global mutual fund asset under management (AUM) doubled in five years from \$ 20.35 trillion in 2012 to \$ 41 trillion in 2016, according to data presented in Table 2.1. This growth has been achieved despite the negative growth during the years of recession from 2008 to 2011. The global recession influenced the mutual fund growth worldwide. Net new flows showed substantial fluctuations in early 2011. The worsening of the Euro zone debt crisis caused a sharp net outflow from funds worldwide during 2011 (Bose, 2012). However, the recovery has been substantial since 2012. The graphical representation of the global asset under management is presented in the figure 2.1.



Source: EFAMA. (2016). *Regulated Open-ended Fund Assets and Flows, EFAMA 2013-2016*

**Figure 2.1: Global trends in mutual fund asset under management (Millions of Euros)**

### **2.2.2 Growth Trends in Different Regions**

During the past two decades, the mutual fund industry has witnessed strong growth the world over. However, the amount, type and growth experience of mutual fund assets has varied substantially across the four broad regions: Americas, Europe, Asia-Pacific and Africa. In the total worldwide mutual fund asset, the contributions mainly come from the United States, Europe and the Asia-Pacific region. U.S. mutual fund industry remained the largest in the world in 2015, with nearly \$16 trillion in assets (ICI, 2016).

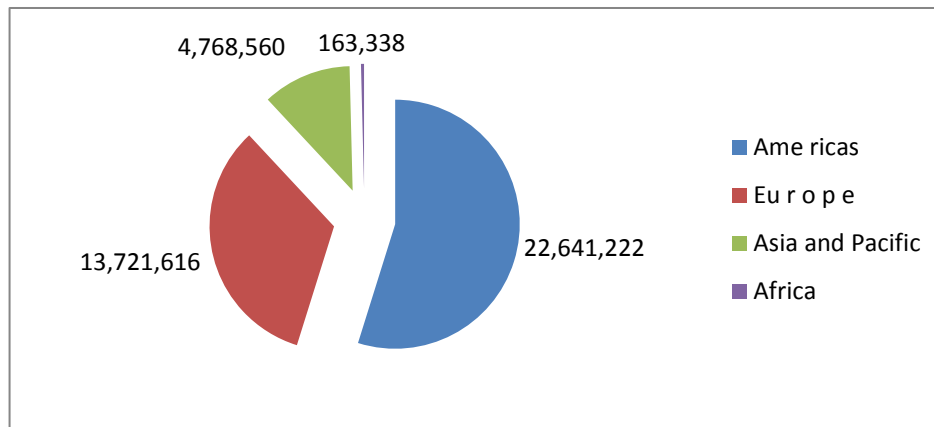
The compound annual growth rate in asset under management during the period 2012- 2016 has been impressive in the different regions of the world. Mutual fund assets under management in the different regions are furnished in Table: 2.2

**Table 2.2: Mutual fund asset under management in the different region in the world (in Millions of Euros)**

Regions	2012	2013	2014	2015	2016	CAGR
America	1,14,80,224	1,24,52,688	1,48,35,845	2,01,70,534	2,26,41,222	18.51
Europe	62,37,731	67,97,789	78,87,716	1,22,52,605	1,37,21,616	21.79
Asia and Pacific	22,57,731	22,95,556	30,03,275	43,78,570	47,68,560	20.55
Africa	96,588	1,05,983	1,20,644	1,33,385	1,63,338	14.04

Source: EFAMA. (2016). *Regulated Open-ended Fund Assets and Flows, EFAMA 2013-2016*

The CAGR in mutual fund assets under management has been highest in Europe (21.79%) during the period 2012-2016. This is followed by the Asia Pacific region with a CAGR of 20.55%. In the Americas the CAGR has been 18.51 %. Even in the African region, which has the lowest rate of growth, the CAGR was 14.04%.



Source: *Worldwide Regulated Open-ended Fund Assets and Flows, EFAMA (2013-2016)*

**Figure 2.2: Share of different region in the global asset under management as on 2016.**

## **2.3 Mutual Funds in Developed Countries**

The global mutual fund industry is dominated by the developed countries, particularly the United States and countries of Europe. The emerging economies have seen recent sprout in the mutual fund sector. The low income countries are yet to see the potential of the sector.

### **2.3.1 Mutual Funds trend in United States**

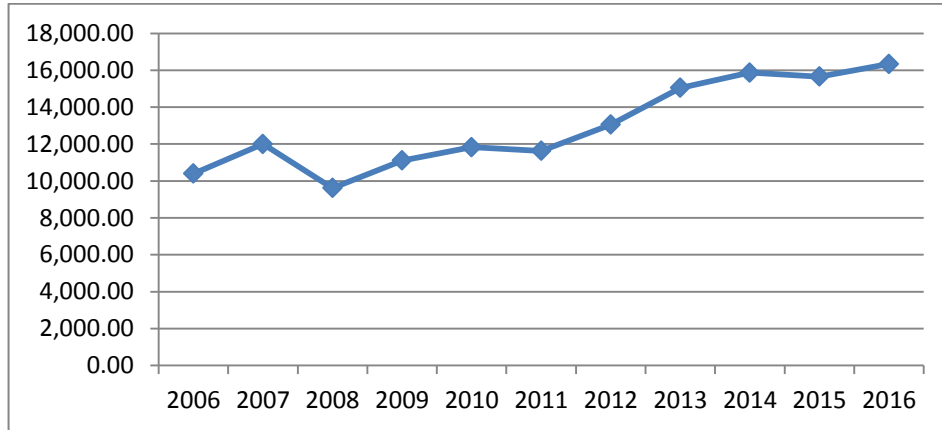
In the United States, the total net assets of mutual funds grew from USD 1.6 trillion in 1992 to \$ 5.5 trillion in 1998, contributing an average annual rate of growth of 22.4 percent. The U.S. registered investment companies managed \$18.1 trillion in assets at year-end 2015 (Reid Brian et al., 2016).

The recent trends in the U.S mutual fund sector are presented in Table 2.3 and Figure 2.3.

**Table 2.3: Trends in mutual fund asset under management in the U.S**

<b>Year</b>	<b>Total asset (in billion dollar)</b>	<b>Annual increase</b>
2006	10,398.16	
2007	12,000.17	13.35
2008	9,620.64	-24.73
2009	11,112.62	13.43
2010	11,833.36	6.09
2011	11,632.35	-1.73
2012	13,056.68	10.91
2013	15,050.82	13.25
2014	15,875.27	5.19
2015	15,651.96	-1.43
2016	16344.00	4.24
CAGR - 4.63%		

*Source: ICI, Investment Company Fact Book (2016 & 2017)*



Source: ICI, Investment Company Fact Book (2016 & 2017)

**Figure 2.3: Trend in mutual fund asset under management in the U.S (Total Asset in billion dollars)**

The U.S. mutual fund industry was already a \$ 12 trillion industry by 2007, just before the years of the financial crisis. The industry recovered with assets under management of \$ 13 trillion in 2013, \$ 15 trillion in 2013 and \$ 15.87 trillion in 2014. Despite a small setback in 2015, it increased to \$ 16.34 trillion in 2016.

Despite the financial crisis and the resultant decline in mutual fund assets under management in the U.S., the industry registered a growth of CAGR 4.63 %.

### 2.3.2 Trend of Mutual Fund Asset under Management in Europe

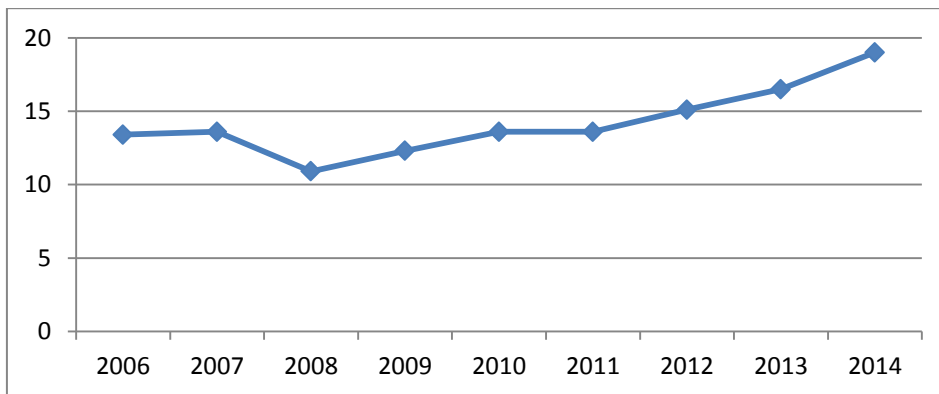
Professionally managed assets in Europe rose by 8.6% in 2013 to reach EUR 16.5 trillion. In 2014 it increased to 19 trillion EUR. This growth came on the back of strong performances of financial markets around the globe. The trend of total AUM in the European mutual fund market is furnished in the Table 2.4.

**Table 2.4: European mutual funds assets under management**

Year	AUM (EUR trillion)	Increase (%)
2006	13.4	
2007	13.6	1.47
2008	10.9	-24.77
2009	12.3	11.38
2010	13.6	9.56
2011	13.6	0.00
2012	15.1	9.93
2013	16.5	8.48
2014	19.0	13.16
CAGR	3.96 %	

Source: EFAMA. (2015). 8<sup>th</sup> Annual Review Report on European Asset management

Despite the decline and stagnation during the years of the financial trouble during 2008-2011, the performance of the European mutual fund sector has been significant. The EUR 13.6 trillion AUM in 2007 recovered to EUR 15.1 trillion in 2012 and further increased to EUR 19 trillion by 2014. The CAGR was 3.96 % during the ten year span.



Source: 8<sup>th</sup> Annual Review Report on European Asset management, EFAMA (2015)

**Figure 2.4: European assets under management (EUR trillion)**

### 2.3.3 Mutual Fund Assets under Management in Japan

In terms of mutual fund investment Japan is an exception to the developed countries of the west. Mutual funds are known as Tōshin in Japan. Japan's mutual fund industry is very small compared those in the U.S or Europe, but it is the second largest in the Asia-Pacific region. There are 3937 funds in Japan managing, \$ 822 billion in 2015. Japanese individuals invest only 4 % of their personal savings in mutual funds (Cafe mutual fund, 2013). The growth of the industry has been stagnant after the collapse of Tokyo stock market in 1990. Nomura, Nikko and Daiwa are the largest asset managers in Japan (Kerker, 2012).

The details of AUM in different years are presented in Table 2.5 and Figure 2.5.

**Table 2.5: Mutual fund asset under management (AUM) in Japan**

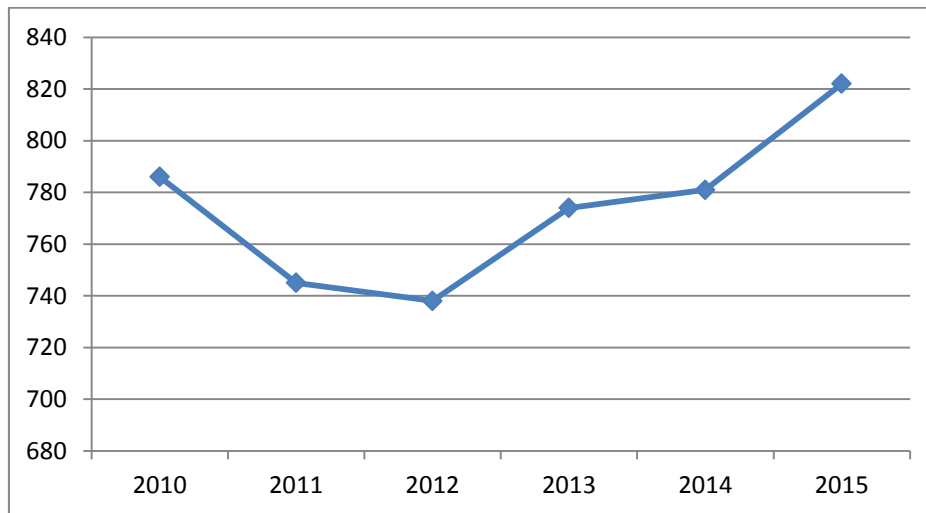
year	AUM ((USD billion)	Annual increase
2010	786	
2011	745	-5.50
2012	738	-0.95
2013	774	4.65
2014	781	0.90
2015	822	4.99
CAGR	0.75	

*Source: Sadyuki Horie. (2015). Report on Japan Asset Management Business*

Data reveal that the assets under management in the mutual fund sector in Japan continue to stagnate. From \$ 786 in 2010, the AMU



declined or stagnated during the next four years and it recovered marginally in 2015 to \$ 882 billion. The growth in AUM was a meagre CAGR of 0.75 %.



Source: Sadyuki Horie. (2015). *Report on Japan Asset management Business*

**Figure 2.5: Mutual fund Asset under management in Japan (AUM in USD billion)**

## **2.4 Mutual Funds in Asia Pacific Region**

The Asia Pacific region covers a diverse mix of countries, including developed countries such as Japan and Australia, emerging economies such as China and South Korea and developing countries such as Thailand and Philippines. The fortunes of the mutual funds industry in these countries have been unique. However, growth in mutual fund investment has been predicted on account of factors such as increasing disposable income, urbanisation, growing middle class and young educated population. Mutual fund demand mainly comes from institutional and retail investors in these countries.

The Asia Pacific mutual fund assets under management have grown at an average annual growth rate of 7.5%, increasing from USD 3.2 trillion in 2010 to USD 4.5 trillion by 2015 (PwC, 2016).

The AUM and growth of the mutual fund assets in the different countries of Asia Pacific region are presented in Table 2.6 and Figure 2.6.

**Table 2.6: Mutual fund assets under management in selected countries in the Asia Pacific region (USD billion)**

Countries	2010	2011	2012	2013	2014	2015	CAGR
Australia	1456	1440	1667	1624	1601	1588	1.46
Japan	786	745	738	774	781	822	0.75
China	365	339	437	480	709	1,120	25.14
Hong Kong	36.8	33.4	56	97.6	118.2		26.29
Malaysia		87.3	116.1	120	119.1	115.8	5.81
New Zealand	20	24	31	34	42	39	10.2
Singapore	25.6	24.6	26.2	30	28.7		2.31
South Korea	266	227	268	285	330	365	8.23
Thailand	59.5	57.7	76.6	78.4	99.2	102.1	14.45

Source: PWC. (2016). *Asian Passports, the coming of age: an overview and its demand.*

In the Asia Pacific region, the countries with substantial mutual fund assets under management are Australia (\$1.46 trillion), China (\$1.12 trillion), and Japan (\$ 0.82 trillion). This is followed by South Korea (\$365 million), Hong Kong (\$118 million), Malaysia (\$118 million) and Thailand (\$102 million), in this order. Singapore and New Zealand have relatively low mutual fund investment.

In terms of the rate of growth, China and Hong Kong dominate the area with CAGR over 25 %. The rate of growth is very low in the developed countries of Australia and Japan. In Thailand, New Zealand and South Korea, the rates of growth are significant.

## **2.5 Mutual Funds in Emerging Economies**

Emerging markets represent a vast and exciting investment frontier, offering a chance for generous returns to mutual fund investors (Fredman, 2012). Higher returns are possible because emerging economies and stock markets are both expanding rapidly. Mutual fund penetration in most Asian economies have not kept pace with the growth in financial assets of the Asian households and is relatively lower compared to American and European economies. Mutual funds investments constitute only 10% of the Asian investors' financial holdings. The financial holdings of mutual fund among the different Asian countries are China (11%) Korea (23%), India (7%), Taiwan (11%). In developed countries such as the US, mutual funds serve as long-term savings tools and are also found in retirement options, while in Asia, investors view mutual funds mainly as trading tools (KPMG, 2016).

Mutual fund investments are becoming increasingly common in developing countries, despite still being quite small. ICI data reveal that mutual fund assets under management in middle-income countries have grown from 2.3 percent of global mutual fund assets in 2001 to 6.3 percent in 2012, although high- income countries held over 93 percent of assets under management.

## **2.5.1 Asset under Management in BRICS Countries**

BRICS countries (Brazil, Russia, India, China and South Africa) represent the largest and most influential emerging market nations. Mutual funds in these countries tend to focus on the largest stocks within each country and can be indexed or actively managed. This section discusses assets under management in BRICS countries other than India.

### **2.5.1.1 Mutual Funds in Brazil**

The first mutual fund, Fundo Crescinco, was created in Brazil in 1957, and until 1970 only 11 funds existed. The funds' AUM grew substantially until 1971, with rallies in stock markets. However, mutual funds lost much of their asset value with the large fall in stock markets and they were forgotten until the 1990s (Varga and Wengert, 2010):

Since 1994 when the hyperinflation ended, the demand for professional money management offered by mutual funds increased. Several changes in regulation helped the momentum in the mutual fund industry. The AUM increased from USD 110 billion in 1996 to USD 442 billion in 2008 (Varga and Wengert, 2010).

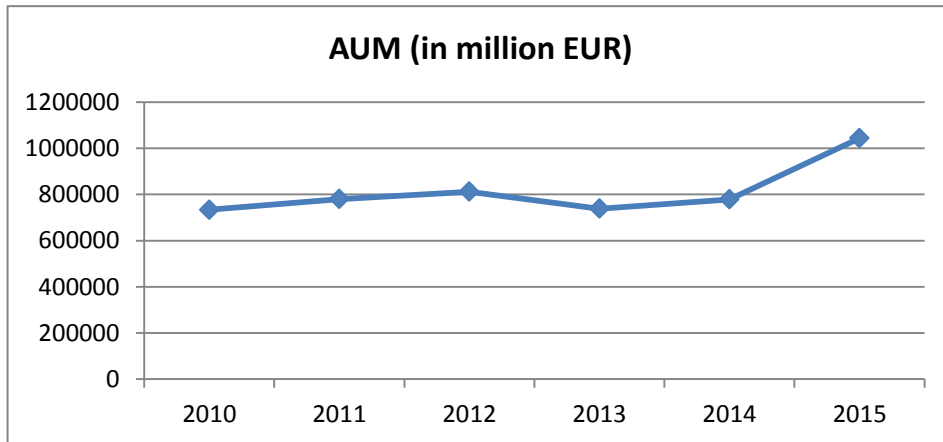
Among the developing countries, Brazil has experienced significant growth in mutual funds investments. The mutual fund asset under management in Brazil (EUR 1.04 trillion in 2015) is quite high compared to the same in other emerging or developing countries.

**Table 2.7: Asset under management in Brazil**

Year	AUM (in million EUR)	Average annual increase
2010	733758	
2011	779757	5.90
2012	811731	3.94
2013	738627	-9.90
2014	778357	5.10
2015	1,043,381	25.40
CAGR	6.04%	

Source: EFAMA. (2015). Report on 8<sup>th</sup> Annual Review on European Asset management

In 2015 Brazilian mutual fund industry reported 25% growth compared to the previous year. The Brazilian mutual funds growth has been significant in the years under review, with CAGR of 6.04%,



Source: EFAMA. (2015). Report on 8<sup>th</sup> Annual Review on European Asset Management

**Figure 2.6: Asset under management in Brazil (AUM in million EUR)**

### 2.5.1.2 Asset under Management in Russia

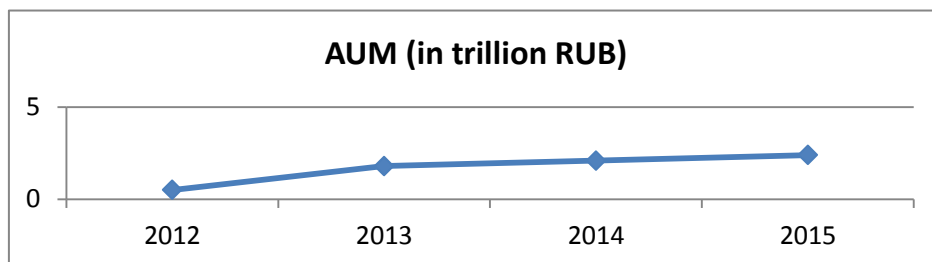
Mutual funds started their operations in Russia by mid 1990s. Soon mutual funds investment developed in Russia with high speed. During 2000-2004, the number of mutual funds and number of management companies increased from 30 and 29 to 273 and 177, respectively. In 2004 the net asset value of mutual funds was 109.6 billion of RUR; at the end of 2000, it was 7.56 billion of RUR (Piskurouskaya, 2006)

Russian retail investors are driving rapid growth in mutual funds, albeit from a tiny base. AUM has risen from \$3 billion in 2004 to \$25 billion in July 2007 (BCG, 2016). The recent trend in mutual fund growth is presented in Table 2.8.

**Table 2.8: Asset under management in Russia**

Year	AUM (in trillion RUB)	Annual Growth (%)
2012	0.5	
2013	1.8	360
2014	2.1	117
2015	2.4	114
CAGR	68.69 %	

Source: Marina B. Tereshkova et al. (2016). *Mutual Funds as a Form of Collective Investment in Russia*.



Source: Marina B. Tereshkova et al. (2016). *Mutual Funds as a Form of Collective Investment in Russia*.

**Figure 2.7: Asset under management in Russia in trillion RUB**

Data reveal that the Russian mutual fund industry is experiencing high rate of growth. From 0.5 trillion rubles in 2012, it increased to \$ 2.4 trillion rubles in 2015, a CAGR of 68.7%. The collective investment system in Russia provides safety to investor's financial resources.

### **2.5.1.3 Asset under Management in China**

Mutual Funds market in China is embryonic, but growing substantially. Favorable demographics make China an attractive market for mutual funds. The recent trend in mutual fund growth in China is presented in Table 2.9.

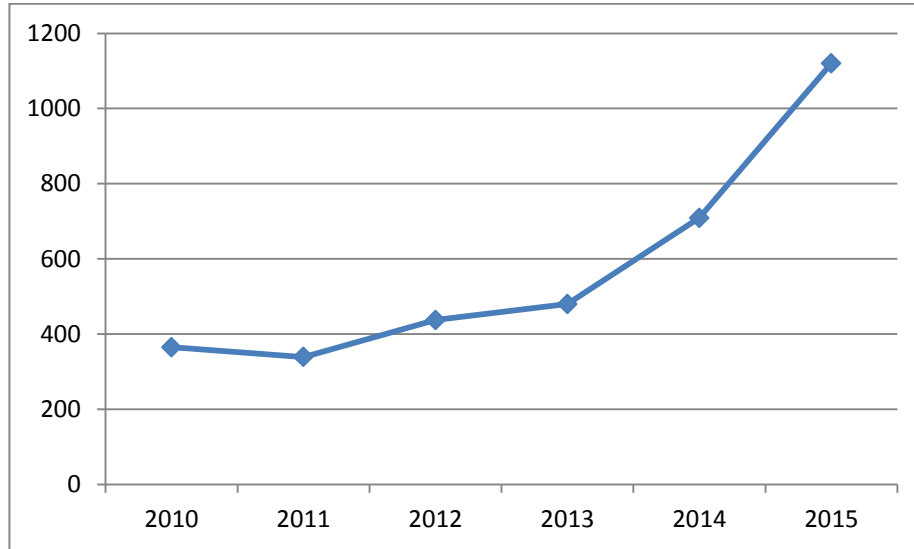
**Table 2.9: Asset under management in China (USD billion)**

<b>Year</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>CAGR</b>
China	365	339	437	480	709	1,120	25.14

*Source: PwC. (2016). Asian Passports, the coming of age: an overview and its demand,*

Chinese mutual fund sector has experienced substantial growth in recent years. From USD 365 billion in 2010, AMU has increased to USD 1120 billion in 2015, at a CAGR of 25 %. The growth has been spectacular particularly since 2013.

According to data from the Asset Management Association of China (AMAC), mutual funds assets in China increased to RMB 9.16 trillion (\$1.33trillion) at the end of 2016, up 9% from 2015 (Wong , 2016).



Source: PwC. (2016). *Asian Passports, the coming of age: an overview and its demand*

**Figure 2.8: Asset under management in China (USD billion)**

#### 2.5.1.4 Mutual Funds in South Africa

South Africa is the most mature financial market in Africa, with the largest amount of AUM. Total assets of the 1171 mutual funds companies (Collective Investment Schemes-CIS) in South Africa amounted to ZAR 1.7 trillion (USD 147.2bn) in 2014 (PwC, 2015).

**Table 2.10: South Africa - Evolution of AUM of Collective Investment Schemes- (CIS) ZAR billion**

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Institutional	120	157	158	230	292	442	593	794	910
Retail	425	495	502	555	546	568	636	705	786
Total	545	652	660	785	838	1010	1229	1499	1696
Increase %		19.63	1.23	18.94	6.75	20.53	21.68	21.97	13.14

Source: PwC. (2015). *Africa Asset Management 2020*



From ZAR 554 billion in 2006, AUM increased to 1696 in 2014. AUM has grown at a compound annual growth rate (CAGR) of 15.2 percent.

#### **2.5.1.5 Review of AUM in BRICS Countries**

Emerging markets, with the notable exception of Brazil, often have relatively small mutual fund sectors. In 2013, Brazil had the fifth largest domestic fund market globally and the largest mutual fund industry in the developing world, with more than \$1 trillion of assets under management and an unusually large number of funds, totaling over 8,000 (IBRD, 2015).

Mutual fund sectors across developing countries have experienced variable growth. Mutual fund sectors in several emerging markets have recorded double-digit growth during the period 2002 - 2012. For instance, Brazil (27 percent) and China (38 percent) have experienced considerable annual growth between 2002 and 2012 in their mutual fund sectors. China's growth has been particularly striking and it from \$17 billion in 2002 to \$440 billion in 2012 (EY, 2016).

During the period 2010-2015, the BRICS countries have reported two digits CAGR in the growth of mutual fund, except Brazil. China had a compound annual growth of over 25%, Russia 68.7%, South Africa 15% and India 15 %. Brazil had a CAGR of 6.09 %.

## **2.6 Mutual Funds in Africa**

Although Africa is currently a small part of the global mutual fund industry, the region is experiencing considerable growth. Africa presents an exciting mutual fund investment opportunity. As wealth increases,

more domestic investors emerge and improvements in national regulatory frameworks are attracting foreign investment. Growth rates are surprising in some markets; Ghana is projected to have a GDP growth rate of 9.2% in 2017 and Angola has a CAGR of 21.7% for the period 2002 to 2014.

Africa is a collection of different markets, each with its own characteristics. Economic performance varies widely from one country to the next. However, economic growth as a whole has been impressive in most countries due to numerous factors. Since the beginning of the 21st century, Africa has benefited from an unprecedented growth in GDP. In fact, since the beginning of its ascent in 2002, it has risen to become one of the fastest growing regions in the world. Despite the economic downturn during the global financial crisis, overall African nominal GDP growth has managed to stay at around 12.4 percent (PwC, 2015).

The growth of mutual funds in Africa has been contributed by factors such as economic growth, the subsequent rise in wealth and the demand for pensions and life insurance products. As a result, the demand for retail investment funds will increase, and the widespread adoption of technology will make delivery of new products cheaper, bringing more consumers into the formal financial sector. (PWC, 2015)

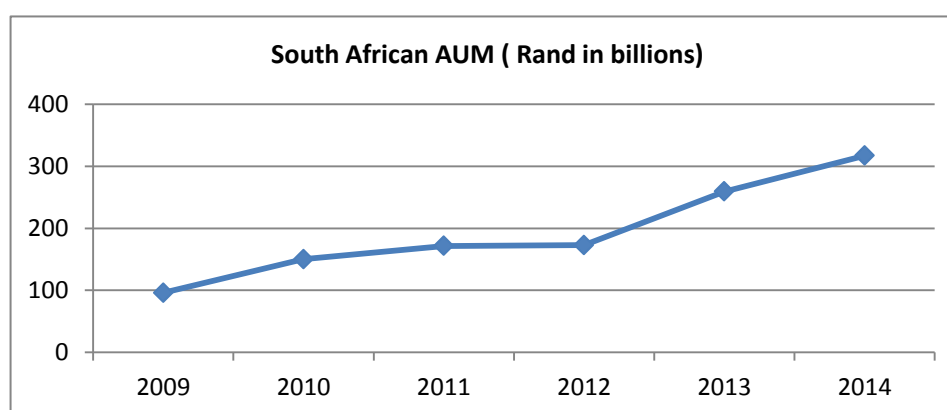
The growth of mutual fund asset under management in Africa is presented in Table 2.11.

**Table 2.11: Mutual fund Asset under management in Africa (in South African Rand in billions)**

Year	Asset under management	Annual increase (%)
2009	95.9	
2010	150.0	56.4
2011	171.4	14.3
2012	172.8	0.8
2013	259.2	50.0
2014	317.1	22.3
CAGR	27.02	

Source: PwC. (2015). Africa Asset Management 2020

Data show that assets under management have increased more than three times in a span of five years from South African Rand 96 billion in 2009 to 317 billion by 2014. The compound annual growth rate was 27%.



Source: PwC. (2015). Africa Asset Management 2020

**Figure 2.9: Mutual fund asset under management in Africa (in South African Rand in billions)**

A PwC study puts the major economies of the African region into three groups: Advancing (South Africa, Morocco, Mauritius and Namibia),

Promising (Egypt, Kenya, Botswana, Ghana and Nigeria) and Nascent (Angola, Algeria and Tunisia).

In the advancing countries (South Africa, Morocco, Mauritius and Namibia) the total AUM was USD 240 billion in 2008 which increased to USD 559 billion in 2014. This is expected to increase to USD 972 billion in 2020. In all the 12 countries together, the AUM increased from USD 293bn in 2008 to USD 634bn in 2014. The projected AUM by 2020 is USD 1,098 bn.

## **2.7 Mutual Fund Contribution to GDP**

The asset management industry fosters economic growth. It provides a link between the investors seeking suitable savings vehicles and the financing needs of the economy. Mutual funds raise capital from retail and institutional investors and provide funding to other sectors -financial institutions, non-financial corporations and government agencies.

The asset management industry fulfils three essential economic functions: first, it channels capital from where it is in surplus to where it is in short supply. Mutual funds are fuelling the real economy by providing equity capital in both primary and secondary markets, by providing credit to corporations and financial institutions – directly via corporate bonds or indirectly via money markets – and by helping fund government deficits. Secondly, the industry provides liquidity needed to ensure the sound functioning of the capital markets. Thirdly, it gives investors access to a range of instruments and markets to diversify their portfolios and achieve their investment goals (Costanzo, 2011).

Asset managers are expected to stimulate overall economic development by continuously monitoring developments in industries, countries and regions. They identify companies with the best prospects of effectively implementing novel innovations, processes and strategies and allocate financial resources to those most promising.

Such developmental mandates of mutual funds establish the relationship between Gross Domestic Product (GDP) and assets under management (AUM) with the mutual fund companies. The relationship is quite well established at least in the case of the developed countries.

### **2.7.1 Mutual Fund Contribution to GDP - Global Scenario**

The mutual fund contribution to GDP differs from country to country and from region to region. Total asset under management of the mutual fund industry was estimated as 15.29% of the world GDP, according to World Bank - Non Banking Financial database. The GDP – AUM ratios in different regions of the world are given in Table 2.12.

**Table 2.12: GDP –AUM ratio in different regions of the world -2015**

<b>Geographical area</b>	<b>GDP –AUM ratio (%) in 2015</b>
World	15.29
High income countries	24.56
Middle income	3.56
Upper middle income	4.18
Low & Middle income countries	3.56
East Asia & Pacific (developing only)	18.61
Latin America & Caribbean (developing only)	3.42
South Asia	4.45
Sub-Saharan Africa (developing only)	39.02

*Source: World Bank. (2017).Non Banking Financial database*

In general, high income countries (as per World Bank classification) account for much of the mutual fund industry's assets under management and the GDP –AUM ratio of the high income countries in 2015 was 24.56 %. In sharp contrast, in the Middle income countries, including Upper middle income and Low & Middle income countries, the AUM contribution to GDP is very limited. The GDP –AUM ratio in Middle income, Upper middle income and Low & Middle income countries are 3.56 %, 4.18 % and 3.56 %, respectively. In the developing countries of Latin America and South Asia, the AUM contributions to GDP have been low: 3.45% and 4.45 %, respectively.

However, in the developing countries of East Asia and Sub-Saharan Africa, the contributions of AUM to GDP have been very significant; 18.61% and 39.02% respectively.

### 2.7.2 The Share of Mutual Fund in the GDP: World Scenario

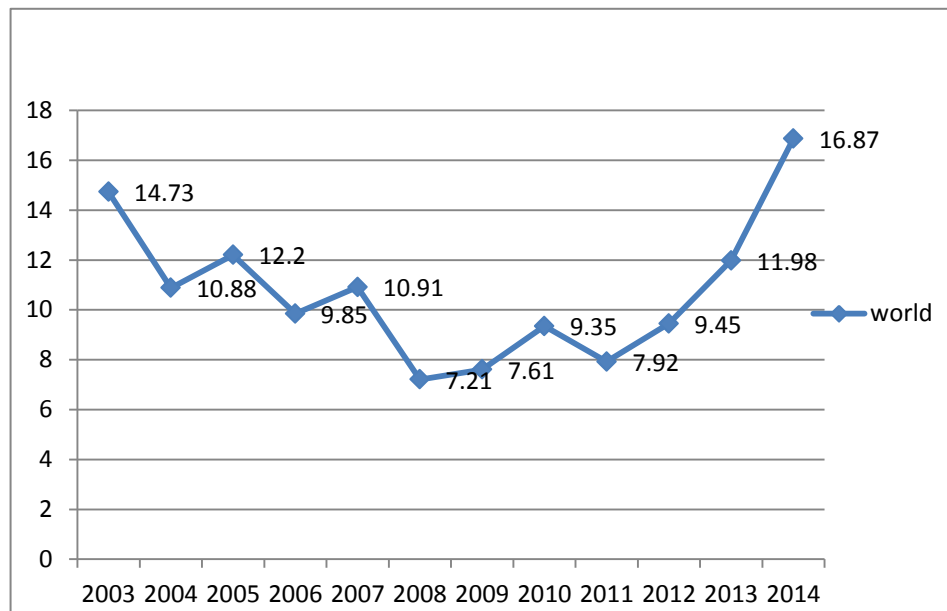
The trend in the share of mutual fund in the world GDP is given in Table 2.13.

**Table 2.13: The ratio of mutual fund asset to world GDP**

Year	Mutual funds contribution to GDP (%)	Annual increase
2003	14.73	
2004	10.88	-26.14
2005	12.2	12.13
2006	9.85	-19.26
2007	10.91	10.76
2008	7.21	-33.91
2009	7.61	5.55
2010	9.35	22.86
2011	7.92	-15.29
2012	9.45	19.32
2013	11.98	26.77
2014	16.87	40.82
CAGR	1.24 %	

Source: World Bank. (2017). Non Banking Financial database

World mutual fund asset contribution to GDP shows an increasing trend. Globally mutual fund asset under management has registered moderate growth at a CAGR of 1.24 % during the period 2003-2014. There has been significant decline in the GDP –AUM ratio for many years, particularly during the years of the global financial crisis. In 2003 the GDP – AUM ratio was 14.73 percent and the recovery was made only by 2014 (16.87 %). However, over the last four years (2010-2014) it has grown at a CAGR of 15.9 percent.



Source: World Bank. (2017). *Non Banking Financial database*

**Figure 2.10: The share of mutual fund asset in the world GDP (in percent)**

## **2.8 Mutual Fund Contribution to GDP in Developed Countries**

The ratio between GDP and assets under management of mutual funds varies significantly among the developed countries. The AUM as

percent of GDP is quite substantial in the U.S and quite significant in European countries. The data on AUM as percent of GDP in selected developed countries is presented in Table 2.14.

**Table 2.14: Mutual fund asset contribution to GDP in selected developed economies**

Year	US	UK	France	Germany	Japan	Canada
2004	66.04	22.68	64.5	39.46	8.58	41.35
2005	67.09	28.28	61.9	43.88	10.28	47.05
2006	75.04	32.34	76.23	44.43	13.29	52.59
2007	82.88	33.79	74.55	43.15	16.39	54.83
2008	65.24	28.64	54.31	37.2	11.86	43.33
2009	77.09	35.08	66.99	43.63	13.21	54.62
2010	79.02	42.19	61.05	45.67	14.29	58.12
2011	74.95	39.08	48.26	43.42	12.62	56.57
2012	80.92	44.41	54.85	48.69	12.4	61.91
2013	89.66	51.34	54.4	51.57	15.74	67.85
2014	91.04	47.25	49.23	-	16.97	72.98
CAGR	3.26	7.62	-2.67	3.02	7.06	5.85

Source: World Bank. (2017). Non Banking Financial database

The AUM as percent of GDP was highest in the U.S. (91.04%) in 2014, followed by Canada (72.98%). The European countries –Germany, France and UK have substantial AUM as percent of GDP; 51.57% (2013), 49.23% and 47.25%, respectively. Among the selected developed countries, AUM as percent of GDP is lowest in Japan.



The global asset management industry was severely hit by the worldwide financial crisis in 2008, with all regions suffering a severe contraction in assets. According to EFAMA, the value of assets professionally managed in Europe suffered a fall of 21%, from EUR 13.6 trillion in 2007 to EUR 10.8 trillion in 2008 (Costanzo'2011). The problems of financial crisis and euro deficit have affected the industry altogether. (The government deficit to GDP ratio increased from 2 % in 2008 to 6.3 % in 2009 in European union countries where the currency is Euro and the government debt to GDP ratio increased in these countries from 69% in 2008 to 79% in 2009) In 2008 and 2011 the industry reported negative annual growth in almost all countries.

Data in Table: 2.13 reveal that the compound annual growth rate has been high in UK- 7.62 %, followed by Canada (5.85%). The CAGR were moderate in Germany (3.02%) and negative in France. The growth (CAGR) was 3.26% in the U.S.

## **2.9 Mutual Fund Contribution to GDP in Emerging Economies**

### **2.9.1 Mutual Fund Asset Contribution to GDP in Emerging Economies**

Mutual fund markets and their contribution to GDP in developing countries have the potential to grow rapidly. As a result of the increasing population and increasing income of the middle class, developing countries have good potential to grow in investment in mutual fund and their contribution to GDP is likely to increase. Table 2.15 provides data on mutual fund asset contribution to GDP in emerging economies.

**Table 2.15: Mutual fund asset contribution to GDP in emerging economies**  
(Figures in percent)

Year	China	% increase	Korea	% increase	South Africa	% increase	Brazil	% increase	Thailand	% increase
2004			23.2		23.64		31.55		2.07	
2005			22.16	-4.48	25.44	7.61	34.41	9.06	2	-3.38
2006			24.09	8.71	28.72	12.89	39.65	15.23	1.87	-6.50
2007	12.54		29.39	22.00	31.8	10.72	43.57	9.89	2.06	10.16
2008	6.05	-51.75	22.15	-24.63	24.2	-23.90	37.44	-14.07	1.86	-9.71
2009	7.51	24.13	29.33	32.42	35.9	48.35	43.8	16.99	2.41	29.57
2010	6.07	-19.17	24.35	-16.98	37.72	5.07	44.04	0.55	2.77	14.94
2011	4.85	-20.10	18.85	-22.59	29.99	-20.49	46.46	5.50	3.04	9.75
2012	5.16	6.39	21.88	16.07	36.52	21.77	50.07	7.77	2.86	-5.92
2013	4.83	-6.40	21.84	-0.18	39.02	6.85	49.68	-0.78	3.67	28.32
2014	6.79	40.58	22.13	1.33	41.87	7.30	46.21	-6.98	-	-
CAGR	-7.38		-0.43		5.33		3.53		5.89	

Source: World Bank. (2017). Non Banking Financial database

Among the developing countries, Brazil, South Africa and South Korea have relatively high GDP – AUM ratio, 46.21%, 41.87 % and 22.13%, respectively. China’s AUM contribution to GDP declined considerably from 12.54 % in 2007 to 6.79 % in 2014, registering a negative growth (CAGR) of – 7.38 %. Global economic downturn, limited inflow of investment to stock market, fall in stock market index, depreciation of Chinese Yuan and decline in return from mutual fund product were some of the reasons for the decline in mutual fund investment. (However, GDP – AUM ratio recovered in 2015 to 11.54 %).

In other developing countries also the GDP- AUM ratios have been relatively low, as in Thailand (3.63%).

## **2.9.2 GDP –AUM Ratio in BRICS Countries**

Among the BRICS countries, the star performers are Brazil and South Africa, in terms of AUM contribution to GDP. The GDP –AUM ratios in BRICS countries are presented in Table 2.16.

**Table 2.16: GDP –AUM ratios in BRICS countries**

<b>Country</b>	<b>GDP –AUM ratio (%) in 2015</b>
Brazil	48.8
Russian Federation	0.17
India	7.33
China	11.54
South Africa	39.02

*Source: World Bank. (2017). Non Banking Financial database*

Brazil and South Africa lead with 48.8 % and 39.02% respectively. The GDP –AUM ratio (%) in Russia in 2015 was only 0.17%. India and China had 7.33 % and 11.54 % respectively.

## **2.10 Mutual Funds in India**

### **2.10.1 Growth in MF Industry**

The Indian mutual fund industry had its humble beginning in 1963, almost two centuries after the commencement of the industry in Netherland. The Unit trust of India was established at the initiative of the Government of India and the Reserve Bank of India. UTI was the only mutual fund institution in India until 1987, when the public sector banks were permitted to enter the field.

Three banks established their mutual fund organisations in the same year - SBI Mutual fund, Can Bank Mutual Fund and Punjab National Bank Mutual Fund. Indian Bank, Bank of India and Bank of Baroda established their mutual fund divisions in subsequent years. LIC and GIC entered the scene in 1998 and 1990 respectively. The growth of the Indian mutual fund industry has been slow during the first three decades.

From ₹ 25 crores in 1964-65, assets under management increased to ₹ 4564 crores in 1987 and further to ₹ 47734 crores in 1993 (Bonanza, 2015). With the liberalization of the Indian economy in early 1990s, a new era started in the Indian mutual fund industry with the entry of private sector funds. The industry now functions under the SEBI (Mutual Fund) Regulations 1996 (AMFI, 2015).

The history of mutual funds in India has been divided into four phases by the Association of Mutual Funds in India.

- First Phase: Monopoly of Unit Trust of India (1964-1987)
- Second Phase: Entry of Public Sector Funds 1987-1993)
- Third Phase : Entry of Private Sector Funds (1993-2003)
- Fourth Phase: Growth phase (2003 -2012)

However, the half century spanning the period from 1963 to 2012 did not witness any significant growth in the mutual fund sector in India. From a product life cycle perspective, mutual funds industry has been under the introductory stage during the first three phases, which lasted till 2003.

### **First Phase: Unit Trust of India (1964-1987)**

Established in 1963 by an Act of Parliament, the Unit Trust of India (UTI) functioned under the regulatory and administrative control of the Reserve Bank of India. Delinked from the RBI in 1978, the UTI came

under the regulatory and administrative control of the Industrial Development Bank of India (IDBI). The total asset under management of UTI at the end of 1986 was ₹ 4564 crores.

The details of the net assets of mutual funds industry during the phase are presented in Table 2.17.

**Table 2.17: Net assets of mutual funds and the industry growth during 1964-1987**

Year (ending 31st March)	Net Assets (₹ in Cr.)	Annual % increase
1964	24.67	
1965	25.94	5.15
1966	33.86	30.53
1967	48.7	43.83
1968	65.4	34.29
1969	88.3	35.02
1970	105.14	19.07
1970	105.14	19.07
1971	119.26	13.43
1972	141.96	19.03
1973	172.09	21.22
1974	172.09 0.	00
1975	169.96	-1.24
1976	176.66	3.94
1977	279.91	58.45
1978	393.7	40.65
1979	455.3	15.65
1980	513.97	12.89
1981	679.24	32.16
1982	870.24	28.12
1983	1261.33	44.94
1984	2209.61	75.18
1985	3218.34	45.65
1986	4563.68	41.80

Source: UTI Fact Book. (2000)

Considering the absolute volume of funds, this was a period of slow growth. It took two decades for the industry to exceed ₹ 1000 crores. However, during the four year period from 1983 to 1986 the assets under management with the UTI increased almost four times and reached ₹ 4564 crores.

### **Second Phase - Entry of Public Sector Funds (1987-1993)**

The year 1987 was marked the entry into mutual funds of banks and insurance companies in the public sector. The growth in assets under management of the mutual funds industry during the second phase is presented in Table 2.18.

**Table 2.18: Assets under management of the mutual funds industry during 1987-1993**

<b>Year (ending 31st March)</b>	<b>Total Amount (₹ Crores)</b>	<b>Annual increase (%)</b>
1987	4563.68	
1988	6870.81	50.55
1989	13455.65	95.84
1990	19130.92	42.18
1991	23161.47	21.07
1992	37973.47	63.95
1993	47733.5	25.70

*Source: SEBI. (2000). Mutual Fund Year Book*

By 1993 the assets under management of the mutual fund industry increased to ₹ 47,004 crores, almost a tenfold increase. The rate of growth in the mutual fund industry was particularly significant from 1987 to

1992, when the assets under management increased from ₹ 6871 crores to ₹ 37973crores.

### **Third Phase - Entry of Private Sector Funds (1993-2003)**

With the liberalisation in the Indian economy, the mutual fund sector was opened up for the private sector in 1993. Several national and international companies established mutual fund business in India. The regulation of the mutual fund sector was initiated in India in 1993 with the SEBI (Mutual Fund) Regulations, which was replaced by the more comprehensive SEBI (Mutual Fund) Regulations 1996.

Table 2.19 shows the net assets of mutual fund industry for the period 1994-2003.

**Table 2.19: Assets under management of the mutual funds industry during 1994-2003**

<b>Year (ending 31st March)</b>	<b>Asset under management (₹Crores)</b>	<b>Annual increase (%)</b>
1994	62,430	
1995	72,967	16.88
1996	74,315	1.85
1997	70,197	-5.54
1998	58,918	-16.07
1999	70,624	19.87
2000	103,453	46.49
2001	90,587	-12.44
2002	100,594	11.05
2003	79,464	-21.01
CAGR	0.027	

Source: SEBI. (2000).*Mutual Fund Year Book.*, & AMFI. (2004)

Despite tremendous growth in the world mutual funds industry during the 1990s, and the benefit of financial sector liberalization in the country, the growth of the sector in India was rather limited during the period.

From ₹ 62,430 crores in 1994, assets under management of the mutual funds industry increased to ₹ 79464 crore.

#### **Fourth Phase –Growth phase (2003 -2012)**

Fourth phase of the mutual fund industry in India brought a big change in the history of mutual funds in India. UTI faced a big crisis because of the distribution of heavy return to the unit holders of US-64. However, the period experienced reasonable growth in the mutual fund industry. Table 2.20 shows the assets under management of the mutual fund industry for the period of 2003-2012.

**Table 2.20: AUM of Mutual Fund Industry in India (2004 – 2012)**

<b>Year (ending 31st March)</b>	<b>Total (₹Crores)</b>	<b>Annual increase (%)</b>
2004	139,616	-
2005	149,600	7.15
2006	231,862	54.99
2007	359,097	54.88
2008	538,508	49.96
2009	493,285	-8.40
2010	747,525	51.54
2011	705,038	-5.68
2012	664,792	-5.71
CAGR	21.54%	

Source: AMFI. (2014)



The mutual fund industry experienced substantial growth during the period. From ₹139,616 crores in 2004, AUM increased to ₹ 747,525 crores in 2010. The global recession had its adverse impact on the net assets of the industry, with negative growth in 2009, 2011 and 2012. However, the period showed a compound annual growth rate of 21.54 %.

### **2.10.2 Mutual Fund Growth in Recent Years**

The Indian mutual fund industry achieved considerable growth in the last few years. The details of the AUM increase from March 2013 to July 2017 are presented in Table 2.21.

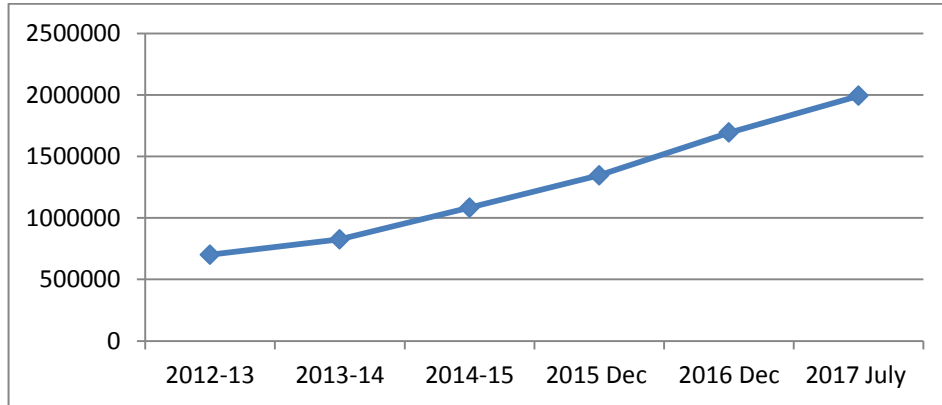
**Table 2.21: The trend of mutual fund asset under management in India**

<b>Year</b>	<b>AUM (₹Crores)</b>	<b>% increase</b>
2012-13	7,01,443	
2013-14	8,25,240	15.00
2014-15	10,82,757	23.78
2015 Dec	1346,000	12.17
2016 Dec	16,93,000	25.78
2017 July	19,92,000	17.66

*Source: SEBI. (2017) Annual Report*

In a span of less than five years assets under management of the mutual funds industry increased almost three times and reached ₹ 19.92 Trillion.

The Industry's AUM had crossed the milestone of ₹ 10 trillion (₹ 10 Lakh Crore) for the first time in 2014 and in a short span of less than three years, the AUM size reached ₹ 20 Trillion in 2017 (PTI, 2017).



**Figure: 2.11 Indian mutual fund AUM trend (In ₹Crore)**

### **2.10.3 Regulatory frame work of mutual fund in India**

SEBI is the main regulator of mutual funds in India, besides agencies such as RBI, AMFI and Ministry of Finance. To protect the interest of investors, SEBI formulates policies and regulates the mutual funds. Its regulations were notified first in 1993 and they were fully revised in 1996 (Securities Exchange Board of India (Mutual Fund) Regulations 1996 and SEBI continues to issues guidelines from time to time. Mutual funds promoted by public sector and private sector entities, including foreign entities, are governed by these regulations.

#### **Legal Structure of Mutual Funds in India**

A mutual fund is a trust that pools the savings of a number of investors who share a common financial goal and investments may be in shares, debt securities, money-market securities or a combination of these. Mutual Funds in India primarily have a 3-tier structure. The agencies involved are the Sponsor (1st tier), Public Trust (2nd tier) and Asset Management Company (3rd tier).

Sponsor is the person who either alone or in association with another corporate body, establishes a mutual fund. The Sponsor has to get approval from SEBI. The sponsor must contribute at least 40% of the net worth of the investment managed and meet the eligibility criteria prescribed under the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996. The sponsor is not responsible or liable for any loss or shortfall resulting from the operation of the schemes beyond the initial contribution made by it towards setting up of the mutual fund.

Once SEBI approves the sponsor, the sponsor creates the Public Trust as per the Indian Trusts Act, 1882. Since trusts have no legal identity in India, the trust itself cannot enter into contracts. Therefore, trustees are appointed and authorized to act on behalf of the trust. The instrument of trust must be in the form of a deed between the Sponsor and the trustees and it is registered under the provisions of the Indian Registration Act, 1908. The trust is then registered with SEBI leading to formation of mutual fund. Sponsor and the Trust are two separate entities. The trustee, as the investment manager of the mutual fund, appoints the Asset Management Company (AMC). The main responsibility of the trustee is to safeguard the interest of the unit holders and ensure that the AMC functions in the interest of investors and in accordance with the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996, the provisions of the trust deed and the offer documents of the respective schemes. At least two – third of the directors of the Trust are independent directors who are not associated with the sponsor.

The AMC is required to be approved by SEBI to function as an asset management company of the mutual fund. At least 50% of the directors of the AMC shall be independent directors who are not associated with the sponsor in any manner. The AMC functions under the supervision of its Board of Directors, the direction of the Trustees and SEBI. AMC in the name of the Trust floats new schemes and manages these schemes by buying and selling securities. In order to do this, the AMC needs to follow the rules and regulations of SEBI as well as the Investment Management Agreement it signs with the Trustees.

### **Mutual funds Regulating Agencies other than SEBI**

Besides SEBI, mutual funds are regulated by RBI, Companies Act, Stock exchange, Indian Trust Act and Ministry of Finance. RBI acts as a regulator of Sponsors of bank-sponsored mutual funds, especially in the case of funds offering guaranteed returns. For providing a guaranteed returns scheme, mutual fund needs to take approval from RBI. The Ministry of Finance acts as supervisor of RBI and SEBI and appellate authority under SEBI regulations. Mutual funds can appeal to Ministry of finance on the SEBI rulings. AMFI (Association of Mutual Funds in India) is an organisation established to define and maintain high professional and ethical standards in all areas of operation of mutual fund industry. It is further entrusted with the responsibility to regulate the conduct of distributors, including disciplinary actions, for violations of code of conduct.

### **Key Provisions of SEBI (Mutual Funds) Regulations**

The mutual fund industry functions in accordance with the Securities Exchange Board of India (Mutual Funds) Regulations, 1996. This was amended several times. Latest amendment was in 2017. The key provisions are as follows:

- All the schemes should be approved by the Board of Trustees
- Adequate disclosures including periodicity is mandatory in the offer document
- The listing of close ended schemes is mandatory within six months from the closure of subscription..
- Facility for the conversion into open ended scheme should be provided with the consent of the majority of unit holders.
- No scheme other than unit linked schemes can be opened for subscription for more than 45 days. In case of initial offering period equity linked savings schemes shall be open for subscription for more than 15 days.
- A close ended scheme shall be wound up on the redemption date.
- The offer document and advertisement materials shall not be misleading. Open ended scheme offer should be published at least once a week in daily newspaper with all India circulation.

- The repurchase price shall not be lower than 93 per cent of the Net Asset Value and the sale price shall not be higher than 107 per cent of the Net Asset Value.
- Every asset management company should maintain proper books of account, records and documents.
- All expenses should be clearly identified and appropriated in the individual schemes and that should be disclosed in the offer document.
- A mutual fund may declare dividends in accordance with the offer document and subject to such guidelines as may be specified by the Board.
- Every mutual fund or the asset management company shall prepare in respect of each financial year an annual report and annual statement of accounts of the schemes.
- The trustee shall be bound to make such disclosures to the unit holders as are essential in order to keep them informed about any information which may have an adverse bearing on their investments.

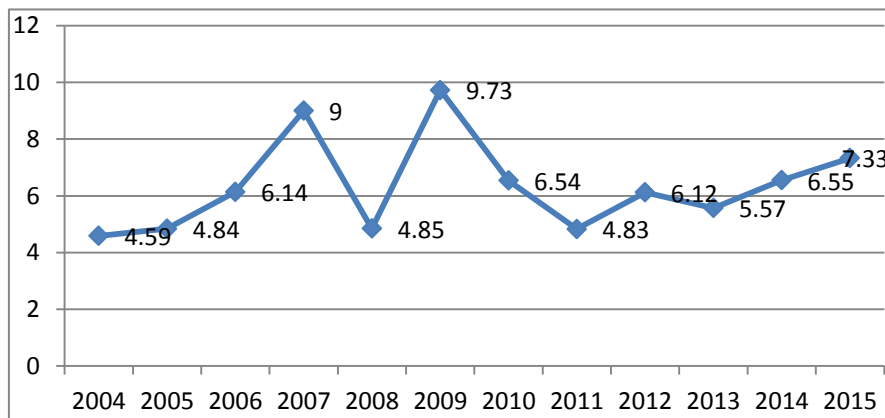
## 2.11 Mutual Fund Contribution to GDP in India

India has among the lowest mutual fund investments to GDP ratios in the world, offering a vast untapped opportunity for the mutual fund sector (Deccan Chronicle, 2016). The details of mutual fund asset contribution to GDP are presented in the Table 2.22.

**Table 2.22: Mutual fund asset contribution to GDP**

Year	GDP contribution	% growth
2004	4.59	
2005	4.84	5.17
2006	6.14	21.17
2007	9.00	31.78
2008	4.85	-85.57
2009	9.73	50.15
2010	6.54	-48.78
2011	4.83	-35.40
2012	6.12	21.08
2013	5.57	-9.87
2014	6.55	14.96
2015	7.33	11.91
CAGR	4.35%	

Source: World Bank. (2017). Non banking financial data (2017)



Source: World Bank. (2017). Non Banking Financial data

**Figure 2.12: Mutual fund asset contribution to GDP**

The annual increase in Indian AUM/GDP ratio has been negative in the years 2008, 2011 and 2013. The ratio was 9 % in 2007, 9.73% in 2009 and 7.33% in 2015, according to World Bank: Non banking financial data (2015).

## **2.12 Economic Growth and Mutual Fund Investment**

Mutual funds grew explosively in most countries around the world during the last quarter century. From \$4.0 trillion in 1993 assets under management reached \$40.36 trillion by the end of 2016, a tenfold increase in a span of 23 years. Economic and financial sector developments are key drivers of a country's long-term mutual fund assets.

The global growth of mutual funds was fuelled by several factors. Klapper (2003) finds three factors: (1) increasing globalization of finance and expanding presence of large multinational financial groups in several countries; (2) well-developed securities markets with a high level of market integrity and liquidity; 3) demographic aging that characterizes the populations of most high and middle-income countries and the search of financial instruments that are safe and liquid but also promise high long-term returns.

Plantier (2014), indicates several factors that help to explain the worldwide growth in long-term mutual fund assets and the varied growth experiences across individual countries. These factors include a country's economic development, demographics, and fiscal balance; strong and appropriate regulation; investor's demand for professionally managed, well-diversified capital market products; deep and liquid capital markets



in the country; favourable returns on capital market instruments; and the country's defined contribution plan for pension.

Among these several factors, the more pertinent ones, according to Plantier (2014), are

(1) a country's economic development, as measured by per capita income; (2) deep and liquid capital markets and (3) investor use of DC plans as part of their retirement savings.

Mutual funds have become an important financial intermediary in a country's economic development. A cross country study shows that the ratio of long-term mutual fund assets to gross domestic product tends to grow as a country's per capita income rises. As wealth and income are expected to increase substantially in developing countries, mutual fund assets are likely to grow considerably.

### **2.13 Retail Investments in Mutual Fund Industry: World vs. India**

Institutional and retail investors have a significant influence in the flow of capital to mutual fund market. The proportions of investment are not same in all countries. The client base of the asset management industry is usually divided into retail clients, usually composed of households and high net worth individuals (HNWI), and institutional clients, usually referring to insurance companies, pension funds, other financial institutions, corporates and governmental entities.

When analysing mutual fund ownership, what is categorized as an institutional or a retail investor may vary from country to country. Retail

investors are individuals that make their own decisions (with or without advice) to buy and sell mutual fund shares or units. An institutional investor is an investment vehicle that gathers money from a number of persons (legal or physical), and whose managers take the investment decisions as to what to buy and sell for the fund's portfolio in alignment with its objectives but without reference to members of the scheme (World bank group, 2015).

### **2.13.1 Global Trends in Retail Investment in Mutual Fund**

According to a report of the World Bank (2015), institutional investors form a significant force in mutual fund markets. The Moroccan mutual fund industry has achieved remarkable growth, approximately 20 percent per annum over the last decade, largely because of institutional investors who own more than 90 percent of total assets under management. In Brazil, only 18 percent of assets under management is held by retail investors; the rest is owned by pension funds, corporates, public institutions, foreign investors, and others.

However, institutional investment is not always dominant in mutual fund sectors. In 2012, institutional investment in mutual funds in Turkey was only 1 percent, which is partly because both pension schemes and life insurance were at the early stages of development.

#### **2.13.1.1 Retail Mutual Fund Contribution in Selected Countries**

Mutual fund industry in US is contributed by house hold /retail mutual fund investors. It had total investment of \$18.5 trillion in mid-2016. Households held about 84 percent, or \$15.6 trillion, of all fund assets. In the US, 44.4 percent of households owned some type of

registered fund, representing an estimated 55.9 million households and 95.8 million investors (Reid et al., 2016)

Canadian investors have great confidence in the mutual funds. Mutual funds account for 31% of Canadians' financial wealth. Canadians built financial security with \$1.34 trillion in mutual funds in 2016. Around 33% (4.9 million) of Canadian households held mutual funds in 2015 (IFIC, 2017).

### **2.13.1.2 Retail Mutual Fund Contribution in Europe**

It is noted that the major share of the world mutual fund assets has been held by US and European market. As per the report of EFAMA (2015), United States and Europe held the largest shares in the world market, with 47.1 percent and 33.8 percent respectively in 2016. In 2015 of the total European AUM 74% was accounted for by the institutional investors and 26 % by the retail investors.

**Table 2.23: Retail and institutional contribution in the European Asset under management (in percentage)**

<b>Year</b>	<b>Retail client base contribution (%)</b>	<b>Institutional client base contribution (%)</b>
2007	31	69
2008	29	71
2009	28	72
2010	28	72
2011	25	75
2012	24	76
2013	26	74
2014	25	75
2015	24	76

*Source: EFAMA (2016) Report on Asset Management in Europe, 7<sup>th</sup> and 8th Annual Review Investment Association (2016).*

### **2.13.2 Retail Mutual Fund Contribution in India**

The overall growth of Indian mutual fund industry has mainly been contributed by institutional investors and foreign investors. Retail investor's contribution is very low compared with other financial investment. SEBI Annual Report (2014) revealed that 46 per cent of total individual wealth in India was invested in physical assets such as gold and real estate (2013-14). Among the contribution of investors in different financial products, the contribution of MFs in the asset portfolio is very low. While the share of insurance products constitutes 17 per cent of the total saving, the share of mutual fund is only 3.2 %. It is much lower compared other financial products (SEBI, 2014).

Rao and Mishra (2007) report that Indian financial markets are getting more and more institutionalised. Foreign investors, local institutions and mutual funds are now playing a bigger role. The investor mix has remained almost static with non-retail participation remaining high (CII, 2014)

Tarapore (2009) has reported that the biggest problem of the mutual fund industry is that the funds prefer bulk investors over retail investors and hence the distribution mechanism remains underdeveloped.

SEBI Annual Report (2015-16) indicates the share of institutional investors and retail investors. As per the data, the share of institutional investors was 49% and the share of retail investors was 47 %. Details are given in Table 2.24 Although share of retail investors is apparently high, a lion share of the contribution comes from High Net worth individuals.

**Table 2.24: Retail and institutional contribution in mutual fund investment, 2015-16**

Category	Net asset value (NAV) ₹ in crores	Percentage to total Net asset
Individual	5,75,217	46.7
NRI/OCBs	44,095	3.60
FPIs	11,557	0.9
Corporate/institution/others	6,01,955	48.8
Total	12,32,824	100

Source: SEBI Annual Report, 2015-16

Earnest and Young (2016) reported that the industry has been successful in improving the share of retail and high net worth individuals (HNIs) in total AUM from 43% in March 2009 to 51% in March 2016.

The trends in the mutual funds unit holding pattern shows that the retail investor's share in the asset holding has been increasing. Table 2.25 provide the details.

**Table 2.25: Mutual fund retail contribution India**

Year	Individual's asset contribution to mutual fund (₹ Crores)
2015-16	5,75,217
2014-15	5,08,032
2013-14	3,70,905
2012-13	3,20,769
2011-12	2,85,387

Source: SEBI Annual Report, 2015-16

In absolute terms the contribution of individual investors to mutual funds has been growing significantly during the past several years. From 2.85 lakh crores in 2011-12 it has increased to 5.75 lakh crores in 2015-16. High net worth individuals contribute much of this investment.

### **2.13.2.1 Asset Size Held by the Institutional and Individual Investors in India**

The value of assets held by individual investors in mutual funds increased from ₹ 4.80 lakh crore in September 2014 to ₹ 5.92 lakh crore in September 2015, an absolute increase of 23.51%. This was higher than the 21% overall growth in assets for the mutual fund industry. This was also higher than the growth in institutional assets from ₹ 5.90 lakh crore to ₹ 7.02 lakh crore, an absolute growth of 19.01% (AMFI,2015). Institutional investors including FIIs had the largest ticket size, at ₹ 13.1 crore per account. Retail investors had an average ticket size of ₹ 61,369 per account, while HNIs held ₹ 21.6 lakh per account (Patnayak, 2017).

### **2.14 Summary**

The global mutual fund industry achieved tremendous growth in the last quarter century. Mutual fund emerged as an ideal investment option for individuals and households and it has remained as such in many developed societies. The Indian mutual fund industry has grown exponentially over the last decade. It has come a long way since its inception in 1963. However, opportunities for further growth exist. The Indian mutual fund industry has been dominated by the institutional investors and foreign investors. Retail investment (investment by individuals and households) in mutual funds is still low. Only 2 % of the total domestic population is investing the mutual funds. There is ample growth opportunity available in the Indian mutual fund sector.

## **References**

- [1] Association of Mutual Funds in India. (2015). Mutual fund history. AMFI.
- [2] BCG. (2016). Global Wealth 2016: Navigating the New Client Landscape, BCG perspectives.
- [3] Bonanza. (2017), Mutual fund over view, retrieved on 3 July 2017 from <https://www.bonanzaonline.com>.
- [4] Bose, Suchismita. (2012).Some Aspects of Indian Mutual Funds' Performance during the Recent Financial Crisis,. Money & Finance. ICRA Bulletin ,pp 89-109.
- [5] Brian Reid, Sean Collins, Sarah Holden, Judy Steenstra (2016) investment company Fact Book, a review of trends and activities in the US investment company industry.
- [6] Bullock, Hugh. (1959). The Story of Investment Trusts .New York: Columbia University Press.
- [7] Cafemutual fund .(2013), Mutual fund news the global picture, retrived from 14 october 2014 from <http://cafemutual.com/news/industry/1003>.
- [8] Costanzo, Gian Luigi. (2011). The Contribution of the Asset Management Industry to long -term growth. OECD Journal: Financial Market Trends, (1), September.
- [9] EFAMA. (2015). Report on research and statistics, EFAMA.
- [10] EFAMA. (2015).8th Annual Review on European Asset Management Report, Facts and Figures. EFAMA.
- [11] EFAMA. (2016). Regulated Open-ended Fund Assets and Flows, EFAMA 2013-2016.
- [12] Ernst & Young. (2016). Ready for the next leap.
- [13] Fredman, Albert J. (1996), The Mutual Fund Route to the Growth Potential of Emerging Markets.AAII Journal May, pp. 22-26.

- [14] Geert, Rouwenhorst K. (2004). The Origins of Mutual Fund, Yale ICF Working Paper SSRN, pp.4-48.
- [15] ICI, Global (2017). A Review of Trends and Activities in the Investment Company Industry. ICI fact book, 57 edition.
- [16] IFIC (2017). Stats and Facts, IFIC.
- [17] Investment Company Industry. (2017). Report on Worldwide Regulated Open-End Fund Assets and Flows Fourth Quarter 2016.
- [18] Investment Company Industry. (2016) A review of trend and activities of US investment company industry. retrieved on 26 October 2016, from <https://www.ici.org/research/stats/factbook>.
- [19] Kerker, Prasadh. (2012 December 30),How does Indian mutual fund industry compare with global peers(blog post) retrieved from <http://www.mutualfundsexpert.in/2012/12/>.
- [20] Klapper, D Fernando., L., Sulla V., & Vittas, D. (2003). The development of mutual funds around the world. *Emerging Markets Review* 5, 1-38.
- [21] Marina B. Tershukovaa et al. (2016). Mutual Funds as a Form of Collective Investment in Russia. *International Journal of Environmental & Science Education*,11(15).
- [22] McWhinney, James, E.(2016), A Brief History Of The Mutual Fund. Retrieved 12 September 2016, from <http://www.investopedia.com/articles/mutualfund/05/mfhistory.asp>.
- [23] Mehra Gautam (2014) Indian mutual fund industry Challenging the status quo, setting the growth path .CII.
- [24] Piskurouskaya, Alena. (2006), Why Do People Invest into Russian Mutual Funds?. (Thesis) National University “Kyiv-Mohyla Academy” retrieved on 13 May 2013, from <http://www.kse.org.ua/uploads/file/library/2006/piskurouskaya.pdf>.
- [25] Plantier ,L. Christopher.(2014), Globalisation and the Global Growth of Long-Term Mutual Funds, ICI Global, Research Perspective Vol. 1(1)



- [26] PTI. (2017, January 17), Economic Times, AUM of the mutual fund industry may cross Rs 20 trillion in 2017.
- [27] PTI. (2016, September 20), India has among the lowest MF: GDP ratios globally. Deccan Chronicle.
- [28] PwC. (2014). Africa asset management 2020, African Economic Outlook, AFDB, OECD, UNDP.
- [29] PwC. (2015). Asian Passports the coming of age: an overview and its demand 2016.(pp 18-59), PricewaterhouseCoopers LLP.
- [30] Rao Hanumantha P and Mishra Vijay Kr. (2007). MF Industry in India: A SWOT Analysis. ICFAI Portfolio organizer,5-59.
- [31] Reid, Brian. (2000). The 1990s: A Decade of Expansion and Change in the U.S. Mutual Fund Industry. Investment Company Institute Perspective, Vol. 6 / No. 3.
- [32] Reid, Brian., Sean Collins, Sarah Holden, Judy Steenstra.(2016). A review of trends and activities in the US investment company industry. ICI fact book.
- [33] Sadyuki Horie. (2015). Japan's Asset management Business, 5-9.
- [34] SEBI (2016). Annual Report. Security Exchange Board of India.
- [35] SEBI (2014). Annual Report. Security Exchange Board of India.
- [36] Shekhar G.V.Satya., (2016). The management of mutual fund.(pp 8-9) Palgrave Mcmillan.
- [37] Shekhar G.V.Satya., 2014). The Indian Mutual Fund Industry: A Comparative Analysis of Public vs Private. Palgrave Mcmillan.
- [38] Tarapore. (2009, April 10) Mutual funds: Need for reforms, the Hindu business line.
- [39] Varga,Gyorgy., and Maxim Wengert.(2010),The Growth and Size of the Brazilian Mutual Fund Industry, The IX Brazilian Finance Association.

- [40] Wong, Imogene. (2017).China's mutual fund assets grew 9% in 2016, Fund Sector Asia. retrieved on 11 June 2017, from <http://www.fundselectorasia.com/news/1033699>.
- [41] World Bank. (2015). Mutual Funds in Developing Markets: Addressing Challenges to Growth. World Bank.
- [42] World Bank. (2017). Non banking financial database.

.....❧.....

## Chapter 3

### REVIEW OF LITERATURE

<i>Contents</i>	<i>3.1 Introduction: Research Tradition in Mutual Funds</i>
	<i>3.2 Research on Performance of Mutual Funds</i>
	<i>3.3 Choice of Investment Options</i>
	<i>3.4 Fund Related Factors Influencing Mutual Fund Investment</i>
	<i>3.5 Perceptions on Mutual Fund Marketing Issues and the Behavioural Intentions of Investors</i>
	<i>3.6 Influence of Service Quality</i>
	<i>3.7 Service Quality and Behavioural Intention</i>
	<i>3.8 Outcome of Literature Review</i>
	<i>3.9 Summary</i>

### **3.1 Introduction: Research Tradition in Mutual Funds**

#### **3.1.1 Introduction**

The study is on the perception and behaviour of mutual fund investors. However, the context of the study is the limited participation of retail investors (households and individuals) in the mutual fund sector in India, unlike in developed economies. While attempting to relate the perception and behaviour of investors to the limited participation of retail investors in mutual funds, the scope of the study has become rather

incomprehensive. The coverage of the topics in the literature survey is also, therefore, comprehensive.

The purpose of the literature survey is to define the research problem, formulate the research objectives and hypotheses, review the theoretical and conceptual models and evaluate the methodological options for empirical analysis.

This literature review relates to the following topics:

- 1) Tradition in mutual funds research
- 2) Research on performance of mutual funds
- 3) Preference for different financial investment options
- 4) Fund related factors influencing mutual fund investment
- 5) Investor centered factors influencing mutual fund investment and the product selection criteria
- 6) Perceptions on marketing issues and the behavioural intentions of investors
- 7) Service quality and behavioural intentions of mutual fund investors

### **3.1.2 Behaviour of Mutual Fund Investors: Implications for Stakeholders**

A study on the perceptions and behaviour of mutual fund investors has significant implications for several stakeholders. Mutual fund managers can better understand and anticipate investor needs so as to relate the fund's investment goals with those of the investors. There are strong linkages between mutual funds and capital markets around the world. The

stock markets are financed to a significant extent by the household savings routed through mutual funds and these savings finance the corporate sector investments. Share market prices to a large extent are decided by the behaviour of mutual fund investors. Decisions by mutual fund investors not only affect individual investor wealth, but can ultimately impact asset prices as well (Goetzmann et al., 2000). Feedback on perceptions and behaviour of mutual fund investors provide the regulators with reliable inputs for regulatory interventions. The economic implications of the behaviour of mutual fund investors for the national economy and the global economy are fairly evident.

### **3.1.3 Mutual Fund Research: Tradition and Trends**

The review of literature on mutual funds reveals some broad directions of empirical research on mutual funds investments:

- 1) Performance evaluation of asset management companies and studies whether fund managers provide value addition for investors
- 2) Choice of financial investment options of household investors based on risk return and liquidity - choices from among options such as bank deposit, insurance, pension funds, shares and mutual funds.
- 3) The objectives, benefit expectations and preferences of mutual fund retail investors
- 4) Product choice criteria often used by mutual fund retail investors

- 5) The issues faced by the mutual fund sector and the investors' perceptions and attitudes to these issues
- 6) The service quality of mutual funds service providers and the behavioural intentions of mutual fund investors

### **3.1.4 Mutual Fund Research in Developing Countries**

The main stream literature on mutual funds in developed countries by and large focuses on the performance of mutual funds. Choice of investment options by households have also been addresses besides the rest of the areas. Emerging economies and developing countries are relatively late starters in organising mutual funds and the issues relevant are different. The areas of academic research pertaining to mutual funds in countries such as India relate predominantly to the other areas mentioned above. This review of the literature and the empirical studies devote more attention on these themes, particularly since the issues addressed in this study relate to these areas.

## **3.2 Research on Performance of Mutual Funds**

Mutual fund investment literature and research have been influenced by some major theories.

Two of the major theories are 'expected utility theory' and 'prospect theory'. These theories propose controversial views on how investors choose alternative options under conditions of risk and uncertainty. The expected utility theory, initially proposed by Daniel Bernoulli, was expanded by John von Neumann and Oskar Morgenstern in their book "Theory of Games and Economic Behavior", 1944. The expected utility

theory deals with the analysis of situations where individuals must make a decision under uncertainty, without knowing which outcome might result from that decision. The proposition is that individuals will choose the outcome that will result in the highest expected utility. The expected utility is calculated by taking the weighted average of all possible outcomes, with the weights being assigned by the probability that any particular event will occur. The implication is that choices are coherently and consistently made by weighing outcomes of actions by their probabilities and that the alternative with the maximum utility is selected (Einhorn and Hogarth, 1981).

Expected utility theory does not allow for influences on choice due to characteristics of the context of the decision. Decision makers are assumed to rank their preferences and discard alternatives offering lower utility. The presumption is that decision makers are aware of multiple outcomes and are able to sift through the complexities of problems while choosing the outcome and that the manner of presentation of the alternatives is not supposed to influence the choice.

In 1979, Daniel Kahneman and Amos Tversky, already famous for their work on judgment heuristics, introduced the concept of the ‘Prospect Theory’ in their paper published in the journal *Econometrica* titled “Prospect Theory: An Analysis of Decision under Risk.” The paper demonstrated how people systematically violate the predictions of expected utility theory and presented a new model of risk attitudes called “prospect theory,” which captured the experimental evidence on risk-taking, including the documented violations of expected utility.

Prospect theory assumes that losses and gains are valued differently and that individuals make decisions based on perceived gains instead of perceived losses. The concept is that if two choices are put before an individual, both equal, with one presented in terms of potential gains and the other in terms of possible losses, the former option will be chosen. Prospect theory draws heavily from Simon (1955) who proposed that decision makers prefer to simplify their choices cognitively whenever possible, satisfying rather than maximizing.

Two other significant theories are ‘modern Portfolio theory’ (MPT) and ‘efficient Market Hypothesis’ (EMH). Modern Portfolio Theory (MPT), one of the most important and influential economic theories dealing with finance and investment, is a hypothesis put forth by Harry Markowitz in a 1952 paper "Portfolio Selection," published by the Journal of Finance. It is an investment theory based on the idea that risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward (Investopedia).

The Efficient Market Hypothesis (EMH) is another investment theory that states that it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information (Investopedia).

The Modern Portfolio Theory (MPT) which explains the relationship between risk and the expected returns and the Efficient Market Hypothesis (EMH) which suggests that stock prices fully reflect information have



posed serious challenge to the studies in mutual funds and have shifted the fund performance measurement from the calculation of crude returns to detailed explorations of the risk and returns methods. The focus of recent studies in mutual funds is on the performance of mutual funds and an extensive literature is available on the subject (Sharpe, 1966; Jensen, 1968; Fama 1972; Grinblatt and Titman, 1992; Hendricks, Patel and Zeckhauser 1993; Malkiel, 1995; Morey and Morey, 1999; Dahlquist, Engstrom, and Soderlind, 2000).

One of the research questions addressed was whether there are funds that win persistently rather than funds that lose persistently. For example, a study by Jensen (1969) indicated that the performance of mutual funds (alpha) did not persist during the period 1955 to 1964, in the U.S. One method to measure the contribution of an active management is by looking at the average alpha of mutual funds.

Several studies have developed models for performance evaluation and have examined whether the fund managers provide value addition for investors (Lehmann and Modest, 1987; Cumby and Glen 1990; Gallo and Swanson, 1996; Murthi, Choi and Desai, 1997).

The performance measure usually considered is the average return of a mutual fund over a particular period. This return is calculated either as total return (the return in excess of risk-free rate) or relative return to a benchmark. Market benchmarks such as NYSE (New York Stock Exchange), AMEX (American Stock Exchange) and NASDAQ (National Association of Securities Dealers Automated Quotations) have been advocated by Fama and French (1993) for evaluating the equity mutual

funds. Performance measurement without benchmarks has also been considered (Grinblatt and Titman, 1993).

Another group of studies address the issue whether analysis of historical performance of mutual fund can predict future performance (Hendricks and Zeckhauser, (1993); Goetzmann, and Ibbotson, (1994); Kahn and Rudd, (1995); Indro, et al. (1999). Another stream of studies discusses whether the costs of active investment are adequately paid off by the performance of active management (Jensen 1969; Odean, 1999). The issues analysed include whether the market is too efficient for active management (Coggin et al., 1993; Malkiel, 2003)<sup>1</sup>.

Economic theory postulates that market forces in a competitive market will eliminate inferior products and increase efficiency and improve performance. It is assumed that capital market is one of the prime institutions that facilitate competition. With thousands of mutual funds holding trillions of dollars of investor money, there is no reason to believe that this principle is not true for the mutual funds industry. Studies on mutual funds in several developed countries, however, indicate that performance of the mutual fund industry has been far from satisfactory. Several studies on fund performance (Carhart, 1997; Fama and French, 1998) reveal that mutual funds have been underperforming their relative benchmarks and that the fund managers lack investment skills to deliver the results (Fama and French, 2010; Malkiel, 1995).

Estimation of the funds risk is another concern. The magnitude of the return is a serious consideration but equally significant is the risk of

the return. The higher the risk of an investment the bigger the return it gives (Jensen, 1969; Pendaraki and Zopounidis, 2002; Elton, Gruber and Blake, 1996). The time-series of the risk-adjusted return difference between the top and bottom deciles is analysed to determine whether winning funds stay winners, and losing funds stay losers. The Fama and French (1993) factor returns can turn positive or negative over time.

### **3.3 Choice of Investment Options**

#### **3.3.1 Concept of Mutual Funds**

A Mutual Fund is a trust that pools the savings of a number of investors. The money collected is invested by the fund managers in different type of securities, debentures and money market options. The investors buy units of a particular mutual fund scheme for meeting the objective of the investor. Mutual fund units, or shares, can typically be purchased or redeemed as needed at the fund's current net asset value (NAV) per share. The income earned through these investments and the capital appreciations are shared by the investors. Ideally mutual funds balance three things: liquidity, safety and return.

Tomer and Khan (2014) have emphasised the intermediation of mutual funds by converting the scattered saving into productive asset, by investing them in capital market instruments. Through this process mutual funds influence the short-term and long-term behaviour of savers as well as the growth of the capital market and the economy.

### 3.3.2 Investment Options

Several research studies have been carried out in the investment behaviour. Human beings as rational agents always attempt to maximize wealth by minimizing risk. These agents carefully assess the risk and return (Barber 2011). Identifying the possible investment options to arrive at an investment portfolio is the part of their investment behaviour.

Household (retail) investors have different investment options. Psychological features play an important role in the individual investment decision process. The psychological characteristics such as risk taking ability and mental accounting relate to households' expectations. Their self-reported financial risk taking behaviour and risk aversion are some of the important variables having an impact on the investment decision of individual investors (Sanjay Das, 2012).

Bank deposit is the most preferred option to investors in India as reported in several studies. According to a survey by Society for Capital Market Research & Development in 2004 (Gupta, Jain and Choudhury, 2004), only 3 to 4% of retail investors showed interest in liquid funds and around 5% in gilt funds, but these investors were prepared to invest no more than 1% of the total available sum in liquid/money market funds. Investment funds act as substitutes for bank fixed deposits. Somasundaram (1998) found that bank deposits and chit funds were the best known modes of savings among investors and the least known modes were Unit Trust of India (UTI) schemes. SEBI-NCAER (2011) study found that households' investment in shares and debentures and in mutual funds ranges from 7% to 9%. Majority of the equity investor households

portfolio was found to be undiversified and of relatively small value of less than Rs. 25000.

The investment objective is to maximise the return with minimum risk. NCAER in its survey of three lakhs individual investors in 2010 revealed that bank deposit has an appeal across all income class; 43% of the non-investor households lack awareness about stock markets. The study further reveals that mutual funds have not truly become the investment vehicle for small investors; the number of households owning units of mutual funds is merely 9% and the individual investors are investing very small amount in the mutual fund products. Individual awareness about the financial products influences individual investment decision and preference of the different investment options.

Lalit Mohan Kathuria & Kanika Singhania (2012) have reported that private sector banking employees were investing a larger portion of their savings into safe and risk-free investment avenues such as employee provident fund, public provident fund and life insurance policy.

### **3.4 Fund Related Factors Influencing Mutual Fund Investment**

Different factors influence the choice of mutual fund companies and mutual fund products by individual investors. These factors can be broadly classified into two: fund related factors and investor centered factors. The fund related factors include, return, risk, past performance, etc. Investor centered factors include investor objectives and benefit expectations, cultural and social influences and personal factors that influence perception, buying decision process, product choice, etc.

### **3.4.1 Fund Related Factors Influencing Mutual Fund Investment**

Monetary benefit is the key factor for some investors and others are looking the safest return from their investments. The literature has sufficient evidence to show that the individuals invest in mutual fund for better return. Bell, Auh and Smalley (2005) find that the ability of a financial services firm to deliver consistently high returns while managing client risk will be a more important factor to retain the investors with the same financial services provider.

Researcher found that the most important factors leading to mutual fund investments are risk freeness and income and the next factors are savings and cost. Sasaki and Rathiha (2008) report that safety, liquidity, stability, speculative values, diversification and low cost are the different variables which influence the investor to invest in mutual funds.

Ramamurthy (2005) conducted a study to analyze recent trends in the mutual fund industry. The study concluded that investment choices are influenced by efficient management, easy administration, nice return potential, quick liquidation, transparency, flexibility, affordability and wide range of choices coupled with a proper regulation governed by SEBI. Online facility is also an influencing factor to make the investment become a favorite investment.

According to the study conducted by Madhusudhan (1996), investors are looking safety of principal, liquidity and capital appreciation from their mutual fund financial saving.

Mutual funds are offering better return through the risk diversification process. Nanadagopal et al. (2011) has carried out a research on fund selection behaviour of individual investors. The study reported that the most influential factor in the purchase of mutual fund was portfolio diversification. Diversifying the portfolio is the core function of mutual fund services. The investors who prefer higher returns are normally taking growth plans. Saha and Dey (2011) have reported that mutual fund preference of the majority of the investors is for growth scheme followed by income schemes.

According to Ramaswami and Yeung (2003) the main factors affecting the people in their fund selection are the company, future earnings, capacity of financial health and management, level of technology and marketing skill.

Barber (2011) has recommended that for short term gain, transaction cost are considered when individuals make their purchase decisions. Studies by Lichtenstein et al. (1999) and Ramasamy and Yeung (2003) have reported that information from the company regarding assurance of safe return, fund age, number of years the firm has been selling mutual funds, mutual funds managers' tenure or reputation, past performance of the fund, rating from an independent sources and certification information affect the investors' mutual fund purchase decisions.

#### **3.4.1.1 Past Performance**

Past studies and literature show that past performance of the fund is one of the main indicators for predicating the future return of mutual fund

investment. In most cases, investors look at past performance for making their purchase decision. There is some empirical evidence for the fact that mutual fund investors make purchase decisions on the basis of past performance (Kane et al., 1990; Patel et al., 1992).

Capon et al. (1996) in a study among the U S mutual fund investors found that investors considered performance track record, fund manager reputation and number of funds in fund family as the most important factors in selecting a mutual fund. These results support their argument that attributes other than risk and return are also valued by investors.

Ippolito (1992) found that past performance of the mutual fund is one of the important criteria for the selection of mutual funds, as it is believed to be an indicator of fund quality. Study by Ramasamy and Yeung (2003) on mutual fund purchasers in emerging countries such as Malaysia shows that among the factors dominating the selection of mutual funds are consistent past performance, size of funds and cost of transactions. Qualification and investment style of fund manager seems to be relatively less important. This means that in emerging markets the final performance of the funds is critical.

There is, however, big controversy regarding the relevance of past performance. While some studies support the view of past performance as an indicator of the future performance, other studies bring conflicting results. Capon et al. (1994) surveyed 298 affluent investors and the study found performance track record to be one of the four most important criteria of mutual funds selection; however, they have warned the customers that previous return do not guarantee future performance.



Palmiter and Taha (2012) record that past performance doesn't guarantee future results on account of return fluctuations and those investors might lose money in the fund. High past returns are generally a matter of luck, and thus a poor predictor of high future returns. But in most cases investors look at past performance of the fund to make their purchase decision.

### **3.4.1.2 Cost of Mutual Fund Investment**

The cost of investing in mutual fund is a major consideration for the investors. The AMCs are charging fees to the investors mainly for the services they offer. Investors are liable to give the fees for the professional management offered by the agents, distributors and fund managers. Charging high fee and commission for the investment has caused major controversies in the financial product services. Costs of financial services are considered a major factor in the selection of different financial products. Huhmann and Bhattacharyya (2005) found that consumer decision making in regard to selecting a mutual fund would be influenced by considerations of risk-return trade-off, agency issues, and transaction costs. Chordia, (1996) reported that costs of mutual fund operations (such as loads, i.e., sales commissions, management fees, brokerage costs, etc.) were considered by the investors in their financial choices. Ramasamy and Yeung (2003) conclude that transaction cost is often inversely related to the performance of a mutual fund.

### **3.4.2 Investor Centered Factors Influencing Mutual Fund Investment**

#### **3.4.2.1 Demographic Factors of Mutual Fund Investors**

The gender, profession, education, age and the geographical location are the influencing factors to determine the investment behaviour of the investor. The gender difference of the individuals tends to influence the saving and investment pattern of mutual fund investors. Bajtelsmit and Bernasek, (1996) found that gender is the third most significant factor in the investment decision. Puneet Bhushan & Yajulu Medury (2013) found out that women are more conservative and takes less risk and significant gender differences occur in investment preferences for health insurance, fixed deposits and market investments. Men tend to be more prone to overconfidence than women in areas culturally perceived to be in the male domain (Deaux and Farris, 1977) Desigan et al. (2006) found that women investors are basically indecisive in investing in mutual funds for reasons such as lack of knowledge about the investment protection and their various investment procedures, market fluctuations, risks associated with investment and redressal of grievances.

Apart from the gender, the professions of the investors influence decisions in financial saving. Lalit Mohan Kathuria & Kanika Singhania (2012) have reported that private sector banking employees were investing a larger portion of their savings into safe and risk-free investment avenues such as employee provident fund, public provident fund and life insurance policy. Sikidar & Singh (1996) revealed that the salaried and self-employed investors opted for mutual fund primarily due to tax concessions.

There is tendency from the investors that investors still prefer safe return in their financial saving. Syed Tabassum Sultana (2010) have found that that individual investor still prefer to invest in financial products which give risk free returns. Safe mode of investment is most preferred options for the Indian investors even if they are higher income group, well educated and salaried, etc. These are conservative investors who prefer to play safe in the market.

Anderson and Fulcher (1976) found that consumer selection criteria for a bank, such as convenience versus service orientation, were influenced by the several demographic variables.

The individuals have different objectives while investing in mutual funds. Some retail investors look for regular income from their investment, while others look for capital gain. Singh and Vanita (2002) examined the investors' preferences and perceptions towards mutual fund investments; they found that the investors mainly prefer to invest in public sector mutual funds with an investment objective of getting tax exemptions and stayed invested for a period of 3-5 years. Sikidar and Singh (1996) conducted a survey to find out the behavioural aspects of the investors in the direction of equity and mutual fund investment. The survey found that because of tax benefits mutual funds were preferred by the salaried and self-employed individuals.

#### **3.4.2.2 Attitude of Investors**

Wang, (2009) has suggested that personal factors such as gender and personality traits are crucial in explaining investment behaviour. The

psychological factors such as perception, attitudes, learning, and motivation affect an individual's decision making in the financial investment (Durand et al., 2008).

Individual's attitude towards financial savings is the most influencing factor that determines investment behaviour. According to Saha and Dey (2011) attitude of the individual is the main factor that affects investment decision. The investment objectives, risk appetite, time horizon of investment, personal state of affairs or performance, etc., affect the choice of different financial instruments.

Study by Funfgeld and Wang (2009) report that attitudes can be quite influential in explaining an individual's investment. Ajzen, (1991) reports that attitude towards the risk and risk tolerance has been considered widely for the investment decision in the different financial venture.

### **3.4.2.3 Knowledge of the Individual Investor**

Mishra and Kumar (2010) in their study discussed about the objective and subjective knowledge of the investors and their influence on mutual fund behaviour involving width of information search and depth of information processing. The study found that investor's knowledge significantly impacts information search and processing behaviour. Hence, it is likely that investors with limited knowledge will follow different information search and processing styles than investors with more knowledge. Information sources and information attributes differed in the low, moderate and highly knowledgeable mutual fund investors.

Financial literacy and awareness about the financial saving and investment help the investors to take rational decisions. Improvement of education in financial management significantly correlates with decision-making on critical investment issues (Chen and Volpe, 1998).

#### **3.4.2.4 Perceived Risk and Mutual Fund Purchase**

Perceived risks are the main indicators to determine the individual purchase decision. Perceived risk has been defined as the unfavorable outcomes related to a product or service (Engel, Blackwell and Miniard, 1995). Bauer (1960) has defined perceived risk by two different dimensions: uncertainty and adverse consequences.

Kaul and Gupta (2006) analysed the investor's perception on various factors used to select specific mutual fund schemes. Risk capacity and tolerance were found significant. The influence of the perceived risk on the purchase intention is a relevant factor but Wang and Fen (2014)<sup>ii</sup> reveal that purchase intention is affected mainly by perceived quality, not by perceived risk.

#### **3.4.2.5 Source of Information**

Consumer receives different information in their purchase decision process. According to Cho & Lee, (2006) the most prominent strategy to reduce risk is through the availability of information and it can be done by active information search and processing through the cost benefit framework.

Parents, broker and advertisement of mutual funds influence people to take decision to invest in mutual funds (Alexander, Jones and Nigro,

2012). Rajeswari and Moorthy (2001) have reported that selection of mutual funds are influenced by information from news papers, magazines, brokers, agents television, friends and direct mail advertisements.

Gupta and Chander (2011) analyzed different sources of mutual fund selection and found that mutual fund purchase decisions involved both interpersonal (formal and informal sources) and impersonal (mass communication) sources. Impersonal sources of information include advertising, direct mails, TV shows, databases, literature from asset management company and published performance rankings (or returns). Interpersonal formal sources of information include advice from brokers or agents, advice from chartered accountants or bankers, advice from analysts, books, magazines, journals or newspapers, etc. Informal interpersonal sources of information include recommendations from friends/family, business associates and colleagues, etc.

Capon et al. (1994) reports that mutual fund investors use internal (past memory) and external (advertisement, advisor, etc.) sources of information for investment decisions; consumers may receive interpersonal and impersonal (mass) communication. Impersonal sources include advertising, direct mail, and published fund performance statistics. Interpersonal communication is received from both informal (e.g., family and friends) and formal (e.g., organizations) sources.

### **3.5 Perceptions on Mutual Fund Marketing Issues and the Behavioural Intentions of Investors**

Some studies had addressed selected issues pertaining to the low contribution from mutual fund retail investors in India. It is a fact that

mutual fund contribution remains skewed towards the corporate sector. The percentage of households who owned equity shares directly is more than 2½ times the percentage of those who owned any mutual fund schemes (Society for Capital Market Research & Development 2004).

Unlike in developed societies, the participation of household investors in the mutual fund sector is very low in India and it is practically negligible beyond the 15 major cities. A review of empirical studies by academics as well as major research organisations has brought to light several issues pertaining to the mutual fund sector. Some of these issues are perhaps the inhibiting factors that dissuade household retail investors.

Certain issues existing in the mutual fund sector rather compel the investors to withdraw from the mutual fund industry. Balanaga Gurunathan (2007) has investigated that the investors need protection from the various malpractices and unfair practices made by the corporate and intermediaries.

Bodla and Garg (2007) have evaluated the performance of several mutual fund schemes. They have found that most of the schemes have outperformed in market during the study period in terms of return. However, the difference in market return and funds return is found insignificant. Mutual fund investors may be lacking in knowledge and information to evaluate the fund. They consider monitoring cost is too high relative to the benefit.

The marketing sectors are influencing the investment decision in the mutual fund sector. The investors who prefer several kinds of investment

may lack the combination of knowledge and information to monitor fund. This is the case even in developed economies; investors have the feeling that the monitoring cost is too high relative to the benefit (Fama and Jensen, 1983).

One of the major challenges facing the industry is the financial literacy of the investors. Investor awareness programmes and financial education have been very rare in mutual fund sector, although programmes have been initiated by SEBI and the other agencies recently. Lack of effective communication also contributes to the slow growth of mutual fund decision. The ups and downs in the equity market create a sluggish trend in the mutual fund sector. Investors who give high priority for return are affected by the volatility in the stock market.

Tomer and Khan (2014) who examined the decline in the Indian mutual fund industry attributed the decline to factors such as prolonged bearish trends and scams in Indian stock market that killed the investors' interest in equities and units. The fall of UTI broke the investors' faith and confidence. Unattractive returns on mutual fund schemes have been a deterrent to investment. Good performance of debt funds helped the industry for some time. The continuous reduction in interest rates in the country has also adversely affected the growth momentous of mutual funds industry.

Several other models have been used to analyse mutual fund investment behaviour. Saraoglu & Detzler (2002) in their study entitled "A sensible selection Model" studied the proliferation of mutual funds and found that it had made it a challenge for investors to select a right fund to invest. In their opinion many magazines and newspapers were given assistance for



the decision making. But the lack of expertise of investors makes it inefficient to use this information in their decision making.

Singh and Chander (2004) in their study pointed out that the characteristics like “past record of the organization”, “repurchase of the units” by the funds, “easy transferability” and “return provided on investment by the fund” had been rated as important in the investment choices.

Another model has been developed by Latha (2016) in the study entitled “Investors’ Behaviour Towards Investment Intention”. The study pointed out that factors such as investment knowledge, investment experience, perceived risk and self-efficacy predicts investment intention significantly. Out of these four variables, investment experience and perceived risk strongly influence the investment intention towards mutual funds. The empirical data and the statistical tests in this study support the existence of a direct causal relationship between the Investors’ Behaviour and investment intention

Liang et.al(2009), in their study developed and empirically tested a model examining the relationships between customer perspectives (product attributes, benefits, customer satisfaction, trust, commitment and customer behavioral loyalty) and the financial perspective (financial performance). The result indicates that customer perceptions positively affect financial performance.

Paritl et.al (2015), found out that consumers' perceptions on businesses' ethical issues such as misleading advertising and deceptive packaging have an impact on their ethical purchasing behavior or ethical decision making. The study reveals that ethical issues have been found to have a positive effect on purchasing behavior.

### **3.5.1 Marketing Issues**

Issues in the Indian mutual fund industry are many and varied. The present studies therefore limit the discussion (and later the empirical analysis) to the issues related to marketing.

Some previous research studies have identified some issues related to marketing. Diacon and Ennew (1996) had addressed several ethical issues in the financial sector which create the potential for ethical problems in marketing. They have indicated that the complexity and longevity of many financial services and the issue of trust and confidence in the marketing process give rise to ethical dilemma.

A survey by the Society for Capital Market Research & Development (2004) has found that the investors are not happy with over all experience and service of the mutual fund companies. After the Mutual fund industry was opened up to competition and many new kinds of attractive Mutual fund schemes were launched, a growing number of retail investors bought these mutual fund products for some time. Investors relied on the implicit, and sometimes explicit, promises made in the offer documents. In many cases, the promises made by them could not be honored. Investors in mutual funds have been discouraged by nasty surprises of the

service providers due to managerial incompetence, malpractices and fraud.

Further discussions on the issues are limited to the four marketing mix elements: product, price, promotion and distribution.

### **3.5.1.1 Product Issues**

Problems in product related aspects of the mutual fund sector have created big challenges in the overall growth of mutual fund sector. According to Keller (1999) attributes of the product are big purchase motivators in the investment decision; attributes fall into two categories: product-related and non-product-related. Price is defined as the service requirements of a product, and what determine the nature and level of product performance. Non-product-related attributes such as courtesy affect not only the purchase or consumption process, but also indirectly affect product and service performance.

#### **a) Complexity and proliferation of mutual fund products**

One of the major issues associated with mutual fund is the complexity of mutual fund products. The increase in the fund choices and information calls for greater awareness to make a better financial decision to meet personal financial goals. However, an average investor has a difficulty with the complexity of mutual fund data required to make proper financial decision that properly balance risk, return and operation cost (Kozup et al., 2008). Donnelly et al. (1985) has identified that saving and investment products are highly complex from the consumer perspective.

The plethora of products is beneficial to the investors only if they are aware about the financial benefit. Better clarification from the financial advisor or other sources is extremely important for better understanding of the product. Eisingerich, Aldreas and Bell (2007) identified that financial advisor's willingness to help the clients understand complicated financial techniques and to make the investor a financial literate would be the genuine service augmentation.

According to a study by KPMG, customers believe that the mutual fund industry fall short of expectation in meeting their needs at the time of economic uncertainty and market volatility. Availability of large number of mutual funds schemes makes investment decision complex and difficult. It has been noted in the literatures that the industry is offering a wide range of products to the extent that it creates a situation of overcrowding and proliferation in the industry.

Plethora of schemes and complication of the industry will lead to the problem to front line sales function. The total product range will be unclear to the investors. Business Line (2009) has reported that the proliferation of schemes (reportedly 1,000 schemes and 5,000 variants) should be consolidated over a period of time and that the number of schemes permitted should be linked to the net owned funds. At present, the investor is confused by a plethora of schemes.

**b) Lack of Product Innovation and customization**

Up to a certain level, large number of schemes and innovative products are essential to customise the need of investors. Ansari (1993)

has noted the importance of innovative schemes, which are suitable to the varied needs of the small savers. Innovations in products and customisation of products are required to sustain in the highly competitive financial market. Tomer and Khan (2014) have suggested that the mutual funds industry in India offers limited products to meet the needs of investors. Unlike the US, UK and Japan, the Indian mutual funds industry is very slow in offering innovative products to investors. Lack of experience, traditional investment practices and risk averse and conservative attitude of mutual funds appear to be the reasons for limited new product offering in India. Indian mutual fund industry is so weak to customize the product according to the need of the investor and there is no differentiation among the different product available in the industry.

**c) Return and safety elements of mutual fund products**

When some investors are looking the higher return, others are looking the safe investment. Consumers lose faith if they have a bad financial outcome due to an ill-fitting financial product. This can happen by badly constructed product being sold in the market. Walia (2009) has found reflection of risk on mutual funds, though it is not as high as it was in case of shares and bonds. Investors consider mutual funds as the second risky investment avenue. Elton and Gruber, (1989) suggested that purchase decisions for financial assets should be made on the basis of investor beliefs regarding the future return and risk of those assets.

**3.5.1.2 Price Related Issues**

Pricing of the financial products covers mainly the cost of investing for the investor in different financial products. Charging high fee and

commission for the investment is the major controversy in the financial product services. Transparency in the commission was considered to be the major problem in the financial service products.

Tomer and Khan (2014) reported the pricing related issues relevant to the distributors. In 2009 there was a ban of entry load. It reduced the compensation of distributors. In 2008 the average commission paid to distributors was 1.78 percent which came down to 0.98 percent in 2010. This compelled a large number of distributors to go out of the mutual funds business and the participation of households in mutual funds declined.

Hendricks, Patel and Zeckhuser (1993) highlighted that fund expenses have significant impact on fund return in general. The AMCs are charging fee for the professional services they are offering to the investors. But unfortunately the individual has to pay the fees even if the product is not performing well in the market. Some studies have highlighted the point that funds with higher expense have performed well, enough to offset these higher fees (Ippolit, 1989). However, Carhart (1997) reported that wealth-maximizing mutual fund investors should become conscious that expense ratio, transaction costs and load fees have a direct and negative impact on fund performance.

### **3.5.1.3 Promotion Issues**

Ethical practice in the marketing of financial sector is highly important as in any other product marketing. The regulatory frame work has been strengthened on account of the issues existing in the marketing of financial sector. The role of marketing is to create link between the

consumer and seller. Transaction might be ethical and fair if both parties have adequate and appropriate information and both enter the transaction willingly and without coercion. (De George, 1990).

Promotion in the financial industry has two dimensions: the first is the products and second is the intermediary for providing that product (De.george, 1990). Availability of adequate information is the most important factor for the better service from the financial product sellers. Often investors are mislead by the agents or by the official. Deacon and Ennew (1996) in their study have highlighted the issue of promotion and have suggested that the promotion of saving and investment should be regulated. Past performance figure used in the promotional material should be candid.

Right product to right investor is the right of the investor. The challenge really lies in aligning interests of the three stakeholders: investors, fund houses and distributors. As long as the fund is paying commission to procure asset under management there may be issues of interest alignment and the revised compensation structures. Chances of mis-selling happen from the distribution sectors for getting the more commission (CII, 2014)

Deacon and Ennew (1996) have found that promotion of the products which are inappropriate for the consumer is the major issues of the investors. Use of unauthorized gifts and use of small print are also serious issues. Misleading information about the competitors is happening less frequently. Some investors complained that the brokers/sub brokers

are more interested in the incentives provided to them by the companies for selling more schemes (Bimal and Saini, 2011).

**a) Reliability of information**

Taking and giving accurate and adequate information is the major role of marketing, especially in the financial industry. Lacks of adequate information is the major problem in the mutual fund services. Ineffective service (in the form of misleading information by mutual funds or financial advisors) coupled with poor financial literacy of the investors can be a dangerous combination (Marisetty and Venugopal 2010). According to the survey conducted by the CII it has been suggested that the source of retardation in the rate of participation by Indian households in the market is due to both information asymmetry as well as the poor quality of information. When consumers are getting more information, they will become more confident to make better investment.

Tomer and Khan (2014) reports that lack of information in mutual fund is one of the biggest problems faced by the industry. The agents and the distributors are not ready to explain the risk involved in the investment owing to fear that it may discourage investors to invest in mutual funds. Walia, (2009) has observed that mutual funds were not completely disclosing the presence of risk element. The study also shows that investor's responses towards mutual fund companies for disclosing the fund portfolio was not to be found satisfactory.

Delivering the information is the responsibility of the seller. Ultimately the investor is looking information from the agents. Diacon



and Ennew (1996) have suggested that service providers and the sellers should have better degree of information than the customers, but there remains substantial lack of understanding of saving and investment products. When sales force operates for their commission, the presence of asymmetric information enhances the potential for ethical issue. Tomer and Khan (2014) have found that the agents and the executives of the mutual fund companies assure higher returns to the investors and paint a rosy picture about the mutual funds while marketing the schemes with a view to get more commission and incentives. Devlin and Ennew (2002) have found that customers are totally dissatisfied with the standards of advice they receive.

**b) Information from Advertisements**

Studies have shown that advertisements do not provide adequate information. Jordan and Kaas (2002) reports that mutual fund advertising significantly influences investor's perceived investment risk and expected return. Jones and Smythe (2003) investigated the information content of mutual fund advertising. The result shows that advertisement is not communicating enough information, especially price related information. Lack of information and misleading information are among the major issues in the mutual fund sector.

Huhmann and Bhattacharyya (2005) found that mutual fund advertisements did not provide necessary information for optimal investment decisions, as majority of the advertisements are not giving the details of risk- return trade off. It does not provide indications about

transaction cost, management fee, annual distribution fee, custodian fee, commission information, etc.

#### **3.5.1.4 Distribution Issues in Mutual Funds Sector**

Problems with agents, staff, channels, method of delivery, etc., are the major distribution issues in the mutual fund sector. Alexander et al. (1998) have claimed that approximately 86% of the individual investors use brokers. All types of intermediary have a significant role to play and they influence considerably in investment choices.

Building and scaling up any distribution channel depends heavily on the confidence of the investor. The asset management company has to strengthen the distribution channel to make the mutual fund industry accessible and sustainable. The effective utilisation of technology infrastructure and technology oriented platforms will be required to remedy the problems in distribution infrastructure. Ease of access of products and transparency will be part of prompt services to the clients and prospective customers

Black et al. (2002) have explored the factors influencing the selection and use of distribution channels in the financial services. In his model he has considered personal contact, perceived risk, convenience and costs of using the channel to determine the channel structure.

Many mutual fund managers trade too much. The survey of Society for Capital Market Research & Development (2004) has addressed the problem of distributors. The presence of churning is very frequent in the mutual fund sector.

Mis-selling by the mutual fund agents is the common problem in mutual fund investment. Anagol and Kim (2010) found that agents (IFAs) and distributors are compensated through entry loads and initial issue expenses. It is common belief that IFAs and distributors push investors into high fee funds to increase their incomes. In some cases investors are deceived by the mutual fund agents. Walia (2009) has examined tax payer mutual fund investors; they have commented that mutual funds are not completely disclosing the presence of the risk element.

**a) Ability of the fund manager**

Ability of the fund manager is a critical factor in shaping the investor's attitude towards mutual funds. But research has noted mutual fund industry has certain issues related to the skill and ability of fund manager.

Tomer and Khan (2014) have highlighted the issues that there is no regulation for the qualification for the fund managers. Anyone can become a fund manager, irrespective of his/ her qualifications, even in a highly risky job. However, the mutual funds distributor/ advisor are required to pass the 'National Institute of Securities Market's (NISM) Mutual Fund Distributors Certification Examination'. In China, fund managers are stipulated to have a professional qualification for dealing in fund business. In UK, Financial Service Authority (FSA) has laid down the qualification for all entities dealing in investment business.

**b) Regulation for the distributors**

Tomer and Khan (2014) have addressed the issue that there is no regulatory purview of SEBI for the mutual fund distributors. In US, distributors are registered under the Securities Exchange Act of 1934 as broker-dealers. They are regulated by Securities Industries and Financial Markets Associations and are required to pass broker-dealer examination for selling mutual funds. Similarly, Financial Service Authority (FSA) in UK spells out the responsibilities for distributors in ‘The Responsibilities of Providers and Distributors for the Fair Treatment of Customers.’

**c) Investor trust in mutual fund distributors**

Mis-selling, deceiving investors, lack of information and misleading information are problems creating distrust among customers about mutual fund distributors. Trust towards the agent is important in investment decisions. Morgan and Hunt (1994) attempt to explain trust by viewing trust as the perceived confidence level regarding the reliability and honesty of transaction. Trust creates value by providing relational benefits derived from interacting with a competent service provider (Sirdeshmukh et al., 2002). Sniezek and Swol (2001) found that individuals’ trust in their advisors was significantly related to their taking the advice and being confident in their final decision. Joiner et al. (2002) found a strong direct relationship between the financial planners’ trustworthiness and the clients’ intentions to seek the financial planner’s advice.

Keeping promises and solving problems are the key features to maintain the trust of retail investors on mutual fund agents. Martenson (2008) reports that customer contact persons can resolve problems, reduce

perceived risk and provide recommendations that may increase satisfaction. In order to market the mutual fund products effectively, it requires consumer's confidence and trust in the organizations they deal with. Diacon and Ennew (1996) have suggested that the design of commission structure and promotion of inappropriate products are the two major issues. Joiner et al. (2002) found that financial planner's expertise affects the trust worthiness and by increasing the customer's confidence the agent can provide viable and valuable solutions and deliver on promises.

Retail investor's trust can be enhanced by better service of agent or distributor. Delivering better service is the key factor to enhance customer loyalty among the mutual fund investors. Tax and Brown, (1998) have suggested that customer contact persons are nevertheless responsible for delivering service quality, and they may therefore have a large impact on customer loyalty. American Express estimated that more than 30 percent of their investment advisers' clients would defect if a personal adviser left the company. Martenson (2008) has explained that the characteristics of the contact person (relevant similarity and expertise) and relationship quality (trust and overall satisfaction) can be seen as a proxy for reputation. A further comment is that trust among the mutual fund investors is very essential to give a better service quality to the retail investors and service quality is the key factor for smooth running of all financial products. Joiner et al. (2002) found that financial planner's expertise affect the trust worthiness by increasing the customer's confidence. he/she can provide viable and valuable solutions. American

Express estimates that more than 30 percent of their investment advisers' clients would defect if a personal adviser left the company.

### **3.6 Influence of Service Quality**

#### **3.6.1 Mutual Fund Service Quality**

Most of the studies highlight the influence of return and risk of mutual fund on the purchase decision. Apart from the return and risk, individual satisfaction can be met by better service delivery. All mutual funds and their performance are subject to market risk. The fluctuations in the financial markets affect the overall performance of the mutual fund products. Better service delivery can reduce the gap between the individual expectation and the real performance of the mutual funds.

The investment decisions on mutual funds are influenced by the quality of services of the organization. Lakshmi.R, (2009) found that the investors rate quality of service as an attribute more significant than returns. Rajeswari and Ramamoorthy (2001) analysed the factors influencing the fund selection behaviour of 350 mutual fund investors. They have found that *investor service* is one among the major factors that influence the investor. Individual investor's decision criteria depend on the convenience feature. Retail fees, location of the office, and existing personal relationship are among the decision criteria (Lee and Marlowe (2003).

Capon, Fitzsimons and Weingarten (1994) conducted a study on 298 affluent mutual fund investors. To determine the investment behaviour a cluster analysis was done. The adviser influenced service/substance group

was significantly more focused on a single mutual fund family. Service substance was the most important factor in their investment choices. Sirri and Tufano (1992) have found that higher levels of service are positively related to net fund inflow.

Walia and Kiran (2009) observe that investor satisfaction cannot be achieved without paying attention to the quality of services. Presence of intense competition in mutual fund industry is strongly pushing AMCs to change their attitude towards investors. It is high time to develop competence by showing their concern and innovating newly designed schemes that can assure that they can deliver not only the financial benefits but also value added quality services. Study by Garvin (1984) has shown that customers are generally benefited from the improvements that are offered by way of new features e.g., enhanced quality product.

Brand or product characteristics such as price, quality, performance, return and risk are widely believed to impact the retail investment decision (Gupta, 1988). Better service in the industry i.e., highest quality data base, higher level of commitment, proper segmentation and value added service for the most highly profitable customers, training to employees and easily accepted technology for the customers will increase the customer satisfaction as well as the customer loyalty rates (Zeithaml 2000).

### **3.6.2 Perceived Quality and Mutual Fund Purchase**

Harrison, (2000) has pointed out that the new marketing philosophy and strategies place special emphasis on recognition of customer needs,

because it gives a special effort to provide high level of quality services. Zeithaml, (1988) and Aaker (1991) report that perceived quality can be considered as consumer's judgment about a product's overall excellence and superiority, not the actual quality of a product. Petrick (2002) has measured perceived service quality by measuring the consistency, reliability, dependability, and superiority. Zeithaml (1988) defined perceived value as "the consumer's overall assessment of the utility of a product, based on perceptions of what is received (e.g., quality, satisfaction) and what is given (price and 'nonmonetary' costs)".

### **3.6.3 Influence of Service Quality in the Mutual Fund Purchase Decision**

Delivery of quality services to the customers has become an indispensable factor for success and survival in today's financial industry. Service quality has become an important factor in the entire financial industry. Eisingerich, Bell and Simon (2006) have proposed that problem management is likely to have a significant impact on customer evaluation of service quality. Problem management implies the financial advisor's response towards speed and recovery initiation which communicate empathy, effort and, respect to others. Liang (2010) has pointed out that customers desire high-speed services, and clear information about the time required to complete specific services.

The measurement called SERVQUAL is used to measure service quality. Essentially, "SERVQUAL measures customers' expectations of what firms should provide in the industry and their perceptions of how a given service provider performs against these criteria" (East,



1997). The concept was originally developed by Parasuraman et al. (1985). Understanding service quality must involve acknowledging the unique characteristics of service, which are intangibility, heterogeneity and inseparability.

Service quality can be defined as the difference between customer's expectation for service performance prior to the service encounter and their perception of the service received (Daniel 2010). If perceived performance is higher than the expectations, then it indicates high service quality, and the reverse indicates poor quality. Gronroos (1984) and Parasuraman et al. (1988) conceptualized service quality on the basis of disconfirmation between consumer expectations and perceptions.

Attitudinal differences of investors influence the purchase decision. The studies by Dabholkar et al. (2000) also proved that the perception measures have higher predictive and explanatory power and have better indicative power in the cases of customer evaluation and intention. In addition, they observed that perception could allow an understanding of service quality at factor level and proposed all the dimensions of quality as antecedents, rather than components of service quality. The investors who are more satisfied with the product will take positive purchase decision.

In marketing literature, service quality has been linked to many and varied business performance metrics, including customer satisfaction, loyalty, word-of-mouth referral, price sensitivity, sales growth and market share. Academic research in marketing has paid considerable attention to the dimensions of service quality. The widely accepted measurement tool

SERVQUAL has some limitations. It reflects only the delivery process. In order to measure the service quality perception, another method has been used. Kang and James (2004) proposed revision of Gronroos's service quality model and their study empirically tested their service quality measurement which consisted of three dimensions: technical, functional and image, and image functions as a filter in service quality perception.

### **3.6.4 Technical and Functional Service Quality**

Researchers have defined service quality in different ways. Bitner, Booms and Mohr (1994) defined service quality as 'the consumer's overall impression of the relative inferiority or superiority of the organization and its services'. Most researchers have given operational definition of service quality as the individual's perception of the customer service. The perceived value is measured to check the company's service quality.

Gummesson (1991) proposed two different dimensions to the quality of a service: technical quality and functional quality. Technical quality is the outcome of service provision, whereas functional quality referred to one's feelings toward the process or experience of receiving the service.

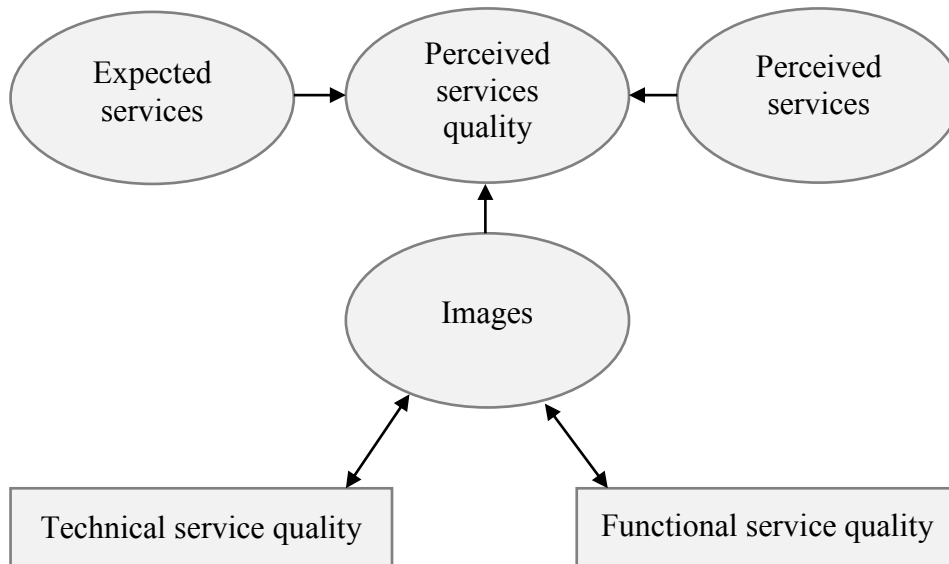
Ausbonteng (1996) defined service quality as difference in customer's expectation of service performance prior to the service encounter and their perception of service received. Technical service quality refers to the outcome-related aspects of the service, e.g., quality and accuracy of advice and meeting the performance expectations of customers (Sharma and Patterson 1999).

### **3.6.4.1 Gronroos Model of Service Quality**

Gronroos (1983) identified the significance of the concept of perceived service quality as the outcome of an evaluation process, where the consumer compares his expectations with the service he perceived and received. Individual expectations vary based on their attitude measurements of service quality. He emphasised the processes and outcomes for defining the concept of service quality. These processes and outcomes can be considered technical and functional service quality dimensions. Gronroos (1983) defined the two forms of service quality. Functional service quality relates to the nature of interaction between service provider and customer. Technical service quality refers to the quality of the service output. According to the definition of Gronroos, technical quality refers to the outcome or ‘what’ and functional quality refers to the process or ‘how.’

Gronroos (1984) developed a service quality model with expected service and perceived service as independent variables. The expected service is formed through the firm’s promotional activities, consumers’ past experience, word of mouth communication and consumer needs. The functional quality represents how the service is delivered and the technical quality refers to what the customer receives in the service encounter. Corporate image is introduced as a high order moderating dimension for perceived and expected quality

The conceptual model of service quality as presented by Gronroos is given in Figure 3.1



Source: Gronroos, C. 1984.

**Figure 3.1: Gronroos model of Service quality**

In the financial sector, service quality is measured by the two concepts: technical service quality and functional service quality. Functional service quality denotes the process-related elements of service delivery, e.g., accessibility and empathy of service providers (Hartline, Michael and Ferrell (1996).

Guo et al. (2008) conducted a study to measure service quality in the Chinese corporate banking and concluded that service quality contained two higher-order constructs (Functional Quality and technical quality) and four lower-order dimensions (reliability, human capital, technology and communication). Arne De Keyser, Bart Lariviere, (2014) empirically tested the impact of technical and functional service quality

on consumer happiness in a multichannel environment. He found that the quality dimensions that have the greatest impact on consumer happiness differ.

### **3.6.5 Service Quality and Customer Satisfaction**

Service quality and customer satisfaction are closely related constructs. According to Beerli et al., 2004, there is a positive relationship between the two constructs. It is widely believed that service quality ensures customer satisfaction and profitability to the service firm. Some researchers argue that service quality is the antecedent of customer satisfaction, while others argued the opposite relationship. Parasuraman et al. (1988) explained the relationship between service quality and customer satisfaction as “service quality is a global judgment, or attitude, relating to the superiority of the service, whereas satisfaction is related to a specific transaction”. Jamal and Naser (2003) stated that service quality is the antecedent of customer satisfaction. Parasuraman et al. (1988) held that when perceived or experienced service is less than expected service, it implies less than satisfactory service quality. But, when the perceived service is more than the expected service, the obvious inference is that service quality is more than satisfactory.

Cronin and Taylor (1992) have investigated the conceptualization and measurement of service quality and the relationships between service quality, customer satisfaction and purchase intention. The study reports the influence of service quality to customer satisfaction and purchase intention. Goswami (2007) has reported that service quality helps

ensuring maximum customer satisfaction in the life insurance industry in India.

### **3.6.6 Service Quality and Customer Loyalty**

Customers have certain expectations or assumptions about the quality of service from their service provider. Every financial firm likes to provide better service within a short span of time. Fulfillment of customer's expectations produces high level of satisfaction, loyalty and recommendation. Falling short of expectations could adversely affect customer satisfaction, and ultimately customer retention and loyalty. Individual firms have discovered that increasing levels of customer satisfaction can be linked to customer loyalty and profits (Hekett et al. 1997).

It is held that service quality is an important antecedent of consumer assessment of value, which in turn influences customer satisfaction, which then motivates loyalty (Babakus and Boller 1992). There is a tendency for the customers to remain with same service provider if they are satisfied with the services. Anderson et al. (1976) recognised the importance of service quality for obtaining and retaining customers. Zeithaml et al. (1996) considered behavioural loyalty as a construct which is determined by customer's willingness to remain with or defect from a company.

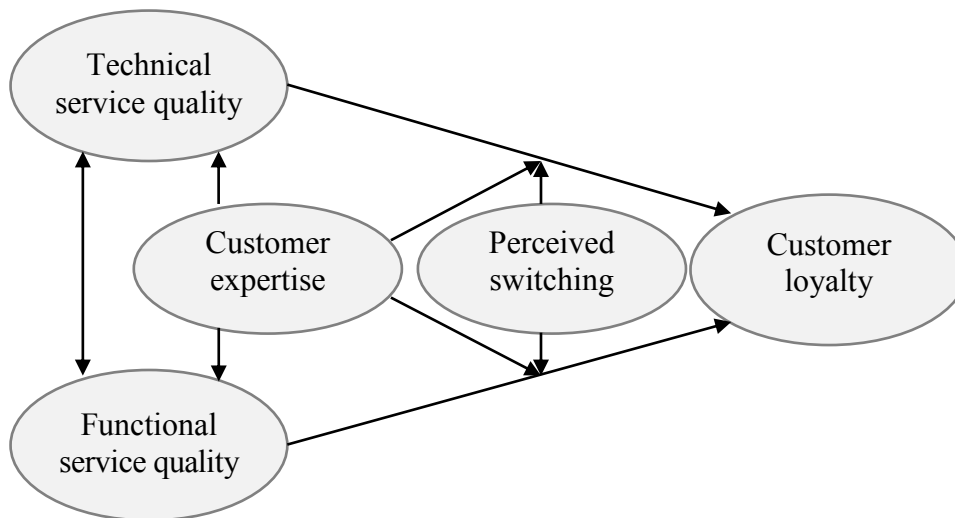
Bennett (1996) argued that the strength of customer commitment depends on customer perceptions of the relationship efforts made by the seller. Moorman et al. (1993) consider that commitment is an expression

of customer willingness to remain with the provider. Liljander and Strandvik (1993) have found the relationship between commitment and behavioural loyalty. The study concluded that these were related concepts.

Customer loyalty is often examined from a behavioural point of view by measuring items such as number of repeat purchases and purchase frequency. Parasuraman et al. (1994) proposed comprehensive behavioural loyalty taxonomy. This taxonomy initially comprised of word-of-mouth communication, repurchase intention, price sensitivity, etc. Boulding et al. (1993) considered that both repurchase intentions and willingness to recommend as indications of loyalty.

Customer loyalty translates into an unspecified number of repeat purchases from the same supplier over a specified period (Egan, 2004). Customers who are satisfied with over all service from their service provider are ready to become loyal and committed towards their service provider. The firm should serve their customers efficiently and effectively for achieving customer loyalty. Falling short of expectations could adversely affect the customer satisfaction, and ultimately customer retention and loyalty. Zeithaml et al. (1996) have considered behavioural loyalty as a construct involves retention, detention, customer satisfaction, loyalty and profit.

Model developed by Bell and Eisingerich (2007) has shown the relationship between the perceived service quality and customer loyalty.



Source: Bell and Eisingerich (2007)

**Figure 3.2: Conceptual model: Relationship between the perceived service quality and customer loyalty**

Customer satisfaction and customer loyalty are considered as important determinants of business success. These factors lead to the positive behaviour intention of the investors. Customer satisfaction is the most important determinant of behavioural intention. Retained customers with higher customer satisfaction have great impact of the company's turn over and profitability.

### 3.6.7 Investment Expertise and Customer Loyalty

Investment expertise can be explained as the extent of a customer's prior product knowledge and ability to assess product performance. Poor investment decisions are often taken on account of lack financial knowledge. Investors may avoid mistakes either by being smart or by



having knowledge of financial markets. Bodnaruk and Simonov (2015) have stated that financial experts make better investment decisions than peers.

Dynamics of customer education and customer expertise in relation to service quality has been studied by Bell et al. (2007). The study has established the moderating effect of investment expertise on the relationship between the service quality and customer loyalty. According to Ahmad Jamal (2009) the investment expertise has direct effect on customer loyalty; it works as moderating variable in the relationship between satisfaction and loyalty.

### **3.7 Service Quality and Behavioural Intention**

#### **3.7.1 Behavioural Intentions**

Behavioural intention is an indication of an individual's readiness to perform a given behaviour. It is an indicator of customers' subjective behaviours and how they make consumption decisions. Behavioural intention is assumed to be an immediate antecedent of behaviour (Ajzen, 2002). Fishbein and Ajzen (1975) suggested that behavioural intentions of the customer when properly measured are capable of predicting actual behaviour. Study by Trafimow (1996) has indicated that attitude is found to be the strongest predictor of behavioural intention. Behavioural intention of customers can be either favorable or unfavorable (Zeithmal et al., 1996).

Bitner (1990) in his study measured the concept of behavioural intentions in terms of word-of-mouth and repurchase intention. Park et al. (2015) have measured behavioural intention through several factors such

as word-of-mouth communications repurchase intentions, price sensitivity, loyalty, complaints and willingness to pay.

Zeithaml et al. (1996) have defined the behaviour intention as the customer's decision for their retention and defection from the company. Both Parasuraman et al. (1988) and Zeithaml et al. (1996) have reported that a positive relationship exists between perceived service quality and behavioural intentions of the consumers. Parasuraman (1988) and Zeithaml et al. (1996) conclude that there exist a positive relationship between perceived service quality and behavioural intentions. Behavioural intentions of the customer can contribute to profitability of the firm. Parasuraman et al. (1994) have measured behavioural intention based on four categories word-of-mouth communications: repurchase intention, price sensitivity, and complaining behaviour.

Favorable behavioural intention ends with loyalty resulting in increased volume of business, expressing positive publicity for the service provider.

### **3.7.2 Influence of Service Quality on Behavioral Intention**

The individuals show their behavioural intention with repeat purchase and by positive word of mouth. Bitner (1990) found that perceived service quality influences behavioural intentions in terms of word-of-mouth and repurchase intention. In particular, positive word-of-mouth has been clearly associated with superior service quality.

Previous research has shown the relationship between service quality and customer loyalty. A positive relationship exists between service

quality and customer loyalty. Bell and Eisingerich (2007) in their study examined the technical service quality and functional service quality and found a positive relation with customer loyalty and technical service quality. This relationship is stronger than the functional service quality.

Boulding et al. (1993) and Cronin and Taylor (1992) have measured the behavioural intention by repurchase intentions and willingness to recommend. They have examined relationship between the service quality and customer loyalty. The study has recommended the positive relationships between service quality, repurchase intentions and willingness to recommend. But Cronin and Taylor (1992) in their study have found that service quality did not appear to have a significant (positive) effect on purchase intentions. Ladhari (2009) has developed model to identify the relationship between the service quality and behavioural intention. The purpose of the study was to find out a relationship between service quality, emotional satisfaction and behavioural intention in the hospitality industry. The result confirms the relationship between these variables.

### **3.8 Outcome of Literature Review**

As the research problem indirectly relates to identifying the factors that inhibit the growth of retail mutual fund investment in India, the coverage of the issues addressed in the study are rather comprehensive. The outcome of the review of literature is the formulation of the research problem, research objectives and hypotheses. The areas identified for empirical analysis are as follows:

- 1) Preference for different investment options
- 2) Investors' perceptions on risk, return and liquidity
- 3) Investment pattern of mutual fund investors in terms of the amount of investment, years of experience, number of AMCs used and channel preference for mutual fund purchase
- 4) Fund benefit expectation and types of funds preferred
- 5) Sources of information for mutual fund investment decision
- 6) Product selection criteria for mutual fund investment-fund quality, fund sponsor quality and service substance
- 7) Mutual fund marketing issues and purchase behaviour: structural equation model
- 8) Perceived service quality and behavioural intention: structural equation model

### **3.9 Summary**

The survey of literature covered theoretical and empirical studies on mutual funds and other financial products as well as review of conceptual models and methodology for empirical analysis. The study has identified new sets of variables pertaining to the different issues in the mutual fund sector. The study objectives, hypotheses, models and methodology are discussed at appropriate chapters devoted for research methodology as well as data analysis.

## References

- [1] Aaker D.A., 1991. Managing Brand Equity: Capitalizing on Value of a Brand Name. The Free Press, New York. pp: 299.
- [2] Ahmad, Jamal., & Kyriaki Anastasiadou. (2009). Investigating the effects of service quality dimensions & expertise on loyalty. *European Journal of Marketing*, 43 (3/4), 398.
- [3] Ajzen. I. (1991). The theory of planned behavior. *Journal of Organizational Behavior & Human Decision Processes*, 50, 179-211.
- [4] Ajzen. I., (2002), Perceived behavioral control, self-efficacy, locus of control, & the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32(4), 665-683.
- [5] Alexander, G. J., Jones, J. D., & Nigro, P. J. (1998). Mutual Fund Shareholders: Characteristics, Investor Knowledge, & Sources of Information, *Financial Services Review*, 7(4), 301-316.
- [6] Anagol., & Hugh, Kim. (2010). The Impact of Shrouded Fees: Evidence from a Natural Experiment Working Paper Boettner Center for Pensions & Retirement Research the Wharton School, University of Pennsylvania.
- [7] Anderson, W.T.J., Cox, E.P.I., & Fulcher, D.H. (1976). "Bank selection decisions & market segmentation". *Journal of Marketing*, 40(1), 40-50.
- [8] Ansari, Lubna., & Sana Moid. (2013). Factors affecting investment behaviour among young professionals, *International Journal of Technical Research & Applications*, 1(2), 27-32
- [9] Ansari., (1993). "Mutual Funds in India: Emerging Trends". *The Chartered Accountant*, Vol. 42(2), 88-93.

- [10] Arne De Keyser, Bart Lariviere.(2014) "How technical &functional service quality drive consumer happiness: Moderating influences of channel usage", *Journal of Service Management*, 25 (1), 30-48.
- [11] Asubonteng, P., McCleary, K.J., &Swan, J.E.(1996). "SERVQUAL a critical review of service quality".*Journal of Services Marketing*, Vol. 10, No. 6, 62-81.
- [12] Babakus, Emin., & Gregory, W. Boller.(1992). An Empirical Assessment of the SERVQUAL Scale. *Journal of Business Research*, vol.24, 253-268.
- [13] Bajtelsmit, V. L., & Bernasek, A. (1996). Why do women invest differently than men?. *Financial Counseling &Planning*, vol.7,pp. 1-10.accessed on 12 April 2014.from <http://u.osu.edu/hanna.1/financial-counseling-and-planning/7-2/bajtel>.
- [14] Barber, Brand, M. (2011), Behavior of individual investors. retrieved on 15May 2015 from <http://ssrn.com/abstract=1872211>
- [15] Bauer, R.A. (1960). Consumer behavior &risk taking, in *Dynamic Marketing for a Changing World*,. *American Marketing Association*, U.S.A,389.
- [16] Beerli, A., Martin, J. D., &Quintana, A.(2004).A model of customer loyalty in the retail banking market. *European Journal of Marketing*, 38(2), 253-275.
- [17] Bell, Simon, J., Seigyoung, Auh., & Karen, Smalley. (2005). Customer Relationship Dynamics: Service Quality &Customer Loyalty in the Context of Varying Levels of Customer Expertise &Switching Costs.*Journal of the academy of marketing science*,16,74-94.
- [18] Bell, Simon, J.,& Andreas B. Eisingerich. (2007)."The paradox of customer education: Customer expertise &loyalty in the financial services industry". *European Journal of Marketing*, 41(5), 466 - 486.

- [19] Bennett, R. (1996). Relationship formation & governance in consumer markets: transactional versus the behaviourist approach. *Journal of Marketing*, 12(5), 417-436.
- [20] Bhushan, P., & Medury, Y. (2013). Gender Differences in Investment Behaviour among Employees. *Asian Journal of Research in Business Economics & Management*, 3 (12), 147-157.
- [21] Bimal, Anjum, & Ramandeep Saini., (2011). Investors' awareness & perception about mutual funds. *International Journal of Multidisciplinary Research*, 1(1).
- [22] Bitner, M.J. (1990). Evaluating service encounters: the effects of physical surroundings & employee responses. *Journal of Marketing*, 54 (2), 69-82.
- [23] Bitner, M.J., Booms, B. & Tetreault, M., (1990). The service encounter: diagnosing favorable & unfavorable incidents. *Journal of Marketing*, Vol. 54 No. 1, 71-84.
- [24] Bitner, M.J., Booms, B.H., & Mohr, L.A. (1994). Critical Service Encounters: The Employee Viewpoint. *Journal of Marketing*, 58(4), 95-106.
- [25] Black, N. J., Lockett, A., Ennew, C., Winklhofer, H., McKechnie, S. (2002) Modelling consumer choice of distribution channel: an illustration from financial services. *International Journal of Bank Marketing*, 20, 161-173.
- [26] Bodla, B.S. & Garg Asish. (2007). 'Performance of Mutual Funds in India-An Empirical Study of Growth Schemes'. *GITAM Journal of Management*, 5(4), 29-43.
- [27] Bodnaruk, A., & Simonov, A. (2015). Do financial experts make better investment decisions?. *Journal of Financial Intermediation*, 24(4), 514-536.

- [28] Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A Dynamic Model of Service Quality: From Expectations to behavioral Intentions. *Journal of Marketing Research*, 30(1),7-27.
- [29] Brand, M. Barber. (2011), Behavior of individual investors. retrieved on 15May 2015 from <http://ssrn.com/abstract=1872211>.
- [30] Capon, Noel., Gavan, J. Fitzsimons., & Russalan, Prince. (1996).An Individual Level Analysis of the Mutual Fund Investment Decision. *Journal of financial services research*, 10,59-88.
- [31] Capon, Noel., Gavan, J. Fitzsimons., &Rick, Weingarten. (1994). Affluent Investors &Mutual Fund Purchases. *International Journal of Bank Marketing* ,12(3), 17-25.
- [32] Carhart, Mark M. (1997).On Persistence in Mutual Fund Performance. *Journal of Finance*, 52, (1), 57-82.
- [33] Chen, H., & Volpe, R. P., (1998).An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 22.
- [34] Chingang, Nde Daniel., & Lukong Paul Berinyuy. (2010).Using the SERVQUAL Model to assess Service Quality &Customer Satisfaction, An Empirical study of grocery stores in Umea.Master Thesis, Umea School of Business.
- [35] Cho, Jinsook., & Jinkook Lee.( 2006). “An integrated model of risk & riskreducing strategies”. *Journal of Business Research*, 59(1), 112-120.
- [36] Chordia, T. (1996). The structure of mutual fund charges. *Journal of Financial Economics*, 41, 3-39.
- [37] Coggin, T. D., F. J. Fabozzi., & S. Rahman. (1993). The investment performance of U.S. equity pension fund managers: An empirical investigation. *Journal of Finance*, 48, 1039–1055.



- [38] Cronin, J. J. & Taylor, S. A. (1992), Measuring Service Quality: A Reexamination & Extension. *Journal of Marketing*, 56, 55-68.
- [39] Cronin, J. Joseph., & Steven A. Taylor. (1992), Measuring Service Quality: A Reexamination & Extension, *Journal of Marketing*, 56 (3) 55-68, retrieved on 8<sup>th</sup> April 2015 from <http://www.jstor.org>.
- [40] Cumby, R.E.; Glen J.D., (1990). "Evaluating the performance of international mutual funds". *The Journal of Finance*, vol. 45 (2), 497–521.
- [41] Dabholkar, P.A., Shepherd, D.C. & Thorpe, D.I. (2000). A comprehensive framework for service quality: an investigation of critical conceptual & measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139-173.
- [42] Dahlquist, M., Engstrom, S., & Soderlind, P. (2000). "Performance & characteristics of Swedish mutual funds". *Journal of Financial & Quantitative Analysis*, vol. 35 (3), 409–423.
- [43] David, Trafimow. (1996). The Importance of Attitudes in the Prediction of College Students' Intentions to Drink Alcohol. *Journal of applied social psychology*, 26,( 24), 2167–2188.
- [44] De George R T (1990), Business ethics: 3<sup>rd</sup> edition (pp.81-87). Macmillan Publishing, New York.
- [45] Deaux, K., & E. Farris. (1977). Attributing causes for one's own performance, the effects of sex, norms & outcome. *Journal of research in personality*, 11, 59-72.
- [46] Deepak., Sirdeshmukh., Jagdip, Singh., & Barry, Sabol. (2012). Consumer trust, value, & loyalty in relational exchanges. *Journal of marketing*, 66, 15-37.

- [47] Desigan, C. Gnana., S. Kalaiselvi.,L. Anusuyaet. (2006). Women Investors' Perception towards Investment: An empirical Study. *Indian Journal of Marketing*, 36(4).
- [48] Devlin, J.F., Gwynne, A.L., Ennew, C.T. (2002). 'The Antecedents of Service Expectations'. *The Service Industries Journal*, 22(4), 117–152.
- [49] Diacon, S. R., & Ennew, C. T. (1996). "Ethical issues in insurance marketing in the UK." *European Journal of Marketing*, 30(5):67.
- [50] Diacon, Stephen R., Christine T. Ennew. (1996). Ethical issues in insurance marketing in the UK. *European Journal of Marketing*. 30 (5), 67-80.
- [51] Donnelly, James H. Jr.; Berry, Leonard L., Thompson, Thomas W. (1985), *Marketing Financial Services: A Strategic Vision*, Homewood, Ill.: Dow Jones-Irwin, p.113.
- [52] Dur&,B. Robert., Newby Rick.,&Saghani, Jay.(2008).An Intimate Portrait of the Individual Investor. *Journal of Behavioral Finance*, 9 (4),pp. 193 - 208.
- [53] East, R. (1997). "Consumer Behavior: Advances & Applications in Marketing." Prentice-Hall, London.
- [54] Egan, J.(2004), *Relationship Marketing: Exploring Relational Strategies in Marketing*, *European Journal of Marketing*, 38.1(2), 276-278.
- [55] Einhorn, H., & Hogarth, R.(1981). Behavioral Decision Theory: Processes of Judgment And Choice. *Annual Review of Psychology* 32, 53-88.
- [56] Elton, E. J., & Gruber, M. I.(1989). Modern portfolio theory & empirical work. *Journal of Finance*,(3),pp. 875-899.
- [57] Elton, J. Edwin., Martin, J. Gruber., & Christopher, R. Blake. (1996). The persistence of Risk adjusted mutual fund performance. *The Journal of Business*, Vol 69(2), 133-157.

- [58] Engel, J. F., Blackwell, R. D., & Miniard, P. W., (1995), *Consumer Behavior* (8th Ed.), Chicago: Dryden Press.
- [59] Ennew, Christine T. and Martin R. Binks. 1999. "The Impact of Participative Service Relationships on Quality, Satisfaction and Retention: An Exploratory Study." *Journal of Business Research* 46 (October): 121-132.
- [60] Fama, E. (1972). "Components of investment performance" *Journal of Finance*, vol. 27 (2), 551–567.
- [61] Fama, E. F., & French, K. R. (1998). Value versus Growth: The International Evidence. *Journal of Finance*, 53, 1975–1999.
- [62] Fama, Eugene, F., & Michael, C. Jensen. (1986). Agency Problems & Residual Claims. *Journal of Law & Economics*, 26(2).
- [63] Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. MA: Addison-Wesley.
- [64] Funfgeld, B., & Wang, M. (2009). 'Attitudes & behavior in everyday finance: Evidence from Switzerland'. *International Journal of Bank Marketing*, 27 (2): 108-128.
- [65] Gallo, J. G., & Swanson, P. E., (1996). "Comparative measures of performance for U.S.-based international equity mutual funds". *Journal of Banking & Finance*, vol. 20, 1635–1650.
- [66] Garvin, D.A. (1984). What does product quality really mean?. *Sloan Management Review*, 25-39.
- [67] Goetzmann, W.N., & Ibbotson, R. (1994). "Do winners repeat? Patterns in mutual fund return behavior". *The Journal of Portfolio Management*, 9–18.
- [68] Goswami, Paromita. (2007). Customer Satisfaction with Service Quality in the Life Insurance Industry in India. *The ICFAI Journal of Services Marketing*, 5(1), 25 - 30.

- [69] Grinblatt, M., & Titman, S. (1989). "Mutual fund performance: An analysis of quarterly portfolio holdings". *Journal of Business*, vol. 62(3), pp. 393-416.
- [70] Grinblatt, M., & Titman, S. (1992). "The persistence of mutual fund performance", *The Journal of Finance*, vol. 47 (5), 1977-1984.
- [71] Grinblatt, Mark., & Titman Sheridan. (1993). Performance Measurement without Benchmarks: An Examination of Mutual Fund Returns. *The Journal of Business*, 1993, vol. 66, issue 1, 47-68
- [72] Gronroos, C. (1982). *Strategic Management & Marketing in the Service Sector*, Swedish School of Economics & Business Administration, Helsinki.
- [73] Gronroos, C. (1984). 'A service quality model & its marketing implications'. *European Journal of Marketing*, Vol. 18 No. 4, 36-44.
- [74] Gronroos, C. (2001). The perceived service quality concept - a mistake? *Managing Service Quality*, Vol. 11 (3), 150-152.
- [75] Gummesson, E., Edvardsson, B. & Gustavsson B.O. (Eds.). (1991). *Service quality. A holistic view: Multidisciplinary & Multinational Perspectives*. Lexington Books, Lexington.
- [76] Gupta L.C., Naveen Jain & team. (2009). "Indian Household Investors Survey-2004". Society for Capital Market Research & Development, Delhi.
- [77] Gupta, M., & Chander S. (2011). Consideration of Sources of Information as Selection Criteria in Mutual Fund Purchase: A Comparative Study of Retail & Nonretail Investors. *The IUP Journal of Applied Finance*, 17 (1):27-42.
- [78] Gupta, Mohit., & Subhash, Chander. (2011). "Consideration of Sources of Information's Selection Criteria in Mutual Fund

- Purchases“ a Comparative Study of Retail &Non-Retail Investors.”  
*IUP Journal of Applied Finance* 17(1), 27-42.
- [79] Gupta, Sunil. (1998). "Impact of Sales Promotions on When, What, &How Much to buy." *Journal of Marketing Research*, 25, 342-355.
- [80] Gurunathan, Balanaga, K.(2007), An Investors' Requirements in Indian Securities Market. *Delhi Business Review*, 8(10), 39.
- [81] Jaspal Singh and Subhash Chander. (2004). An Empirical Analysis of Perceptions of Investors towards Mutual Funds. *Finance India Journal*, vol. 18 (4), 1673-1692.
- [82] Harrison, T. (2000). Financial services marketing. Pearson Education Limited, Essex.
- [83] Hartline, Michael D., &O. C. Ferrell. (1996). “The Management of Customer-Contact Service Employees: An Empirical Investigation.” *Journal of Marketing* 60,52-70.
- [84] Hendricks, Darryll., Jayendu, Patel., & Richard Zeckhauser. (1993). “Hot Hands in Mutual Funds: Short-run Persistence of Relative Performance 1974-1988.” *Journal of Finance*, 48(1), 93- 130.
- [85] Heskett, J.L., Sasser, W.E. Jr., &Schlesinger, L.A. (1997). *The Service-Profit Chain*.Free Press, New York.
- [86] Huhmann, Bruce A., & Nalinaksha Bhattacharyya. (2005), Does mutual fund advertising provide necessary investment information?. *The International Journal of Bank Marketing*, 23(4), 296-316
- [87] Indro, D.C., Jiang, C.X., Patuwo, B.E., & Zhang, G.P. (1999). “Predicting mutual fund performance using artificial neural networks.”, *Omega*, vol. 27, 373–380.

- [88] Investopedia, Modern Portfolio Theory (MPT). retrieved on 2 August 2017 from [www.investopedia.com/walkthrough/fund-guide/.../modern-portfolio-theory-mpt.aspx](http://www.investopedia.com/walkthrough/fund-guide/.../modern-portfolio-theory-mpt.aspx).
- [89] Investopedia,.Efficient Market Hypothesis (EMH). retrieved on 2 August 2017 from [www.investopedia.com/terms/e/efficientmarkethypothesis.asp](http://www.investopedia.com/terms/e/efficientmarkethypothesis.asp).
- [90] Ippolito, R. (1989). "Efficiency with Costly Information: A Study of Mutual Fund Performance". *Quarterly Journal of Economics*, 104, 1-23.
- [91] Ippolito, R. (1992). "Consumer Reaction to measures of Poor Quality: Evidence from the Mutual Fund Industry." *Journal of Law & Economics*, 35, 45-70.
- [92] Jamal, A., & Naser, K. (2003). Factors influencing customer satisfaction in the retail banking sector in Pakistan. *International Journal of Commerce & Management*, 13(2): 29-53.
- [93] Jambodekar, Madhusudan V.(1996). "Marketing Strategies of Mutual Funds – Current Practices & Future Directions". Working Paper, UTI – IIMB Centre for Capital Markets Education & Research, Bangalore.
- [94] Jensen, C.M. (1968). "The Performance of Mutual Funds in the Period 1945–1964". *Journal of Finance*, vol. 23, 389–416.
- [95] Joiner, T.A., Leveson, L., & Langfield-Smith, K. (2002). Technical Language, Advice Understandability, & Perceptions of Expertise & Trustworthiness: the Case of the Financial Planner. *Australian Journal of Management*, 27(1), 25-43.
- [96] Jones, M.A., Lesseig, V.P., Smythe, T.I. & Taylor, V.A.(2007). "Mutual fund advertising: Should investors take notice?." *Journal of Financial Services Marketing*, 12 (3): 242–254.

- [97] Jordan, J., &Kaas, K.P. (2002). Advertising in the mutual fund business: The role of judgmental heuristics in private investors' evaluation of risk &return. *Journal of Financial Services Marketing*, 7 (2),129–140.
- [98] Kahn, R. N., &Rudd, A. (1995). “Does historical performance predict future performance?”. *Financial Analysts Journal*, (November–December), 43–53.
- [99] Kane, Snatini., &Aber. (1990), “Lessons from the Growth History of Mutual Funds”. Working paper, Harvard University, Cambridge, MA.
- [100] Kang ,Gi Du., Jeffrey James., (2004). "Service quality dimensions: an examination of Gronroos's service quality model". *Journal of service theory and practice*, 14(4), 266-277.
- [101] Kanti ,Sanjay, Das. (2012). Investment Behavior of Middle Class Households: An Empirical Analysis. *Asian journal of management*,3 (3) available at. ISSN Online : 2321-5763.
- [102] Kahneman, D. & A. Tversky. (1979). Prospect Theory: An Analysis Of Decision Under Risk. *Econometrica* 47, 263-291.
- [103] Kathuria ,Lalit, Mohan., & Kanika Singhanian., (2012). Investment Decision Making: A Gender-Based Study of Private Sector Bank Employees. *The IUP Journal of Behavioural Finance*, 9(1), 45-56.
- [104] Kaul, Kuldip., & Rachana Gupt. (2006). 'Mutual funds: Mutually yours'. *Portfolio Organizer*, 7(9), 33-41.
- [105] Keller, Kevin Lane. (1999).“Designing &Implementing Branding Strategies.” *Journal of Brand &Management*, 6 (5), 315-331.
- [106] Kheng,Lo, Liang. (2010).The Impact of Service Quality on Customer Loyalty: A Study of Banks in Penang, Malaysia, *International Journal of Marketing Studies* 2 (2).

- [107] Kozup, J., Howlett, E., & M. Pagano. (2008). 'The effects of summary information on consumer perceptions of mutual fund characteristics'. *Journal of Consumer Affairs*, 42(1), 37-59.
- [108] KPMG.(2009) The Indian mutual fund industry The future in a dynamic environment outlook for 2015, CII.
- [109] Ladhari, Riadh, (2009). Service quality, emotional satisfaction, and behavioural intentions: A study in the hotel industry, *Managing Service Quality. International Journal*, Vol. 19 ( 3), 308-331.
- [110] Lakshmi, R. (2009). Investor Servicing: Where is the Future? *Southern Economist*, Vol.44 (18), 64.
- [111] Latha. (2016). Investor's behaviour towards investment intention: A study Of investors of mutual funds in Nagapattinam district. *International Journal of Innovative Research and Advanced Studies*, Vol 3(9).
- [112] Lee. J., & Marlowe, J. (2003). How consumers choose a Financial Institution: Decision Making criteria &heuristics. *International Journal of Bank Marketing*, 24(2), 53- 71.
- [113] Lehmann, B.N.,& Modest, D.M. (1987). "Mutual Fund Performance Evaluation: A Comparison of Benchmarks &Benchmark Comparisons". *The Journal of Finance*, vol. 42 (2), June, 233–265.
- [114] Lewis, B.R., & Mitchell, V.W. (1990). Defining &measuring the quality of customer service. *Marketing Intelligence & Planning*, 8, (6), 11-17.
- [115] Liang, Chiung-Ju., Wen-Hung Wang., & Jillian Dawes Farquhar. (2009). The influence of customer perceptions on financial performance in financial services. *International Journal of Bank Marketing* Vol. 27(2), 129-149.
- [116] Lichtenstein et al. (1993), Price perceptions &consumer shopping behavior: A field study. *Journal of Marketing Research*, 30(2), 234- 245.



- [117] Liljander, Veronica., & Tore Strandvik. (1993). Estimating Zones of Tolerance in Perceived Service Quality & Perceived Service Value. *International Journal of Service Industry Management*, 4 (2), 6-28.
- [118] Malkiel, B. G., 2003. Passive investment strategies & efficient markets, *European Financial Management*, 9, 1-10.
- [119] Marisetty V.B. & Venugopal B. G. (2010). Are Mutual Funds Sold or Bought? Evidence from the Indian Mutual Funds Market. Retrieved on 10th march 2015 from <http://www.igidr.ac.in>.
- [120] Martenson, Rita. (2008). How financial advisors affect behavioral loyalty. *International Journal of Bank Marketing*, 26 (2), 119-147, retrieved on 8th April 2015 from <https://doi.org/10.1108/02652320810852781>.
- [121] Mishra, Sanjay., & Manoj kumar.(2010). “How mutual fund investors' objective & subjective knowledge impacts their information search & processing behaviour”. *Journal of Financial Services Marketing*, 16(1), 27-41.
- [122] Moorman C., Deshpande, R., & Zaltman G. (1993). “Factors affecting trust in market research relationships.” *Journal of Marketing*, 57: 81-101.
- [123] Morey. M.R., & Morey, R.C. (1999). “Mutual fund performance appraisals: a multi-horizon perspective with endogenous benchmarking”. *Omega, International Journal of Management Science*, vol. 27, 241–258.
- [124] Morgan, R.M., & Hunt, S.D., (1994). “The commitment-trust theory of relationship marketing”. *Journal of Marketing*, 58, (7), 20-38.
- [125] Murthi, B.P.S., Choi, Y.K., Desai, P. (1997). “Efficiency of mutual funds & portfolio performance measurement: A non-parametric approach”. *European Journal of Operational Research*, vol. 98, 408-418.

- [126] Nancy,Jo,Black.,Andy,Lockett.,Christine,Ennew.,Heidi,Winkhofer.,& Sally,Mckechnie. (2002). 'Modeling consumer choice of distribution channels: an illustration from financial services'. *The International Journal of Bank Marketing*, 20:4/5, 161-173.
- [127] Nandagopal, Sathish et al., (2011). "Investors perception towards investment in mutual funds". *International journal of research in computer application & management*, 4 , 40-44.
- [128] Odean, T. (1999). Do investors trade too much?. *American Economic Review* 89,pp. 1279–1298.
- [129] Palmiter, Alan, R., & Ahmed E. Taha. (2012). "Mutual fund performance advertising: inherently & materially misleading?." *Georgia law review* 46(2).
- [130] Panda K., Tapan N.P., & Tripathi.Recent Trends in Marketing of Public Issues: An Empirical Study of Investors Perception .*Journal of Applied Finance*, Vol. 7, No.1, 2007, pp: 1-6.
- [131] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research. *Journal of Marketing*, 58,pp. 111-124.
- [132] Parasuraman, A., Zeithaml, V. A., & Berry, L. L.(1985).A Conceptual Model of Service Quality &its Implications for Future Research. *Journal of Marketing*, 49, 41-50.
- [133] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988).SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality. *Journal of Retailing*, 64 (1),pp.12-40.
- [134] Park, Eunil., Sanghoon, Lee, Sang, Jib, Kwon., & Angel P. del Pobil. (2015).“Determinants of Behavioral Intention to Use South Korean Airline Services: Effects of Service Quality &Corporate Social

- Responsibility”. Sustainability .retrieved on 15 March 2016 from [www.mdpi.com/journal/sustainability](http://www.mdpi.com/journal/sustainability).
- [135] Parilti Nurettin., Banu Kulter Demirgüneş ., & Bulent Ozsaçmaci (2015). Ethical issues in marketing an application for understanding ethical decision making. Accessed on 16 may 2017 from <https://www.researchgate>.
- [136] Patel, J., Zeckhauser, R. &Hendricks, D. (1992). Investment Flows & Performance: Evidence from Mutual Funds, Cross Border Investments &New Issues.working paper, Harvard University, Cambridge, MA.
- [137] Pathak,Bharati V.(2006). “Indian Financial System”(P.2)Pearson Edition, First Impression , P. 2.
- [138] Pendarakic, K., & Zopounidis. (2002). Evaluating Mutual Fund Performance: An Overview.*New Trends in Banking Management*, conference, 251-275.
- [139] Petrick, J. F., & Backman, S. J.(2002). An examination of the construct of perceived value for the prediction of golf travelers intentions to revisit.*Journal of Travel Research*, 41(1), 38-45.
- [140] Pierce, James L.(1948). Monetary &Economics, John Wiely & Sons, (p.81) Pierce.
- [141] Rajeswari, T. R., &Moorthy, V. R.(2001). An Empirical Study on Factors Influencing the Mutual Fund/Scheme Selection by Retail Investors.,Retrieved on 5 September 2011 from <http://www.utiiicm.com/cmc/pdf/2001>.
- [142] Ramamurthy, B M., & Reddy, Sudarsana. (2005). Recent Trends in Mutual Fund Industry.*SCMS Journal of Indian Management*, July September.

- [143] Ramasamy, B., & Yeung, M. C. H. (2003). Evaluating mutual funds in an emerging market: factors that matter to financial advisors. *The International Journal of Bank Marketing*, 21(3), 122-136.
- [144] Saha, Soumya., & Dey, Munmun. (2011). Investors Perception of Mutual Fund Investment. *The IUP Journal of Management Research* 10 (2).
- [145] Saraoglu, H. & M.L. Deltzer. (2002). A Sensible Mutual Fund Selection Model. *Financial Analysts Journal*, 60-72.
- [146] Sasaki, R., & Rathiha, R. (2008). 'Mutual Funds & Investors interest unpublished working paper.
- [147] SEBI-NCAER, (2011). How Households Save & Invest: Evidence from NCAER Household Survey, SEBI, Mumbai. Retrieved on 11 August 2015 from [http://www.sebi.gov.in/sebi\\_data/attachdocs/1326345117894.pdf](http://www.sebi.gov.in/sebi_data/attachdocs/1326345117894.pdf).
- [148] Shah, F.T., K. Khan, A. Imam., & M. Sadiqa. (2015). Impact of service quality on customer satisfaction of banking sector employees: a study of lahore, Punjab. *Vidyabharati International Interdisciplinary Research Journal*, 4(1), 54-60.
- [149] Sharma, Neeru., & Paul G. Patterson. (2000). Switching Costs, Alternative Attractiveness & Experience as Moderators of Relationship Commitment in Professional, Consumer Services. *International Journal of Service Industry Management*, 11 (5), 470-490.
- [150] Sharpe, W.F. (1966). Mutual Fund Performance. *Journal of Business*, vol. 39, 119-138.
- [151] Sikidar, Sujit, Singh., & Amrit Pal. (1996). Financial Services: Investment in Equity & Mutual Funds – A Behavioural Study. in Bhatia B.S., & Batra G.S.(ed.) *Management of Financial Services*, Deep & Deep Publications, New Delhi, 136-145.

- [152] Simon, H. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics* 69, 99-118.
- [153] Singh Y.P., & Vanita. (2002). Mutual Fund Investors' Perceptions & Preferences: A Survey. *The Indian Journal of Commerce*, 55(3), 8-20.
- [154] Singh, Chander. (2004). Performance of mutual funds in India- an empirical evidence. *ICFAI Journal of applied finance*, December, 81-98.
- [155] Sirri, Erik R., & Peter Tufano. (1993). Competition & change in the mutual fund industry. Samuel Hayes III, ed, *Financial services: perspective & challenges* (HBS, Press, Boston, Mass).
- [156] Snizek, K. Janet., & Swol, Van. (2001) Trust, Confidence, and Expertise in a Judge-Advisor System. *Organizational Behavior and Human Decision Processes*, Vol. 84(2), 288-307.
- [157] Somasundaram, V. K. (1999). A Study on Savings & Investment Pattern of Salaried Class in Coimbatore District, Ph.D Thesis, Bharathiyar University, Coimbatore, Tamil Nadu.
- [158] Syed, Tabassum, Sultana. (2010). An Empirical Study of Indian Individual Investors Behaviour. *Global Journal of Finance & Management*, 2(1), 19-33.
- [159] Tax, Stephen S., Stephen W. Brown., & Murali Chandrashekar. (1998). Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing. *Journal of Marketing*, 62,( 2), 60-76.
- [160] Tomer , Joity., & Khan Nisar Ahmad.(2014). Problems & Prospects of Mutual Funds in India. *Journal of Commerce & Management Thought*, 5(3), 378-408.
- [161] Walia, Nidhi., & Kiran Ravi.(2009). An Analysis of Investor's Risk Perception towards Mutual Funds Services. *International journal of business & management* , 4 (5).

- [162] Xin, Guo., Angus Duff, Mario Hair. (2008). Service quality measurement in the Chinese corporate banking market. *International Journal of Bank Marketing*, 26( 5), 305-327.
- [163] Ya,Hui, Wang., &Cing-Fen Tsai. (2014). The relationship between image &purchase intention: evidence from award winning mutual funds. *The International Journal of Business &Finance Research* , 8(2).
- [164] Yi, Shun Wang., Ming-Cheng Wu. & Hsiu-Yuan Wang. (2009). Investigating the determinants &age &gender differences in the acceptance of mobile learning. *British journal of education technology*, 40(1), 92-118.
- [165] Zeithaml, V.A. (1988). Consumer Perceptions of price, quality & value: A means-end model &synthesis of evidence. *Journal of Marketing*, 52: 2-22.
- [166] Zeithaml, VA., Berry, LL., Parasuraman, A.(1996). The behavioral consequences service quality. *Journal of Marketing*, 60(2), 31-46.
- [167] Zeithmal, Valarie & Mary Jo Bitner. (2000).Service marketing: integrating customer focus across the firm .2nd ed. Boston, Irwin/ Mc Graw hill retrieved on 2 august 2011 from <https://books.google.co.in/books>.

.....❧.....

## RESEARCH METHODOLOGY

<i>Contents</i>	4.1 <i>Research Problem</i>
	4.2 <i>Significance of the Study</i>
	4.3 <i>Objectives of the Study</i>
	4.4 <i>Hypotheses of the Study</i>
	4.5 <i>Research Design</i>
	4.6 <i>Limitations of the Study</i>
	4.7 <i>Operational Definitions</i>

### 4.1 Research Problem

The world mutual fund industry has recorded phenomenal growth in the last quarter century, with the global assets under management increasing from US\$ 4.0 trillion in 1993 to US\$40.36 trillion in 2016, registering more than 10 fold increase (ICI Global, 2017). In India mutual fund investment has been relatively low, but is in the growth phase; the assets under management has doubled in the last three years, from ₹ 10 trillion (₹ 10 Lakh Crore) in 2014 to ₹ 20 trillion by mid-2017. However, the mutual fund investment contribution to GDP in India has been low (7.33% in 2015), while it is over 90% in the U.S and around 50% in European countries.

Although household investors (retail investors) contribute much of the investments in mutual funds around the world, the retail investors' contribution to mutual funds is rather limited in India. While 84% of the mutual fund investment in the U.S comes from households, in India it is around 45%, and much of it (27%) comes from high net worth individuals. Less than two percent of the Indian households invest in mutual funds.

## **4.2 Significance of the Study**

Although there have been several studies on mutual funds investment and investment behaviour in India, very few studies have addressed the issue of the relatively low response of Indian retail investors towards mutual fund investment. The study attempts to analyse the perception and behaviour of retail investors towards mutual fund investment. However, in context of low investments by retail investors, the perceptions and behaviour of the investors have a bearing on the factors inhibiting retail investment. Identifying all the relevant factors leading to low retail mutual fund investment was not possible, as the scope of the study was limited. However, the issues analysed in the study, using primary as well as secondary data, address at least indirectly the problem of limited retail mutual fund investment in the country.

The focus of the study was by and large limited to the marketing issues relevant to mutual fund investment. Perceptions of the consumers on issues pertaining to mutual fund investment and their influence on behavioural intentions have been subjected to empirical analysis. After analysing the dynamics of the current mutual fund investment patterns,



the study attempts to develop structural equation model relating mutual fund marketing issues with investors' behavioural intentions. Further, the influence of perceived service quality of the services rendered by distributors and agents on the behavioural intentions of the investors has also been analysed, using structural equation model.

Serious academic studies addressing the dilemma in the retail mutual fund sector have been lacking. There have been very few studies addressing the marketing issues of the Indian mutual fund sector. Further, hardly any study has been done relating the service quality of mutual fund distributors and agents on the behavioural intentions of the investors. Analysis of such issues in the context of the low response of retail investors towards mutual fund makes the study significant.

The study is, therefore, significant to regulators such as SEBI, industry associations, policy makers in the government and strategist in the asset management companies (AMCs).

### **4.3 Objectives of the Study**

The broad objective of the study is to find the perception and behavior of retail investors towards mutual fund investment and analyse the factors that influence retail investors in investing in mutual funds.

The specific objectives of the study are the following:

- 1) Identify the preference of retail investors for different investment options such as bank deposits, insurance, security market investments and mutual funds

- 2) Identify the perception of retail mutual fund investors towards the different investment options, in terms of risk, return and liquidity.
- 3) Analyse the investment patterns of mutual fund retail investors, in terms size of investment, years of experience in mutual fund investing, number of AMCs used and source of purchase.
- 4) Analyse the fund preferences of mutual fund investors and their fund benefit expectations.
- 5) Analyse the information sources preferred by mutual fund investors for product choice
- 6) Identify the selection criteria used for product choice by mutual fund investors.
- 7) Study the perception of the investors towards major marketing related issues in the mutual fund sector.
- 8) Analyze the influence of issues related to product, price, promotion and distribution on the behavioral intention of mutual fund investors.
- 9) Analyse the influence of service quality of distributors and agents on the behavioral intentions of mutual fund investors
- 10) Identify the moderating role of investment expertise in the relationship between perceived service quality and behavioral intention

#### 4.4 Hypotheses of the Study

- H01: *There is no gender difference in risk perception with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H02: *There is no age difference in risk perception with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H03: *There is no difference in terms of levels of education in risk perception with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H04: *There is no difference in risk perception among people with different occupations in respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H05: *There is no gender difference in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H06: *There is no difference in terms of age in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H07: *There is no difference in terms of the levels of education in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*

- H08: *There is no difference in terms of occupation in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H09: *There is no gender difference in perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H010: *There is no difference in terms of age in the perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H011: *There is no difference in terms of levels of education in perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.*
- H012: *There is no difference in terms of occupation in perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment*
- H013: *There is no significant relationship between the gender and the amount of mutual fund investment*
- H014: *There is no significant relationship between the age and the amount of mutual fund investment*
- H015: *There is no significant relationship between the level of educational of the investor and the amount of mutual fund investment*
- H016: *There is no significant relationship between the occupation and the amount of mutual fund investment*

- H017: *There is no significant relationship between age and total years of experience in mutual fund.*
- H018: *There is no significant relationship between gender and the number of mutual fund AMCs chosen for investment*
- H019: *There is no significant relationship between age and the number of mutual fund AMCs chosen for investment.*
- H020: *There is no significant relationship between level of education and the number of mutual fund AMCs chosen for investment*
- H021: *There is no significant relationship between gender and preferred source of mutual fund purchase*
- H022: *There is no significant relationship between age of the respondent and the preferred source of mutual fund purchase*
- H023: *There is no significant relationship between level of education of the respondent and the preferred source of the mutual fund purchase*
- H024: *There is no significant relationship between occupation of the respondent and preferred source of the mutual fund purchase*
- H025: *There is no significant difference between the genders in their preferences for the type of mutual funds*
- H026: *There is no significant difference among different age groups in their preferences for the type of mutual funds*
- H027: *There is no significant relationship between gender and fund benefit expectation.*

- H028: *There is no significant relationship between age and fund benefit expectation*
- H029: *There is no significant relationship between level of educational and fund benefit expectations.*
- H030: *There is no significant relationship between occupation of the respondent and fund benefit expectation*
- H031: *There is no difference in fund quality selection criteria for mutual fund purchase among the equity fund and fixed income fund preferred investors.*
- H032: *There is no difference in fund sponsor quality selection criteria for mutual fund purchase among the equity fund and fixed income fund preferred investors*
- H033: *There is no difference in service substance selection criteria for mutual fund purchase among the equity fund and fixed income fund preferred investors*
- H34: *Product issues significantly influence the behavioural intention of the mutual fund investors*
- H35: *Pricing issues significantly influence the behavioural intention of the mutual fund investors*
- H36: *Promotional issues significantly influence the behavioural intention of the mutual fund investors*
- H37: *Distributional issues significantly influence the behavioural intention of the mutual fund investors*

- H38: *Perceived technical service quality has significant influence on the behavioural intention of the mutual fund investors*
- H39: *Perceived functional service quality has significant influence on the behavioural intention of the mutual fund investors*
- H40: *The positive relationship between technical service quality and behavioural intention will be stronger where clients have high investment expertise.*
- H41: *The positive relationship between functional service quality and behavioural intention will be weaker where clients have high investment expertise*

## **4.5 Research Design**

The study relies on both primary and secondary data. Primary data for the study have been collected through a sample survey among mutual fund investors in Cochin. The major steps involved in the study are as follows:

- Desk research and secondary data
- Pilot study and research instrument
- Sample survey among mutual fund investors
- Data analysis
- Development of SEM models

### **4.5.1 Desk Research and Secondary Data**

A comprehensive study of the mutual fund industry has been carried out, covering the evolution as well as current status of the industry in

India and around the world. Development of the mutual fund industry in the developed and developing countries have been analysed using secondary data in order to put the status of the Indian mutual fund industry in the right context. The other issues addressed include alternate financial investment options used by households in India and in other countries. Trends in retail mutual fund investment have also been analysed with global and Indian perspectives.

As part of the literature survey, the rich research traditions in mutual funds in advanced countries have been reviewed, and adequate attention was given to the limited number of empirical studies carried out in India.

Previous studies, reports of research and consultancy organisations, industry associations and government departments, journal articles and newspaper reports and resources in reliable websites formed the sources of perspectives, concepts and secondary data.

#### **4.5.2 Pilot Study**

Prior to the formulation of the research problem, objectives and hypotheses, a qualitative study was undertaken involving semi-structured discussions with industry experts. Ten experts from the mutual fund industry, mainly executives associated with mutual fund distribution organisations and Independent Financial Advisors were involved in the semi-structured discussions. They belonged to five mutual fund distributors in Cochin.

Discussions were also held with some customers. Besides getting insight into the processes and the issues in the mutual funds industry,



these discussions and interviews helped the formation and validation of the research problem. The literature survey and the industry analysis, together with the expert opinion study, provided the theoretical and conceptual frame work for developing the research questions, objectives and hypotheses.

As preparation for the sample survey, a research schedule was developed. A pilot survey was conducted among 50 mutual fund investors for pre-testing the research schedule.

#### **4.5.3 Sample Survey**

A sample study was conducted among individual mutual fund investors. Individual investors formed the sampling units. They were drawn from the list of customers of five mutual fund distributors in Cochin. (The researcher is a former executive in one of these organisations.) Demographic variables were not considered for the selection of respondents. Both male and female respondents were included in the survey. List of customers obtained from the branch offices of these organisations in the nearby areas were also used to identify the respondents. From the list of customers of the mutual fund distribution organisations, mutual fund investors living in Cochin City and surrounding municipalities and Panchayats (within the Greater Cochin area) were identified.

#### **4.5.4 Sample Size**

The total number of mutual fund investors in the study area was unknown. Only the approximate customers of the offices and branches of the distributors were available. Hence a large population was assumed.

The sample size was determined based on aspects such as budgetary constraints, time limitation and sample size taken in similar studies.

A sample size of 500 respondents was decided, considering the rule of thumb that for a large population, a minimum sample size of 400 respondents would be sufficient. Further, a sample size of 500 respondents would be adequate for the kind of statistical analysis envisaged.

#### **4.5.5 Sampling Method**

Simple random sampling was used for respondent selection. Respondents have been drawn at random from the list of customers obtained from the distributors. The selected respondents were contacted to ascertain their willingness and availability to participate in the survey. The next person in the list was included, if the person originally identified was not available or willing.

#### **4.5.6 Data Collection**

Respondents were initially contacted over the phone to get appointments. The researcher personally interviewed them in most cases. Structured interviews were made. Around three hundred respondents were personally interviewed by the researcher.

Research schedules were also mailed to some respondents, after initially contacting them over the phone. It was followed up with further telephone calls. The response rate was low and 90 responses were received. Trained investigators were used for data collection and interview for the rest of the respondents. Four MBA students were engaged for data collection

after initial orientation and subsequent corrective instructions after a few interviews.

The completed schedules were varified, checking the completeness and reliability of data. Some of the schedules were rejected. Although the target was 500 respondents, the total valid responses were only 470.

#### **4.5.7 Research Instrument**

A detailed research schedule was prepared for data collection. Based on the information objectives of the study, relevant questions were included in the research schedule. Three rating scales were included in the schedule. To measure behavioural intention, a rating scale has been developed based on the scales developed by Riyadh Ladhari (2009) and Bitner (1990). The scale was modified for the study. For developing the structural equation model, relating investor's perceptions on mutual fund marketing issues and their influence on behavioural intension, a rating scale has been adopted from Diacon Stephen R Ennew and Christine T (1996). For measuring technical and functional service quality, a multi-item scale was adapted from Sharma and Patterson (1999) and Hartline and Ferrell's (1996).

The research schedule was pre-tested and modified through the pilot study.

#### **4.5.8 Data Analysis**

The data gathered from retail mutual fund investors through the sample survey were analysed using predetermined statistical tools. For the

analysis of much of the data, Chi Square analysis, Mann Whitney U test and Factor Analysis have been used, besides descriptive statistics.

In structural equation modeling, the initial process was ensuring the quality of data. As part of the data cleaning process, missing values of the response were checked. After the data cleaning process, exploratory factor analysis (EFA) has been done to identify the variables and loading. Structural equation modeling was done to study the linkages among the different variables. The data were standardised by the WarpPLS 5.0 software before analysis was carried out.

#### **4.5.9 Validity and Reliability of Measures**

Measurement models for all latent constructs were considered so as to find the causal relationship between the variables. The goodness of measures of the identified constructs were established through reliability and validity. The reliability has been measured by using Cronbach's coefficient and composite reliability.

Validity is the extent to which a scale or set of measures accurately represents the concept of interest (Hair et al., 2009) and ensures the ability of a Scale to measure the intended concept. Content validity of the research instrument used in the study was examined by the experts and the researcher.

Measurement of construct validity was the important steps in the research process. It explains how the theoretical concept is operationalised through the measurement construct. Convergent validity confirms that the scale is correlated with other known measures of the concept. Discriminant

validity ensures that the scale is sufficiently different from other similar concepts to be distinct. The validity and reliability item scales were measured through the WarpPLS 5.0 software. To assess the model fit, Kock (2012) recommended that the p-values for the average path coefficient (APC) and the average r-squared (ARS) be both lower than 0.05 and that the average variance inflation factor (AVIF) be lower than 5. The validity and reliability guidelines in Warp PLS 5.0 are as discussed in Table 4.1.

**Table 4.1: Validity/Reliability Guidelines in Warp PLS 5.0**

<b>S. No</b>	<b>Consideration</b>	<b>Guideline</b>
1	Cronbach's Alpha Coefficient	>0.7
2	Composite Reliability	>0.7
3	Average Variance Extracted (AVE)	>0.5
4	Convergent Validity	P values associated with loadings be lower than 0.05, and the loadings be greater than 0.5
5	Discriminant Validity	The square root of AVE should be higher than any of the correlations involving that latent variable

Finally all the latent variables in the model are measured and tested with a Warp PLS 5.0 guideline to predict the ability to represent the data and develop the model. The significant paths in the model are utilised for predicting the relationship between the variables.

## **4.6 Limitations of the Study**

This study has some inherent limitations. Some of the more pertinent limitations are discussed here.

The geographical scope of the study was limited to Cochin. Whether mutual fund investors in Cochin truly represent investors in other areas in the country is doubtful, particularly since mutual fund investment is concentrated in the metros in certain regions. With the limited scope of the study, it is however not possible to find a truly representative city or to enlarge the study to draw respondents from different cities, towns and villages.

The study was confined to mutual fund investors and the perceptions and behaviour of non investors were not considered. The very fact that they are non investors indicates that their perception about mutual fund would be different and that their investment behaviour would also be different. A study of the perceptions and attitudes of the non investors would have been very relevant to identify factors that inhibit retail mutual fund investment. Obviously, the findings of the study could be generalised only with reference to the current mutual fund investors.

The respondent selection was limited to mutual fund investors who deal through distributors and agents; investors who deal directly with AMCs or through banks were not included among the sample. Although mutual fund investors who deal through distributors are the majority, the other groups do not get participation in the study. However, these groups were not included because identification of direct customers was difficult

and the banks were not ready to provide information about their mutual fund customers.

The study design itself had some limitations. The demographic variables considered do not include income, social class, etc., on the presumption that reliable information on these variables would be difficult to obtain. While exploring the investment pattern of mutual fund investors, the extent of their participation in other investment avenues such as bank deposits, insurance and stock market investment could have been looked into. However, this was among the many issues that were not probed on account of the limited scope of the study.

Apart from the investment pattern of mutual fund investors, the study addressed the relationship between perception towards the different mutual fund issues and behavioral intention; the study further addressed the relationship between perceived service quality and behavioral intention. Data and analysis was limited to the perceived service quality pertaining to the agents and service providers. The service quality of the AMCs was not considered. The reason was that many mutual fund investors do not deal directly with the AMCs.

Limited dimensions of service quality were measured in the study. Other variable which influence the behavioral intention were not considered. While measuring behavioural intention, only the positive behavioral intentions were considered and the negative behavioral intentions were ignored.

Such limitations would constrain the scope for generalisations of some of the findings of the study. However, these are to a large extent inevitable limitations on account of the limited scope of the study as well as the time and resource constraints of the researcher.

#### **4.7 Operational Definitions**

**a) Fund quality**

Fund quality is an evaluative criterion for the investors in their product choices. Fund selection and product choices are related with the fund quality aspects. It is evaluated by the variables such as regular income, tax benefits, investment performance record, maturity of fund and assured return

**b) Fund sponsor quality**

Fund sponsor quality is operationalised in this study by the variables such as reputation of the AMC, company ownership, and management fee of the fund, age of fund, rating by rating agency, and well developed agency network.

**c) Service substance**

The concept of service substance is operationalised in terms of information from agents, facility of online services; response to inquiries, investor's grievance redress machinery, transparency in services and disclosure of net asset value (NAV).



**d) Product issue**

Product issue has been operationalised for the purpose of the study as measuring the investor's attitude towards certain issues associated with the product such as the complexity of the product, product proliferation, differentiation of the product, chances of monetary loss and regulatory framework

**e) Pricing issue**

The pricing issue element has been evaluated in the study by measuring the attitude of the investors regarding the cost of investment they have to bear in the time of investment, unexpected and additional charges for the redemption

**f) Promotional issue**

The promotional issues in the industry can be operationalised as promotion with personal interest, mis-selling and exaggeration of the product performance, deceptive marketing, etc.

**g) Distributional issues**

Distributional issues are operationalised by measuring availability of the branch network, delayed payment of valid claims, not selling the right product to the right customer, etc.

**h) Technical service Quality**

Technical service quality denotes measuring variables such as quality and accuracy of advice, meeting the expectation of the

expectations of customers, performing well in recommending and investing in good investment option, etc.

**i) Functional service quality**

Functional service quality is measured on the basis of how the service is delivered. It relates to the nature of the interaction between the service provider and customer and the process by which the core service is delivered. It can be measured by the service quality dimensions of tangible cues, empathy, and friendliness of staff.

**j) Investment expertise**

Product expertise will be given more confident for the better decision. Investment expertise can be measured by considering financial knowledge and experience of investor.

**k) Behavioural intention**

In this study, behavioral intentions are measured in terms of repurchase intention, willingness to pay more, recommend the product and positive word of mouth.

**l) Investor**

Mutual fund investor is operationally defined as an individual or house hold investor making investment in any of the mutual fund vehicles such as stocks, bonds, money market instruments such other assets. It does not include high net worth individuals or institutional investors.

## Reference

- [1] Bitner, M.J. (1990). Evaluating service encounters: the effects of physical surroundings & employee responses. *Journal of Marketing*, 54 (2), pp. 69-82.
- [2] Diacon, Stephen R., Christine T. Ennew. (1996). Ethical issues in insurance marketing in the UK. *European Journal of Marketing*.30 (5), PP.67-80.
- [3] ICI, Global (2017). A Review of Trends and Activities in the Investment Company Industry. ICI fact book ,57 edition.
- [4] Hartline, Michael D., & O. C. Ferrell. (1996). "The Management of Customer-Contact.
- [5] Service Employees: An Empirical Investigation." *Journal of Marketing* 60,pp.52-70.
- [6] Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis*, (7th ed.) Upper Saddle River, NJ: Prentice Hall.
- [7] Kock, N. (2012). *WarpPLS 3.0 User Manual*. ScriptWarp Systems, Laredo, Texas. Retrieved online on June 18, 2016 from <http://www.scriptwarp.com/warppls/UserManual.pdf>.
- [8] Ladhari, Riadh, (2009). Service quality, emotional satisfaction, and behavioural intentions: A study in the hotel industry, *Managing Service Quality: An International Journal*, Vol. 19 ( 3), 308-331.

- [9] Sharma, Neeru., &Paul G. Patterson. (2000). Switching Costs, Alternative Attractiveness &Experience as Moderators of Relationship Commitment in Professional, Consumer Services. *International Journal of Service Industry Management*, 11 (5), pp. 470-490.

.....❧.....

## DATA ANALYSIS - DYNAMICS OF MUTUAL FUND INVESTMENT DECISIONS: PERCEPTIONS AND PREFERENCES OF RETAIL INVESTORS

<i>Contents</i>	5.1 <i>Introduction</i>
	5.2 <i>Demographic Profile of the Respondents</i>
	5.3 <i>Investment Options and Perceptions on Risk, Return and Liquidity</i>
	5.4 <i>Investment Pattern of Mutual Fund Investors</i>
	5.5 <i>Fund Preference of Retail Mutual Fund Investors</i>
	5.6 <i>Fund Benefit Expectation of Retail Mutual Fund Investors</i>
	5.7 <i>Source of Information for Mutual Fund Investment Decision</i>
	5.8 <i>Product Selection Criteria of Mutual Fund Investors</i>

### 5.1 Introduction

The analysis of the empirical data collected through a survey among mutual fund investors is given in two chapters in this report. Descriptive analysis, hypothesis testing and structural equation modelling have been employed for data analysis.

Chapter 5 analyses the perceptions and preferences of mutual fund retail investors and their influences on choice of financial investment

options, pattern of mutual fund investments, benefit expectations, product choice criteria, etc.

Chapter 6 provides the analysis of two aspects: (1) investors' perceptions on mutual fund marketing issues and their influence on purchase behavioural intentions, and (2) on perceived service quality and behavioural intention. Structural equation modelling has been done for the analysis.

### **5.1.1 Structure of the Chapter**

This chapter provides analysis of empirical data on selected issues:

- 1) Demographic profile of respondents
- 2) Preference for different investment options
- 3) Investors' perceptions on risk, return and liquidity
- 4) Investment pattern of mutual fund investors in terms of the amount of investment, years of experience, number of AMCs used and channel preference for mutual fund purchase
- 5) Fund benefit expectation and types of funds preferred
- 6) Sources of information for mutual fund investment decision
- 7) Product selection criteria for mutual fund investment-Factor Analysis

### **5.1.2 Survey and Data Analysis**

The data analysis is based on a sample survey among 470 mutual fund investors in Kochi. The respondents were identified mainly from the customer lists of few selected mutual fund dealers and agents. Random

sampling was used for respondent selection. Data analysis has been done using SPSS 20 and Warp PLS 5.0.

## **5.2 Demographic Profile of the Respondents**

Since the study is on the perception and behaviour of retail mutual fund investors, analysis based on demographic variables is pertinent. The analysis begins with a review of the demographic profile of the respondents.

This section analyses the following attributes of the respondents:

- Gender
- Age
- Educational qualification
- Occupation

### **5.2.1 Gender Distribution of Respondent**

The number of male and female respondents in the sample was not purposive. It was the result of a random choice of investors. The gender profile of the respondents is presented in the Table 5.1.

**Table 5.1 Survey respondents –Gender wise analysis**

<b>Respondents</b>		
<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	356	75.7
Female	114	24.3
Total	470	100

Among the sample population of 470 mutual fund investors, 75.7% were males and 24.3 % females. The indication is that majority of mutual funds investors are males.

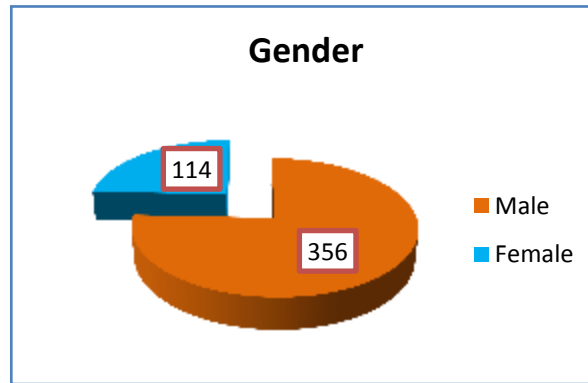


Figure 5.1: Survey respondents –Gender wise analysis

### 5.2.2 Age Distribution of the Respondent

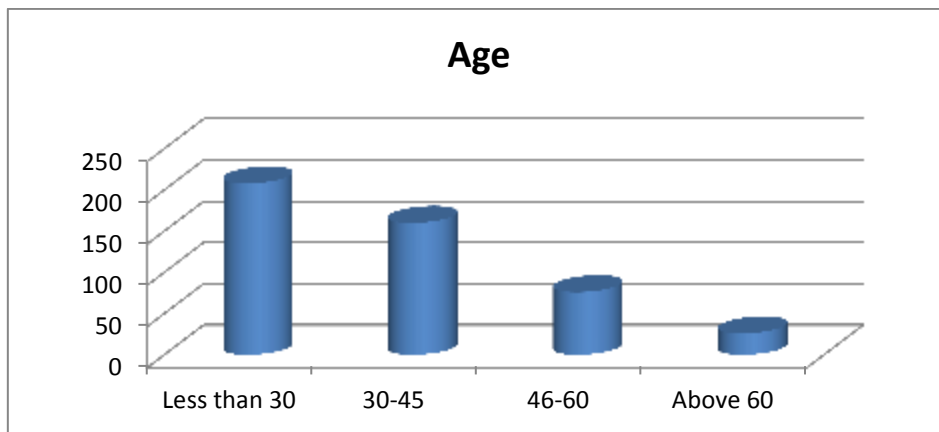
The respondents have been divided into five age groups: less than 30 years, 30-45, 46-60, and above 60 years. Details are presented in Table 5.2.

Table 5.2: Survey respondents –age wise analysis

Respondents		
Age (in years)	Frequency	Percent
Less than 30	208	44.3
30-45	160	34
46-60	76	16.2
Above 60	26	5.5
Total	470	100



Age-wise distribution of the sample respondents shows that 44.3 % of the respondents are less than 30 years and 34 % of the mutual fund investors belong to the age group of 30-45. The respondent in the age group of 46-60 are only 16.2% and above 60 are 5.5% (26). The data reveal that those who are investing in mutual funds are predominantly the youngsters.



**Figure 5.2: Survey respondents –age wise analysis**

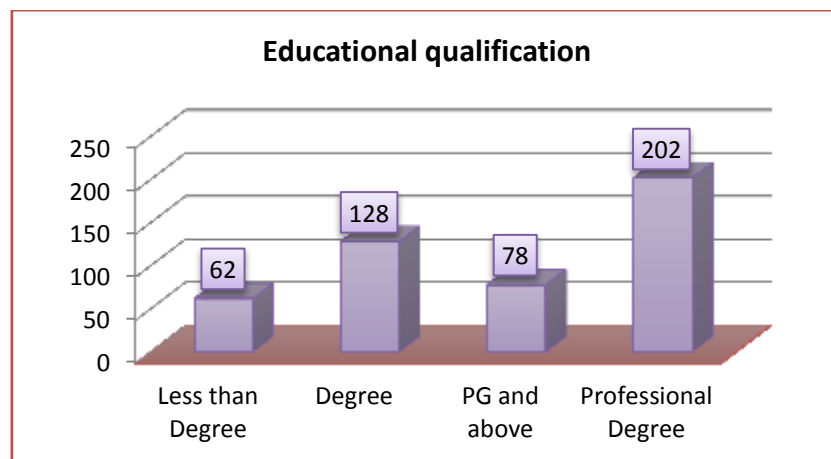
### **5.2.3 Categories of Respondents Based on Education**

Education is supposed to equip a person to make better investment choices with confidence. It is a very important factor to be analysed in the context of savings and investment behaviour. The respondents are grouped according to their educational qualifications into four groups: Less than degree, degree, PG and above and professional degree. The details are given in Table 5.3 and Figure 5.3.

**Table 5.3: Survey respondents –education wise analysis**

Respondent		
Educational qualification	Frequency	Percent
Less than Degree	62	13.2
Degree	128	27.2
PG and above	78	16.6
Professional Degree	202	43
Total	470	100

Most of the respondents are graduates and above. Only 13% of the respondents have educational attainments less than degree. Apparently the tendency for mutual funds investment increases with the level of education.

**Figure 5.3: Survey respondents –Education wise analysis**

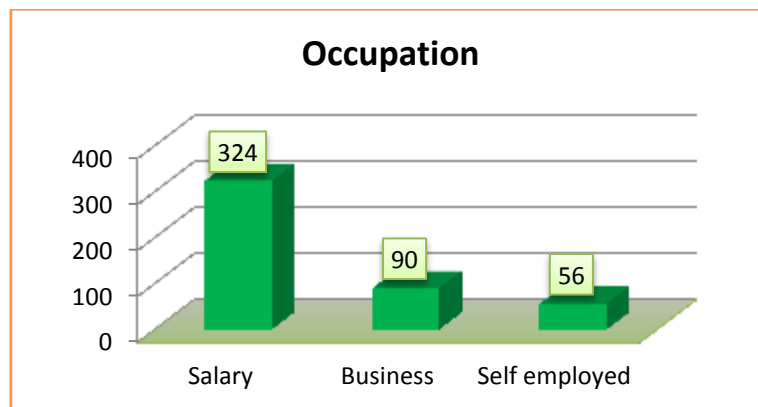
### 5.2.4 Occupational Categories of the Respondents

Occupations –wise analysis of the respondents is furnished in Table 5.4 and Figure 5.4.

**Table 4.4: Survey respondents –Occupation wise analysis**

Respondent		
Source of income	Frequency	Percent
Salaried	324	68.9
Business	90	19.1
Self employed	56	11.9
Total	470	100

On the basis of the occupation of the respondents, the salaried class forms the largest group among the respondents (68.9%), followed by the business and self employed categories, forming 19.1% and 11.9% of the respondents respectively.



**Figure 5.4: Survey respondents –occupation wise analysis**

### 5.3 Investment Options and Perceptions on Risk, Return and Liquidity

#### 5.3.1 Investment Preference in Respect of Different Investment Options

Previous studies have indicated that the major investment options considered by investors in India include bank deposits, insurance, security market investment and mutual funds. The study therefore begins with an analysis of the individual preferences of the respondents for the four different investment options: bank deposit, insurance, security market investment and mutual funds.

The respondents were asked to rank the four options according to their order of preference, 1 for most preferred and 4 for the least preferred investment options. The analysis is given in Table 5.5.

**Table 5.5: Investment preferences of mutual fund investors**

Investment options	Mean	Rank
Bank deposits	3.12	1
Insurance	1.89	4
Security market investment	2.38	3
Mutual funds	2.63	2

Data reveal that bank deposits are the most preferred investment option for the respondents. Mutual fund is the second most preferred investment option. Security market investment comes third. Insurance is the least preferred option among the four. It is pertinent to note that all the respondents are mutual fund investors and that they report bank deposit as their primary investment option. These findings provide added confirmation

for the findings of several earlier studies, particularly by SEBI and NCEAR.

### **5.3.2 Perceptions on Risk, Return and Liquidity of Investment Options**

A major objective of the study is to analyse the perceptions about different investment options in terms of risk, return and liquidity. Risk perception has been a major factor in choosing investment options in all countries. Hence, the study addresses the risk perceptions of investors in respect of the different investment options.

To measure the perception of the investors about risk, return and liquidity aspects of the different investment options, respondents were asked to rank the different investment options from 1 to 4 on risk, return and liquidity. Respondents' perceptions on the different factors have been analysed based on the number of respondents who gave the highest rank to each investment option. Chi-square tests have been used to find the relationships.

### **5.3.3 Risk Perceptions on Investment Options**

In the case of perceived risk, respondents were asked to rank the different investment options from 1 to 4, 1 for the highest risk and 4 for the least risk. Respondents' risk perceptions have been analysed on the basis of the number of respondents who gave the highest rank to each investment option.

Table 5.6 analyses the respondents' risk perception on different investment options.

**Table 5.6: Risk perception of investors in respect of different investment options**

Measured dimension	Investment options	Mean value	Ranks
Level of risk	Bank deposits	1.54	4
	Insurance	2.37	3
	Security market investment	3.36	1
	Mutual funds	2.91	2

Results of data analysis indicate that security market investment is perceived to be the most risky investment option. Mutual fund comes second. Bank deposit is perceived to be the least risky investment option. Further, insurance is perceived less risky compared to mutual funds.

### 5.3.3.1 Risk Perception: Gender- Wise Analysis

**H01:** *There is no gender difference in risk perception with respect to bank deposit, insurance, security market investment or mutual fund investment.*

There could be gender difference in risk perceptions on the different investment options.

Chi-Square test is used for testing the difference in risk perception among male and female respondents. Table 5.7 gives the summary of results.

**Table 5.7: Risk perception towards different investment options:  
Gender-wise analysis**

<b>Gender</b>	<b>Bank deposit</b>	<b>Insurance</b>	<b>Security Market</b>	<b>Mutual Fund</b>	<b>Missing value</b>	<b>Total</b>
Male (Frequency)	29	53	192	62	20	356
% within gender	8.1%	14.9%	53.9%	17.4%	5.6%	100.0%
Female (Frequency)	10	15	65	21	3	114
% within gender	8.8%	13.2%	57.0%	18.4%	2.6%	100.0%
Total (Frequency)	39	68	257	83	23	470
% within gender	8.3%	14.5%	54.7%	17.7%	4.9%	100.0%
Pearson Chi-Square 1.993 <sup>a</sup> P= 0.737 Not significant						

The results of the Chi-Square test give the  $P=0.737$ , which is greater than the significance level of 0.05 and the null hypotheses is accepted. The inference is that there is no difference in risk perception among males and females investors.

### **5.3.3.2 Risk Perception and Age**

**H02: *There is no age difference in risk perception with respect to bank deposit, insurance, security market investment or mutual fund investment.***

Chi-Square test is used to test the hypothesis and the test results are presented in Table 5.8.

**Table 5.8: Risk perception towards different investment options:  
Age - wise analysis**

Age in years	Risk perception: Investment Options					
	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	Total
Less than 30	22	25	110	36	15	208
% within Age	10.6%	12.0%	52.9%	17.3%	7.2%	100.0%
30- 45	10	29	90	25	6	160
% within Age	6.2%	18.1%	56.2%	15.6%	3.8%	100.0%
46-60	5	8	42	20	1	76
% within Age	6.6%	10.5%	55.3%	26.3%	1.3%	100.0%
above 60	2	6	15	2	1	26
% within Age	7.7%	23.1%	57.7%	7.7%	3.8%	100.0%
Total	39	68	257	83	23	470
% within Age	8.3%	14.5%	54.7%	17.7%	4.9%	100.0%
Pearson Chi-Square 16.959 <sup>a</sup> P= .151 Not significant						

Chi-Square test gives a P value (P=0.151) which is greater than 0.05 and the null hypotheses is accepted. The indication is that there is no age difference in risk perception with respect to different investment options.

### 5.3.3.3 Risk Perception and Education

**H03:** *There is no difference in terms of levels of education in risk perception with respect to bank deposit, insurance, security market investment or mutual fund investment.*

The level of education of the investors may have an influence on their risk perception. The hypothesis is tested using Chi-Square test and the test results are presented in Table 5.9.



**Table 5.9: Risk perception towards different investment option:  
Education - wise analysis**

Education	Risk perception : Investment Options					
	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	Total
Less than Degree (Frequency)	6	15	28	9	4	62
% within Educational qualification	9.7%	24.2%	45.2%	14.5%	6.5%	100.0%
Degree (Frequency)	4	20	80	19	5	128
% within Educational qualification	3.1%	15.6%	62.5%	14.8%	3.9%	100.0%
PG and above (Frequency)	12	14	40	8	4	78
% within Educational qualification	15.4%	17.9%	51.3%	10.3%	5.1%	100.0%
Professional Degree (Frequency)	17	19	109	47	10	202
% within Educational qualification	8.4%	9.4%	54.0%	23.3%	5.0%	100.0%
Total	39	68	257	83	23	470
% within Educational qualification	8.3%	14.5%	54.7%	17.7%	4.9%	100.0%
Pearson Chi-Square 27.551 <sup>a</sup> P=0.006 Significant						

The P-value (0.006) is less than the significance level (0.05) and the null hypothesis gets rejected. Risk perceptions with respect to bank deposit, insurance, security market investment and mutual fund investment vary with the levels of education.

Compared to the other groups, more investors with degree level qualification perceive high risk in security market investment. With respect to mutual fund investment, risk perception is more among the professionally qualified people.

### 5.3.3.4 Risk Perception and Occupation

**H04:** *There is no difference in risk perception among people with different occupations in respect to bank deposit, insurance, security market investment or mutual fund investment.*

The occupation of the investors may have an influence on their risk perception. Chi-Square test is used to test the hypothesis and the test results are presented in Table 5.10.

**Table: 5.10 Risk perception: Investment options: occupation - wise analysis**

Occupation	Risk perception					Total
	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	
Salary (Frequency)	24	38	195	53	14	324
% within occupation	7.4%	11.7%	60.2%	16.4%	4.3%	100.0%
Business (Frequency)	10	17	39	15	9	90
% within occupation	11.1%	18.9%	43.3%	16.7%	10.0%	100.0%
Self employed (Frequency)	5	13	23	15	0	56
% within occupation	8.9%	23.2%	41.1%	26.8%	0.0%	100.0%
Total	39	68	257	83	23	470
% within occupation	8.3%	14.5%	54.7%	17.7%	4.9%	100.0%
Pearson Chi-Square 23.619 <sup>a</sup> P= 0.003 Significant						

Chi- Square analysis shows that P-value (0.003) is less than the significance level (0.05) and the null hypothesis gets rejected. The indication is that risk perception is significantly different among the investors with different occupations. While more of the salaried people find security market investment more risky, around one fourth of the self employed group finds mutual fund risky.

### **5.3.4 Perception on Return from Different Investment Options**

Individual investors make their investment decisions based on their expectation about the return from their investments. Previous research studies indicate that return is perhaps the most important factor that determines the choice of investment options.

The perception on level of returns from the different investment options are analysed in Table 5.11.

**Table 5.11: Perception of investors on return from different investment options**

<b>Measured dimension</b>	<b>Investment options</b>	<b>Mean value</b>	<b>Ranks</b>
Level of return	Bank deposits	2.19	3
	Insurance	1.86	4
	Security market investment	3.13	1
	Mutual funds	2.99	2

Data analysis reveals the respondents' perception that investing in security market offers the opportunity for the maximum return. Mutual funds come second in terms of level of return. Bank deposits and insurance are perceived to provide relatively low returns.

### 5.3.4.1 Perception on Return and Gender

**H05:** *There is no gender difference in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*

Chi-Square test is used to test the difference in the perceptions of male and female investors regarding return from the different investment options. Table 5.12 gives the summary of results.

**Table 5.12: Perceptions on returns from different investment options:  
Gender - wise analysis**

Gender	Return perception					
	Bank Deposit	Insurance	Security market investment	Mutual fund	Missing value	Total
Male	44	30	143	121	18	356
% within gender	12.4%	8.4%	40.2%	34.0%	5.1%	100.0%
Female	22	5	50	28	9	114
% within gender	19.3%	4.4%	43.9%	24.6%	7.9%	100.0%
Total	66	35	193	149	27	470
% within gender	14.0%	7.4%	41.1%	31.7%	5.7%	100.0%
Pearson Chi-Square 8.772 <sup>a</sup> P= .067 Not significant						

Chi-Square test gives the P value (P=0.067) which is greater than 0.05 and the null hypotheses is accepted. The inference is that there is no difference in the perception on level of return among male and female investors.

### 5.3.4.2 Perception on Return and Age

**H06:** *There is no difference in terms of age in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*

There could be a relationship between age and the level of returns expected from different investment options. **Chi-Square test** is used to test the hypothesis and the test results are presented in Table 5.13.

**Table 5.13: Perceptions on returns from different investment options: Age- wise analysis**

Age in years	Return perception					
	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	Total
less than 30	18	10	97	65	18	208
% within Age	8.7%	4.8%	46.6%	31.2%	8.7%	100.0%
30- 45	26	18	61	51	4	160
% within Age	16.2%	11.2%	38.1%	31.9%	2.5%	100.0%
46-60	10	7	28	26	5	76
% within Age	13.2%	9.2%	36.8%	34.2%	6.6%	100.0%
above 60	12	0	7	7	0	26
% within Age	46.2%	0.0%	26.9%	26.9%	0.0%	100.0%
Total	66	35	193	149	27	470
% within Age	14.0%	7.4%	41.1%	31.7%	5.7%	100.0%
Pearson Chi-Square 42.737 <sup>a</sup> P= .000 Significant						

Chi-Square test gives the P=0.00, which is less than 0.05 and the relationship between age and return expectations are found to be significant. Most of the youngsters find security market investment (46.6%) and mutual fund (31.2%) as the most attractive options.

Among investors above 60 years, 46.2% find bank deposit the most attractive in terms of returns.

### 5.3.4.3 Perception on Return and Education

**H07: *There is no difference in terms of the levels of education in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.***

Perception on level of return from different investment options might vary with the level of education of the investors. Chi-Square test is used to test the hypothesis; the test results are presented in Table 5.14.

**Table 4.14: Perceptions on returns from different investment options: Education - wise analysis**

<b>Educational qualification</b>	<b>Bank</b>	<b>Insurance</b>	<b>Security market investment</b>	<b>Mutual fund</b>	<b>Missing value</b>	<b>Total</b>
Less than Degree (Frequency)	14	6	22	16	4	62
% within Educational qualification	22.6%	9.7%	35.5%	25.8%	6.5%	100.0%
Degree(Frequency)	23	2	59	39	5	128
% within Educational qualification	18.0%	1.6%	46.1%	30.5%	3.9%	100.0%
PG and above(Frequency)	12	12	30	22	2	78
% within Educational qualification	15.4%	15.4%	38.5%	28.2%	2.6%	100.0%
professional (Frequency)Degree	17	15	82	72	16	202
% within Educational qualification	8.4%	7.4%	40.6%	35.6%	7.9%	100.0%
Total	66	35	193	149	27	470
% within Educational qualification	14.0%	7.4%	41.1%	31.7%	5.7%	100.0%
Pearson Chi-Square 29.519 <sup>a</sup> P=0 .003 Significant						

The Chi Square test gives the  $P=0.003$  and it is less than .05. Hence the result is statistically significant and the null hypothesis is rejected. Return perceptions vary among the investors with different levels of education. All groups, especially investors with degree educational qualification, perceive that security market investments provide better return. Mutual fund gets second rank in terms of return from all the groups, but the perception on higher return is more among professionally qualified investors. The investors with less than degree level education qualification perceive bank deposit as the option for better return.

#### **5.3.4.4 Perception on Return and Occupation**

**H08:** *There is no difference in terms of occupation in perception on return with respect to bank deposit, insurance, security market investment or mutual fund investment.*

Perceptions on level of return from different investment options might vary depending on the occupation of the investors. Chi-Square test is used to test the hypothesis and the test results are presented in Table 5.15.

**Table 5.15 Perceptions on return from different investment options:  
Occupation- wise analysis**

Occupation	Return perception					Total
	Bank	Insurance	Security market investment	Mutual fund	Missing value	
Salary	44	18	144	102	16	324
% within occupation (Frequency)	13.6%	5.6%	44.4%	31.5%	4.9%	100.0%
% within return perception	66.7%	51.4%	74.6%	68.5%	59.3%	68.9%
Business (Frequency)	13	10	34	24	9	90
% within occupation	14.4%	11.1%	37.8%	26.7%	10.0%	100.0%
% within return perception	19.7%	28.6%	17.6%	16.1%	33.3%	19.1%
Self employment (Frequency)	9	7	15	23	2	56
% within occupation	16.1%	12.5%	26.8%	41.1%	3.6%	100.0%
% within return perception	13.6%	20.0%	7.8%	15.4%	7.4%	11.9%
Total	66	35	193	149	27	470
% within occupation	14.0%	7.4%	41.1%	31.7%	5.7%	100.0%
Pearson Chi-Square 15.181 <sup>a</sup> P= .056 Not significant						

The P-value (0.056) is greater than the significance level (0.05), the null hypothesis is accepted. Return perception is not significantly different among the investors with different occupations.



### **5.3.5 Perception on Liquidity of Different Investment Options**

Respondents' perception on liquidity (ease to convert into cash) of different investment options have been analysed. Individual rankings for the financial products have been considered in the analysis. The analysis is presented in Table 5.16

**Table 5.16: Perception of investors on liquidity of different financial products**

<b>Measured dimension</b>	<b>Financial products</b>	<b>Mean</b>	<b>Ranks</b>
Liquidity	Bank deposits	3.58	1
	Insurance	1.82	4
	Security market investment	2.60	2
	Mutual funds	2.42	3

Bank deposits are perceived to have the highest liquidity among the investment options considered. Security market investment is perceived to be the next most liquid investment option; mutual funds come third in terms of liquidity. Insurance has the least liquidity in the perception of investors. The indication is that mutual fund has an inherent disadvantage in terms of liquidity.

#### **5.3.5.1 Perception on Liquidity and Gender**

**H09:** *There is no gender difference in perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.*

There could be gender difference in the perceptions on liquidity of different investment options. Chi-Square test is used to test the difference in the perceptions of male and female investors. The test results are presented in Table 5.17.

**Table 5.17: Perceptions on liquidity of different investment options:  
Gender- wise analysis**

Gender	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	Total
Male (Frequency)	243	29	44	29	11	356
% within Gender	68.3%	8.1%	12.4%	8.1%	3.1%	100.0%
Female (Frequency)	80	8	16	10	0	114
% within Gender	70.2%	7.0%	14.0%	8.8%	0.0%	100.0%
Total (Frequency)	323	37	60	39	11	470
% within Gender	68.7%	7.9%	12.8%	8.3%	2.3%	100.0%
Pearson Chi-Square 3.939 <sup>a</sup> P=0 .414 Not significant						

Chi-Square test gives the P value (P=0.414) which is greater than 0.05 and the null hypotheses is accepted. The inference is that there is no difference in liquidity perception among males and females investors.

### 5.3.5.2 Perception on Liquidity and Age

**H010:** *There is no difference in terms of age in the perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.*

Perceptions on the liquidity of different investment options might vary depending on the age of the investor. The hypothesis is tested using Chi- square test; the test results are presented in Table 5.18.

**Table 5.18: Perceptions on liquidity of different investment options:  
Age- wise analysis**

Age in years	Liquidity perception					Total
	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	
less than 30	130	16	34	21	7	208
% within Age	62.5%	7.7%	16.3%	10.1%	3.4%	100%
30- 45	113	15	20	10	2	160
% within Age	70.6%	9.4%	12.5%	6.2%	1.2%	100.0%
46-60	58	6	4	8	0	76
% within Age	76.3%	7.9%	5.3%	10.5%	0.0%	100.0%
above 60	22	0	2	0	2	26
% within Age	84.6%	0.0%	7.7%	0.0%	7.7%	100%
Total	323	37	60	39	11	470
% within Age	68.7%	7.9%	12.8%	8.3%	2.3%	100%
Pearson Chi-Square 22.275 <sup>a</sup> P= .035 Significant						

The Chi Square test gives a P value 0.035 and it is less than 0.05. Hence the result is statistically significant and the null hypothesis is rejected. Liquidity perception is significantly different among the different age groups. All age groups considered bank deposit as the most liquid investment option. However, among investors above 60 years the liquidity perception of bank deposit is very strong and none of the respondents in this group consider mutual fund or insurance as liquid.

### 5.3.5.3 Perception on Liquidity and Education

**H011:** *There is no difference in terms of levels of education in perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.*

There could be difference among investors with different levels of education on their perceptions on liquidity of different investment options. Chi-Square test is used to test the difference in perceptions. The test results are presented in Table 5.19.

**Table 5.19: Perceptions on liquidity of different investment options: Education- wise analysis**

Educational qualification	Bank deposit	Insurance	Security market investment	Mutual fund	Missing value	Total
Less than Degree (Frequency)	44	8	3	4	3	62
% within Educational qualification	71.0%	12.9%	4.8%	6.5%	4.8%	100.0%
Degree (Frequency)	92	3	21	10	2	128
% within Educational qualification	71.9%	2.3%	16.4%	7.8%	1.6%	100.0%
PG and above (Frequency)	56	9	7	4	2	78
% within Educational qualification	71.8%	11.5%	9.0%	5.1%	2.6%	100.0%
professional Degree (Frequency)	131	17	29	21	4	202
% within Educational qualification	64.9%	8.4%	14.4%	10.4%	2.0%	100.0%
Total	323	37	60	39	11	470
% within Educational qualification	68.7%	7.9%	12.8%	8.3%	2.3%	100.0%
Pearson Chi-Square 19.228 <sup>a</sup> P= .083 Not significant						

The P-value (0.0863) is greater than the significance level (0.05) and the null hypothesis is accepted. Liquidity perception is not significantly different among investors with different levels of education.

#### **5.3.5.4 Perception on Liquidity and Occupation**

**H012: *There is no difference in terms of occupation in perception on liquidity with respect to bank deposit, insurance, security market investment or mutual fund investment.***

There could be difference among different occupational groups in their perceptions on liquidity of different investment options. Chi-Square test is used to analyse the difference in their perceptions. The test results are presented in Table 5.20.

**Table 5.20: Perceptions on liquidity of different investment options: Occupation- wise analysis**

<b>Occupation</b>	<b>Bank deposit</b>	<b>Insurance</b>	<b>Security market investment</b>	<b>Mutual fund</b>	<b>Missing value</b>	<b>Total</b>
Salary (Frequency)	235	20	40	20	9	324
% within occupation	72.5%	6.2%	12.3%	6.2%	2.8%	100.0%
Business (Frequency)	56	5	13	14	2	90
% within occupation	62.2%	5.6%	14.4%	15.6%	2.2%	100.0%
Self employment (Frequency)	32	12	7	5	0	56
% within occupation	57.1%	21.4%	12.5%	8.9%	0.0%	100.0%
Total	323	37	60	39	11	470
% within occupation	68.7%	7.9%	12.8%	8.3%	2.3%	100.0%
Pearson Chi-Square Significant	26.535 <sup>a</sup>	P=.001				

The Chi Square test shows that the P value ( $P=0.001$ ) is less than 0.05. Hence the result is statistically significant and the null hypothesis is rejected. Liquidity perception is different among different occupational groups. Compared to other groups, the salaried group perceives bank deposit as the most liquid. Mutual fund is perceived as liquid by a small group among the businessmen.

#### **5.4 Investment Pattern of Mutual Fund Investors**

Low penetration of mutual fund among the Indian households is the major problem experienced by the investment industry in India. Globally, mutual fund is meant to provide a proper and less risk-more profit option, mainly to small investors. This is reportedly not the case in India. It is, therefore, significant to analyse the investment pattern of mutual fund investors.

As part of the analysis of the investment pattern of the respondents, this section analyses the following aspects:

- amount invested in mutual funds
- years of experience in mutual fund investment
- number of AMCs used
- source of purchase of mutual fund

Apart from these factors, the type of fund preferred and the benefit expectation are also analysed in subsequent sections.

##### **5.4.1 Amount of Investment in Mutual Funds**

The average investment in mutual fund by the retail investors is a pertinent piece of information. Some studies have reported that the

average amount invested by retail mutual fund investors in the country is very low.

An attempt has been made to understand the amount of investment in mutual funds by individual investors. Respondents were asked to indicate the amount of money they had invested in mutual funds. The amounts of investment have been grouped into five categories: less than ₹ 10000, ₹ 10000-25000, ₹ 25001-50000, and ₹ 50001-100000 and above ₹ 100000.

Table 5.21 provides details of the outstanding amount of investment in mutual funds by the respondents.

**Table 5.21: Amount of investment in mutual funds by individual investors**

<b>Amount of investment (₹)</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 10000	148	31.5%
10000-25000	144	30.6%
25001-50000	76	16.2%
50001-100000	44	9.4%
Above 100000	58	12.3%

The amount of investment in mutual funds by majority of the investors is relatively small. While 31.5 % of the investors have invested less than ₹ 10000, another 30.6% have invested ₹ 10000 to ₹ 25000. Only 22 % of the investors have invested more than ₹ 50000, including 12 % who have invested over ₹ 100,000. It is pertinent to note that 62 % of the investors have mutual fund investment of less than or up to ₹ 25000

The average investment by the respondents has been estimated as ₹ 45000, approximately.

#### 5.4.1.1 Amount of Investment in Mutual Funds and Its Relationship with Gender

**H013:** *There is no significant relationship between the gender and the amount of mutual fund investment*

The amounts of investment in mutual funds by individual investors have been analysed with respect to different genders. The details of the analysis are presented in the Table 5.22

**Table 5.22: Amount of investment: Gender -wise Analysis**

Gender	Amount of investment (₹)					Total
	Less than 10000	10000-25000	25000-50000	50000-100000	Above 100000	
Male (Frequency)	109	107	56	30	54	356
% within gender	30.61%	30.05%	15.73%	8.4%	15.16%	100%
Female (Frequency)	39	37	20	14	4	114
% within gender	34.21%	32.45%	17.15%	12.28%	3.50%	100%
Total (Frequency)	148	144	76	44	58	470
% within gender	31.38%	30.63%	16.17%	9.36%	12.34%	100
Pearson Chi-Square 11.574 P=.021 Significant						

Since the P-value (0.021) is less than the significance level (0.05), the null hypothesis gets rejected. The analysis indicated that there exists significant relationship between the amount of investment and the gender. The amounts of investment are more for the males than females.



### 5.4.1.2 Amount of Investment: Age- Wise Analysis

**H014: *There is no significant relationship between the age and the amount of mutual fund investment***

The amounts of investment might vary according to the age categories of the investors. The amounts of investments are cross tabulated with different age groups and analysed with Chi Square test. The relationship between the age and the amount invested is analysed in Table 5.23.

**Table 5.23: Amount of investment: Age- wise analysis**

Age in years	Total amount of asset invested in mutual funds					
	less than 10000	10000-25000	25000-50000	50000-100000	Above 100000	Total
less than 30 (Frequency)	92	52	32	12	20	208
% within age	44.2%	25.0%	15.4%	5.8%	9.6%	100.0%
31-45 (Frequency)	34	64	24	12	26	160
% within age	21.2%	40.0%	15.0%	7.5%	16.2%	100.0%
46-60 (Frequency)	14	20	18	12	12	76
% within age	18.4%	26.3%	23.7%	15.8%	15.8%	100.0%
above 60 (Frequency)	8	8	2	8	0	26
% within age	30.8%	30.8%	7.7%	30.8%	0.0%	100.0%
Total (Frequency)	148	144	76	44	58	470
% within age	31.5%	30.6%	16.2%	9.4%	12.3%	100.0%
Pearson Chi-Square Significant	58.116a	p=.000				

The p value is less than 0.05 and it is found to be statistically significant ( $p=0.000$ ). So the null hypothesis is rejected. The results of the Chi - Square analysis show that age of the investor has significant influence on the amount of investment. Investors in the age group 46 -60 years have invested more amounts in mutual funds than the other age groups.

### 5.4.1.3 Amount of Investment: Education - Wise Analysis

**H015:** *There is no significant relationship between the level of educational of the investor and the amount of mutual fund investment*

Some previous studies have indicated the relationship between the level of education and investment in mutual funds. The relationship between the amount invested and the level of education of the respondents is analysed using Chi-Square test in Table 5.24

**Table 5.24: Amount of investment: Education- wise analysis**

Education	Total amount of asset invested in mutual funds (₹)					Total
	Less than 10000	10000-25000	25000-50000	50000-100000	Above 100000	
Less than Degree (Frequency)	20	22	10	6	4	62
% within education	32.3%	35.5%	16.1%	9.7%	6.5%	100.0%
Degree (Frequency)	44	40	18	12	14	128
% within education	34.4%	31.2%	14.1%	9.4%	10.9%	100.0%
PG and above (Frequency)	18	22	16	6	16	78
% within education	23.1%	28.2%	20.5%	7.7%	20.5%	100.0%
Professional Degree(Frequency)	66	60	32	20	24	202
% within education	32.7%	29.7%	15.8%	9.9%	11.9%	100.0%
Total (Frequency)	148	144	76	44	58	470
% within education	31.5%	30.6%	16.2%	9.4%	12.3%	100.0%
Pearson Chi-Square	10.671 <sup>a</sup>	P=.557				
Not significant						

The p value (P=0.557) is more than .05. It is found to be statistically not significant and the null hypothesis is accepted. The results of the Chi Square test show that the educational back ground of the investor has no relationship with the amount of investment.

#### **5.4.1.4 Amount of Investment: Occupation-Wise Analysis**

**H016: *There is no significant relationship between the occupation and the amount of mutual fund investment***

Individuals belonging to different occupations may vary in their financial choices and preference. Analysis of the data using Chi-Square test for identifying the relationship of occupation with the amount of investment is provided in Table. 5.25

**Table 5.25: Amount of investment: Occupation- wise analysis**

Occupation	Total amount of investment					
	lessthan 10000	10000- 25000	25000- 50000	50000- 100000	Above 100000	Total
Salary	112	106	46	26	34	324
% within occupation	34.6%	32.7%	14.2%	8.0%	10.5%	100.0%
Business	16	30	20	10	14	90
% within occupation	17.8%	33.3%	22.2%	11.1%	15.6%	100.0%
Self employed	20	8	10	8	10	56
% within occupation	35.7%	14.3%	17.9%	14.3%	17.9%	100.0%
Total	148	144	76	44	58	470
% within occupation	31.5%	30.6%	16.2%	9.4%	12.3%	100.0%
Pearson Chi-Square 20.534 <sup>a</sup> d=8 P= .008 Significant						

The Chi Square test shows that the P value is less than .05. It is found to be statistically significant ( $p=.008$ ). So the null hypothesis is rejected. The result of Chi Square test shows that occupation of the investor has relationship with the amount invested. The business persons and the self employed invest relatively more amounts in mutual fund than the salaried class.

#### 5.4.2 Year of Experience of the Investors

Perception and purchase behaviour of mutual fund investors are theoretically influenced by their years of experience in mutual funds investment. Table: 5.26 present the analysis of the years of experience of mutual fund investors.

**Table 5.26: Years of experience in mutual fund investment**

Years of experience	Frequency	Percentage
Less than 1 year	136	28.9
1-3yrs	162	34.5
Above 3 yrs	172	36.6
Total	470	100

On the whole, 71 % of the respondents have been mutual fund investors for more than one year. Among them 37 % have over three years of experience. Data reveal that 29% of the respondents are new investors with less than one year experience in mutual funds investment. This is perhaps an indication of the arrival of new investors into the mutual funds sector. Hence, the relationship between age and the total number of years of mutual funds experience could be analysed.

### 5.4.2.1 Total Years of Mutual Funds Experience: Age - Wise Analysis

**H017: There is no significant relationship between age and total years of experience in mutual fund.**

The relationship between age and total years of experience in mutual fund is analysed using Chi-Square test and the results are presented in Table 5.27.

**Table 5.27: Total years of mutual funds experience: Age - wise analysis**

Age	Total year of experience			
	1year	1-3yrs	Above 3 yr	Total
Less than 30 (Frequency)	94	68	46	208
% within age	45.2%	32.7%	22.1%	100.0%
30-45 (Frequency)	36	60	64	160
% within age	22.5%	37.5%	40.0%	100.0%
46-60 (Frequency)	6	22	48	76
% within age	7.9%	28.9%	63.2%	100.0%
Above 60 (Frequency)	0	12	14	26
% within age	0.0%	46.2%	53.8%	100.0%
Total (Frequency)	136	162	172	470
% within age	28.9%	34.5%	36.6%	100.0%
Pearson Chi-Square 71.948 <sup>a</sup> P= .000 Significant				

The Chi Square test gives the P value as 0.000 and it is less than .05. The relationship is found to be statistically significant and the null hypothesis is rejected. The test results indicate that age of the investor has relationship with the years of experience in mutual fund investment.

Obviously, as age increases, the years of experience in mutual fund also increases. However, what is pertinent is that 45% of the investors who joined mutual fund in less than one year are below the age of 30 years and 68 % are below 45 years. Among investors in the age group of less than 30 years, 78% joined mutual funds in three years or less. On the whole, most investors who joined mutual funds in less than three year are relatively young. The indication is that more young people begin to invest in mutual funds.

### **5.4.3 Investment in Different Mutual Fund AMCs (Asset Management Companies)**

There are 44 Asset Management Companies (AMCs) in India. Although the number of AMCs in India is few, compared to other developing and developed countries, they offer a wide choice of products for the investors. In their efforts to diversify the risk, investors may invest in different AMCs. The attractiveness of specific products may also attract investors to different AMCs.

The respondents' investment behaviour in terms of investing with different AMCs is analysed in Table 5.28.

**Table 5.28: Investment in different mutual fund AMCs**

<b>Number of AMCs</b>	<b>Frequency</b>	<b>Percentage</b>
Only1	200	42.6
2-3	168	35.7
Above 3	102	21.7
	470	100

Data show that almost 43 % of the respondents have invested in one AMC only. The remaining 57 % have invested in two or more AMCs, including 22 % who have invested in more than three AMCs. Obviously, investing in multiple AMCs is predominant, indicating the investors' tendency to choose from different products offered by different AMCs.

#### **5.4.3.1 Number of AMCs for Investment: Gender -Wise Analysis**

**H018: *There is no significant relationship between gender and the number of mutual fund AMCs chosen for investment***

The relationship between gender and the number of mutual fund AMCs chosen for investment has been analysed using Chi -Square test and the results are given in Table 5.29

**Table 5.29: Investment in number of AMCs: Gender - wise analysis**

Gender	Number of mutual fund AMCs used			
	Only1	1-3	Above3	Total
Male (Frequency)	156	121	79	356
% within gender	43.8%	34.0%	22.2%	100.0%
Female(Frequency)	44	47	23	114
% within gender	38.6%	41.2%	20.2%	100.0%
Total (Frequency)	200	168	102	470
% within gender	42.6%	35.7%	21.7%	100.0%
Pearson Chi-Square 1.981 <sup>a</sup> P= 371 Not significant				

As per the results of the Chi -Square test, the P-value (0.371) is greater than the significance level (0.05). The null hypothesis is accepted.

It can be concluded that there is no relationship between gender and the number of AMC's chosen for investment.

#### 5.4.3.2 Number of AMC's for Investment: Age- Wise Analysis

**H019:** *There is no significant relationship between age and the number of mutual fund AMC's chosen for investment.*

The relationship between age and the number of mutual fund AMC's chosen for investment is analysed using Chi -Square test. The results are presented in Table 5.30

**Table 5.30: Investment in number of AMC's: Age - wise analysis**

Age	Number of mutual fund AMC's used			
	only1	1-3	above3	Total
Less than 30 (Frequency)	104	58	46	208
% within age	50.0%	27.9%	22.1%	100.0%
30-45 (Frequency)	64	58	38	160
% within age	40.0%	36.2%	23.8%	100.0%
46-60 (Frequency)	22	44	10	76
% within age	28.9%	57.9%	13.2%	100.0%
Above 60 (Frequency)	10	8	8	26
% within age	38.5%	30.8%	30.8%	100.0%
Total (Frequency)	200	168	102	470
% within age	42.6%	35.7%	21.7%	100.0%
Pearson Chi-Square 24.449 <sup>a</sup> P=.000 Significant				

The results of the Chi- Square analysis shows that the P value (P=.000) is less than 0 .05. It is found to be statistically significant and the



null hypothesis is rejected. The indication is that there is significant relationship between age and the number of mutual fund AMC's chosen for investment. As age increases the number of mutual fund AMC's also increases. However, it is pertinent to note that among the investors above 60 years, 38% have invested only in one AMC.

#### **5.4.3.3 Number of AMC's for Investment: Education- Wise Analysis**

**H020: *There is no significant relationship between level of education and the number of mutual fund AMC's chosen for investment***

The relationship between level of education and the number of mutual fund AMC's chosen for investment is analysed using Chi -Square test and the results are presented in Table 5.31.

**Table 5.31: Investment in number of AMC's: Education - wise analysis**

Education	Number of mutual fund AMC's chosen			
	only1	1-3	Above 3	Total
Less than Degree	34	24	4	62
% within education	54.8%	38.7%	6.5%	100.0%
Degree	54	50	24	128
% within education	42.2%	39.1%	18.8%	100.0%
PG and above	28	30	20	78
% within education	35.9%	38.5%	25.6%	100.0%
Professional Degree	84	64	54	202
% within education	41.6%	31.7%	26.7%	100.0%
Total	200	168	102	470
% within education	42.6%	35.7%	21.7%	100.0%
Pearson Chi-Square 14.771 <sup>a</sup> P=.022 Significant				

The tested result of Chi Square shows that P Value (P=.022) is less than 0.05 and the relationship is found to be statistically significant. The null hypothesis is rejected. As the level of education increases, the number of mutual fund AMCs chosen for investment also increases. For example, while only 6.5 % of investors with less than degree level education have investments in three or more AMCs, 53% of investors with professional degrees have investments in three or more AMCs.

#### 5.4.5 Channel Preference for Mutual Fund Purchase

Distribution has been identified as one of the major bottlenecks in the Indian mutual fund sector, particularly owing to the low penetration of mutual funds in small towns and rural areas. Innovations in distribution have contributed significantly to the growth of the mutual fund industry in recent years.

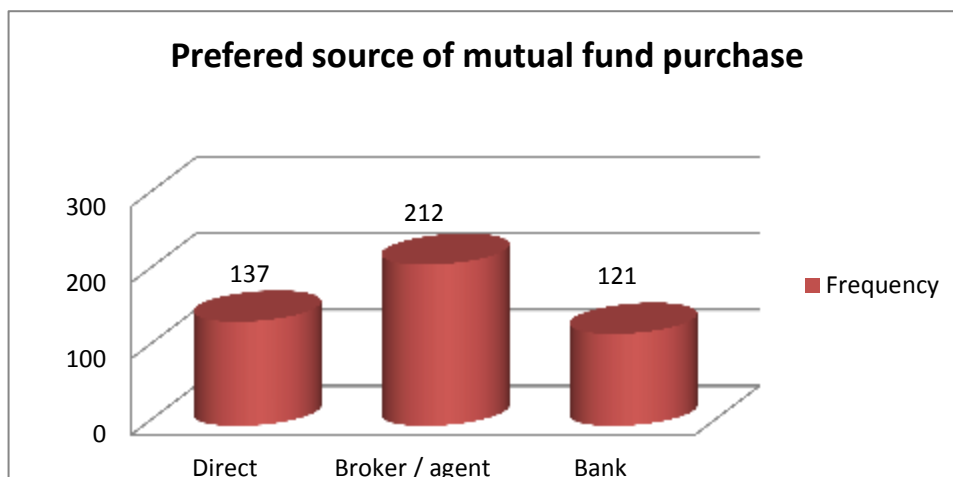
There are different channels used to make mutual fund investments - channels such as brokers, agents, banks, direct to AMC or through internet.

The customer preference for different channels of distribution is a pertinent piece of information for strategy formulation. Respondents were asked to indicate their preference for different channels and the data are analysed in Table 5.32

**Table 5.32: Preferred Source of mutual fund purchase**

Source of fund purchase	Frequency	Percent
Direct	137	29.1
Broker / agent	212	45.1
Bank	121	25.7
Total	470	100

The channel involving brokers and agents is the most preferred channel (45.1 %) for mutual fund purchase. Preference for direct purchase (either directly from AMCs or through internet) is the second most preferred channel (29 %). The least preference is for mutual fund purchase from banks.



**Figure 5.5: Preferred Source of mutual fund purchase**

#### **5.4.5.1 Preferred Source of Mutual Fund Purchase: Gender-Wise Analysis**

**H021:** *There is no significant relationship between gender and preferred source of mutual fund purchase*

The demographic factors that may influence the channel preferences are also analysed. The relationship between gender and channel preference is analysed using Chi Square test and the results are presented in Table 5.33.

**Table 5.33: Preferred source of mutual fund purchase: Gender - wise analysis**

Gender	Main source of mutual fund purchase			
	Direct	Brokers/ agents	Bank	Total
Male (Frequency)	116	157	83	356
% within gender	32.6%	44.1%	23.3%	100.0%
Female(Frequency)	21	55	38	114
% within gender	18.4%	48.2%	33.3%	100.0%
Total (Frequency)	137	212	121	470
% within gender	29.1%	45.1%	25.7%	100.0%
Pearson Chi-Square 9.638, P=.008 Significant				

The Chi Square test shows that the  $P=0.008$  and it is less than .05. Hence the result is statistically significant and the null hypothesis is rejected. The Chi Square test results indicate that the gender of the investor has influence on the preferred source of mutual fund purchase. For direct purchase, the preference is more among the male and the preference of the females is more for distributors / agents.

#### 5.4.5.2 Preferred Source of Mutual Fund Purchase: Age- Wise Analysis

**H022: *There is no significant relationship between age of the respondent and the preferred source of mutual fund purchase***

The relationship between age and preferred source of mutual fund purchase has been analysed using Chi Square test and the results are furnished in Table 5.34.

**Table 5.34: Preferred source of mutual fund purchase: Age - wise analysis**

Age	Main source of mutual fund purchase			
	Direct	Brokers / agent	Bank	Total
Less than 30 (Frequency)	63	93	52	208
% within age	30.3%	44.7%	25.0%	100.0%
30-45 (Frequency)	40	77	43	160
% within age	25.0%	48.1%	26.9%	100.0%
46-60 (Frequency)	26	26	24	76
% within age	34.2%	34.2%	31.6%	100.0%
Above 60 (Frequency)	8	16	2	26
% within age	30.8%	61.5%	7.7%	100.0%
Total (Frequency)	137	212	121	470
% within age	29.1%	45.1%	25.7%	100.0%
Pearson Chi-Square 10.036 P=.123 Not significant				

The Chi-Square test result shows that the P value ( $p=.123$ ) is greater than 0.05 and that the relationship is statistically not significant. So the null hypothesis is accepted. The preferred source of mutual fund purchase is not significantly different among the different age groups.

### 5.4.5.3 Preferred Source of Mutual Fund Purchase: Education - Wise Analysis

**H023:** *There is no significant relationship between level of education of the respondent and the preferred source of the mutual fund purchase*

The relationship between the level of education and the preferred source of mutual fund purchase has been analysed using Chi Square test and the analysis is given in Table 53.5.

**Table 5.35: Preferred Source of Mutual Fund Purchase: Education - Wise Analysis**

Education	Preferred source of mutual fund purchase			Total
	Direct	Brokers / agents	Bank	
Less than Degree	18	32	12	62
% within education	29.0%	51.6%	19.4%	100.0%
Degree	36	72	20	128
% within education	28.1%	56.2%	15.6%	100.0%
PG and above	28	23	27	78
% within education	35.9%	29.5%	34.6%	100.0%
Professional Degree	55	85	62	202
% within education	27.2%	42.1%	30.7%	100.0%
Total	137	212	121	470
% within education	29.1%	45.1%	25.7%	100.0%
Pearson Chi-Square 20.636 <sup>a</sup> P= .002 Significant				

The result of the Chi-Square test shows that the P value ( $p = 0.002$ ) is less than 0.05 and that the relationship is statistically significant. The null hypothesis is rejected. The analysis shows that there is significant relationship between level of education of the respondent and the preferred source of the mutual fund purchase. The preference for purchase through brokers is more among people with relatively less education.

#### **5.4.5.4 Preferred Source of Mutual Fund Purchase – Occupation - Wise Analysis**

**H024:** *There is no significant relationship between occupation of the respondent and preferred source of the mutual fund purchase*

The relationship between occupation and the preferred source of mutual fund purchase has been analysed using Chi Square analysis (Table 5.36)

**Table 5.36: Preferred source of mutual fund purchase: Occupation - wise Analysis**

Occupation	Preferred source of mutual fund purchase			
	Direct	Broker/agent	Bank	Total
Salary	95	146	83	324
% within occupation	29.3%	45.1%	25.6%	100.0%
Business	18	50	22	90
% within occupation	20.0%	55.6%	24.4%	100.0%
Self employed	24	16	16	56
% within occupation	42.9%	28.6%	28.6%	100.0%
Total	137	212	121	470
% within occupation	29.1%	45.1%	25.7%	100.0%
Pearson Chi-Square 12.006      P= .017 Significant				

The result of the Chi-Square test shows that the P value ( $p = 0.017$ ) is less than 0.05 and that the relationship is statistically significant. Hence the null hypothesis is rejected. The indication is that there is significant relationship between occupation and preferred source of the mutual fund purchase. For example, while more of the self employed prefer direct purchase, the business group prefers brokers / agents.

### **5.5 Fund Preference of Retail Mutual Fund Investors**

There is a fair choice for the mutual fund investors in the investment of different funds. The broad choices are for fixed income funds and equity funds. The selections of the fund depend on the investor's willingness to take risk and the perception of expected return from different schemes of mutual funds.

A fixed-income fund provides periodic payments to investors and eventually returns the principal at maturity (Investopedia). These funds may appreciate in value, but the main objective is to provide a steady income to investors. Such funds invest primarily in corporate and government debt. The target groups for these funds are conservative investors and retirees.

An equity fund is a mutual fund that invests principally in stocks. Equity funds in mutual funds are generally considered the riskier asset class. It is expected to yield higher returns as well (Investopedia). Equity funds are ideal investment vehicles for investors who are not as well-versed in financial investing or do not possess a large amount of capital to invest. Equity funds are practical investments for most people. The attributes that make equity funds most suitable for small individual investors are the reduction of risk resulting from a fund's portfolio diversification and the



relatively small amount of capital required to acquire shares of an equity fund.

The respondents' preference for the type of fund is analysed in Table: 5.37

**Table 5.37: Fund preferences of mutual fund investors**

<b>Fund preference</b>	<b>Frequency</b>	<b>Percent</b>
Fixed income fund	188	40
Equity fund	282	60
Total	470	100

Data reveal that 60% of the respondents prefer equity funds. The indication is that the majority of the respondents prefer investments with relatively higher return and higher risk.

### **5.5.1 Preference for the Type of Funds: Gender - Wise Analysis**

**H025: *There is no significant difference between the genders in their preferences for the type of mutual funds***

Attitude towards risk among male and female investors may differ. The gender-wise preferences were cross tabulated and analysed using Chi-Square Test. The analysis is presented in Table 5.38.

**Table 5.38: Fund preferences of mutual fund investors: Gender - wise analysis**

Gender	Type of fund preferred		
	Fixed income fund	Equity fund	Total
Male (Frequency)	140	216	356
% within gender	39.3%	60.7%	100.0%
Female(Frequency)	48	66	114
% within gender	42.1%	57.9%	100.0%
Total (Frequency)	188	282	470
% within gender	40.0%	60.0%	100.0%
Pearson Chi-Square =.278 P= .598 Not significant			

The result of the Chi-Square test shows that the P value (P= 0.598) is greater than 0.05 and that the relationship is statistically not significant. So the null hypothesis is accepted. The result of the Chi Square analysis indicates that there is no significant difference between the genders in their preference for the type of funds.

### 5.5.2 Preference for the Type of Fund: Age- Wise Analysis

**H026: *There is no significant difference among different age groups in their preferences for the type of mutual funds***

In the investment plan of the investors, fund selection is varied according to the age category of the investors. The literature shows that youth are ready to take risky investment; they may invest in equity funds for their investment choices.

The preferences for the type of funds are cross tabulated with different age categories of the investors and analysed using Chi Square test (Table 5.39).

**Table 5.39: Preference for the type of funds: Age- wise analysis**

Age	Fund preference		
	Fixed income fund	Equity fund	Total
Less than 30 (Frequency)	76	132	208
% within age	36.5%	63.5%	100.0%
30-45 (Frequency)	68	92	160
% within age	42.5%	57.5%	100.0%
46-60 (Frequency)	34	42	76
% within age	44.7%	55.3%	100.0%
Above 60 (Frequency)	10	16	26
% within age	38.5%	61.5%	100.0%
Total (Frequency)	188	282	470
% within age	40.0%	60.0%	100.0%
Pearson Chi-Square 2.191, P=.534, Not Significant			

The results of the Chi-square test give the P values 0.534 and it is greater than 0 .05. The null hypothesis is accepted. Test results show that investors' preferences for different types of funds do not vary among different age groups.

## 5.6 Fund Benefit Expectation of Retail Mutual Fund Investors

Retail investors have certain benefit expectations from their saving and investment apart from return and safety. Mutual fund investor's benefit expectations could include high return, high liquidity, tax benefit, regular income, highly secured fund and many more.

Investors were asked to indicate their highest priority. Table 5.40 presents the benefit expectation of mutual fund investors.

**Table 5.40: Fund benefit expectations of mutual fund investors**

Fund benefit expectation	Frequency	Percent
High return	241	51.3
High liquidity	36	7.7
Tax benefit	118	25.1
Regular income	38	8.1
Highly secured fund	37	7.9
Total	470	100

The responses indicate that high return is the single most important benefit expected from mutual fund investment, as majority of the respondents (51.3 %) indicated this. For 25% of the respondents tax benefit is of primary concern. High liquidity (7.7%), regular income (8.1) and highly secured fund (7.9) are prime benefits expected by small minorities.

### 5.6.1 Fund Benefit Expectation of Retail Mutual Fund Investors: Gender -Wise Analysis

**H027: *There is no significant relationship between gender and fund benefit expectation***

The study tries to find out the possible gender difference in the fund benefit expectations. The data analysis using Chi-square test is presented in Table 4.41.

**Table 5.41: Fund benefit expectation of retail mutual fund investors: Gender -wise analysis**

Gender	Main benefit expected from mutual fund investment					
	High return	High liquidity	Tax benefit	Regular income	Highly secured fund	Total
Male (Frequency)	191	26	92	24	23	356
% within gender	53.7%	7.3%	25.8%	6.7%	6.5%	100.0%
Female (Frequency)	50	10	26	14	14	114
% within gender	43.9%	8.8%	22.8%	12.3%	12.3%	100.0%
Total (Frequency)	241	36	118	38	37	470
% within gender	51.3%	7.7%	25.1%	8.1%	7.9%	100.0%
Pearson Chi-Square 9.167 P=.057 Not significant						

The Chi – Square test results give the P value 0.057 which is greater than .05. The null hypothesis is accepted and the relationship is statistically not significant. The benefit expectations from mutual funds do not vary with the gender.

### **5.6.2 Fund Benefit Expectation of Retail Mutual Fund Investors: Age- Wise Analysis**

**H028: *There is no significant relationship between age and fund benefit expectation***

The benefit expectations of the respondents are cross tabulated with age using the Chi -Square analysis. The result of the analysis is presented in Table 5.42

**Table 5.42: Fund benefit expectations of retail mutual fund investors:  
Age -wise analysis**

Age	High return	High liquidity	Tax benefit	Regular income	Highly secured fund	Total
Less than 30 (Frequency)	119	8	44	18	19	208
% within age	57.2%	3.8%	21.2%	8.7%	9.1%	100.0%
30-45 (Frequency)	82	18	38	12	10	160
% within age	51.2%	11.2%	23.8%	7.5%	6.2%	100.0%
46-60 (Frequency)	28	6	28	8	6	76
% within age	36.8%	7.9%	36.8%	10.5%	7.9%	100.0%
Above 60 (Frequency)	12	4	8	0	2	26
% within age	46.2%	15.4%	30.8%	0.0%	7.7%	100.0%
Total (Frequency)	241	36	118	38	37	470
% within age	51.3%	7.7%	25.1%	8.1%	7.9%	100.0%
Pearson Chi-Square =18.319, P=0.019 Significant						

The P value is less than 0. 05 and it is found statistically significant (P=0. 019). Hence the null hypothesis is rejected. It shows that there is relationship between age of the investor and the benefit expected from mutual funds investments. People in the younger age groups (45 years and below) expect high return. Tax benefit expectation is more among people above 45 years.

### 5.6.3 Fund Benefit Expectations of Mutual Fund Investors: Education -Wise Analysis

**H029:** *There is no significant relationship between level of educational and fund benefit expectations.*

The investor groups with different levels of education may have different benefit expectations from their mutual fund investments. Table 5.43. provides data and analysis of the relationship between the level of educational and the fund benefit expectations.

**Table 5.43 Fund benefit expectation of mutual fund investors:  
Education - wise analysis**

Education	Benefit expectation					Total
	High return	High liquidity	Tax benefit	Regular income	Highly secured fund	
Less than Degree	21	6	24	5	6	62
% within education	33.9%	9.7%	38.7%	8.1%	9.7%	100.0%
Degree	56	6	38	8	20	128
% within education	43.8%	4.7%	29.7%	6.2%	15.6%	100.0%
PG and above	48	10	8	6	6	78
% within education	61.5%	12.8%	10.3%	7.7%	7.7%	100.0%
Professional Degree	116	14	48	19	5	202
% within education	57.4%	6.9%	23.8%	9.4%	2.5%	100.0%
Total	241	36	118	38	37	470
% within education	51.3%	7.7%	25.1%	8.1%	7.9%	100.0%
Pearson Chi-Square=30.515, P=0.001 Significant						

Chi-Square analysis shows that the P value (P=0.001) is less than 0. 05 and it is found statistically significant. Hence the null hypothesis is

rejected. The indication is that fund benefit expectations of investors have relationship with their level of education. For instance, funds benefit expectations of higher returns is predominant among investor groups with professional degrees and post graduation. Similarly tax benefit expectation is more among investors with graduation and lower levels of education.

#### 5.6.4 Fund Benefit Expectation of Retail Mutual Fund Investors – Occupation Wise Analysis

**H030:** *There is no significant relationship between occupation of the respondent and fund benefit expectation*

Fund benefit expectations of mutual fund investors may vary according to the occupations of investors. Table 5.44 provide the data and Chi Square analysis of the benefit expectation of the different occupational groups.

**Table 5.44: Fund benefit expectations of mutual fund investors: Occupation - wise analysis**

Occupation	High return	High liquidity	Tax benefit	Regular income	Highly secured fund	Total
Salaried	172	20	81	21	30	324
% within occupation	53.1%	6.2%	25.0%	6.5%	9.3%	100.0%
Business	41	12	23	11	3	90
% within occupation	45.6%	13.3%	25.6%	12.2%	3.3%	100.0%
Self employed	28	4	14	6	4	56
% within occupation	50.0%	7.1%	25.0%	10.7%	7.1%	100.0%
Total	241	36	118	38	37	470
% within occupation	51.3%	7.7%	25.1%	8.1%	7.9%	100.0%
Pearson Chi-Square=12.145 d=8 P=.145 Not Significant						



The Chi - Square test shows that the P value (P=0.145) is greater than the significance level (0.05) and hence the null hypothesis is accepted. The inference is that the occupation of the respondent has no significant relationship with fund benefit expectations.

### **5.7 Source of Information for Mutual Fund Investment Decision**

Mutual fund investors generally depend on different sources of information for purchase decisions. Respondents were asked to rank the different information sources according to their relevance on a five point Likert scale in which '5' was equal to 'very important' and 1 'not at all important'.

Table 5.45 provides the data analysis pertaining to the information sources and the information sources are ranked based on the weighted average.

**Table 5.45: Relevance of source of information on mutual fund investment decision**

<b>Sl. No</b>	<b>Information sources</b>	<b>Mean value</b>	<b>Rank</b>
1	Financial advisor	3.51	1
2	Performance ranking	3.46	2
3	Recommendations of friends or family	3.2	3
4	Recommendation of business associates	3.07	4
5	Seminars	3.02	5
6	Booklets or news letter	2.93	6
7	Direct mail	2.87	7
8	Advertisement-television	2.66	8
9	Advertisement-news paper	2.67	9
10	Advertisement-magazine	2.54	10
11	Advertisement-radio	2.31	11

The result of the analysis reveals that the financial advisor is the most important source of information. Performance ranking is second most important source of information. Friends and family come third in the ranking of the respondents. It is significant to note that media advertisements get the lowest ranking.

## **5.8 Product Selection Criteria of Mutual Fund Investors**

Previous research has found that individual investors rely heavily on different factors when making mutual fund purchase decisions. The decision making process of the investor is extremely important for corporate decision makers since the factors that influence product choice behaviour is critical for marketing decisions.

Researchers on mutual funds have addressed the issue of the product selection criteria used by investors. Different factors influencing product choice have been addressed in different studies. This study addresses a more comprehensive set of product selection criteria.

### **5.8.1 Product Selection Criteria for Mutual Fund Investment**

Factors such as regular income, tax benefit, assured return, performance record, etc., are considered by the investors before their purchase decision. Apart from these fund benefit factors, fees of funds, company ownership, reputation, age and maturity of fund, agency network and agent information, redressal measures, transparency in services, disclosure of NAV, etc., may also be considered by the investors as their selection criteria.

A total of 17 factors have been taken as the selection criteria. Respondents were asked to rate the selection criteria for mutual fund

purchase on a five point Likert scale. Based on the weighted mean scores, ranks have been assigned to each selection criterion. The analysis is presented in Table 5.46

**Table 5.46: Product Selection criteria for mutual fund investment**

Sl. No	Selection criteria	Mean value	Std. Deviation	Ranks
1	Regular income	3.31	1.425	11
2	Tax benefits	3.67	1.240	3
3	Investment performance record	3.70	1.225	1
4	Maturity of fund	3.46	1.280	7
5	Assured return	3.57	1.252	5
6	Reputation of the firm	3.69	1.307	2
7	Company ownership	3.40	1.233	9
8	Management fee of the fund	3.26	1.178	13
9	Age of fund	3.30	1.242	12
10	Rating by rating agency	3.40	1.291	9
11	Well developed agency network	3.33	1.149	10
12	Transparency in services	2.79	1.115	16
13	Disclosure of NAV	3.10	1.223	15
14	Responsiveness to enquiry	3.15	1.178	14
15	Facility of online services	3.41	1.177	8
16	Information from agents	3.61	1.127	4
17	Investors grievance redress machinery	3.53	1.151	6

The results of the analysis indicate that all selection criteria considered in the study are relevant in the consumer decision process. The weighted mean scores are above three for all the choice criteria (where the maximum score is 5), with the single exception of ‘transparency in services.’ The differences in scores are not high.

The top ranking selection criterion is 'performance record'. The 'reputation of the firm' gets second rank. 'Tax benefit' and 'information from agents' get third and fourth rank, respectively. 'Assured return,' 'grievance redressal measures' and 'maturity of fund' get the next three ranks, in their order.

As these 17 selection criteria are independent and apparently unrelated, a factor analysis is done to reduce them into manageable groups for the purpose of further analysis.

### **5.8.2 Product Selection Criteria for Mutual Fund Investment: Factor Analysis**

A factor analysis has been done so that the selection criteria could be grouped meaningfully. Respondents expressed their views regarding the importance of certain information for their mutual fund decision. Seventeen items have been measured and factor analysis has been done with component analysis as the extraction method, with Varimax rotation with Kaiser Normalization. Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin Measure of Sampling Adequacy were performed to confirm the suitability of the data for factor analysis.

Kaiser's criterion was used while performing factor analysis in order to decide the number of factors to be retained.

**Table 5.47: KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olin Measure of Sampling Adequacy.		.937
Bartlett's Test of Sphericity	Approx. Chi-Square	3814.569
	df	136
	Sig.	.000

Chi-square value computed while performing Bartlett's test of Sphericity is 3814.569. It is highly significant and the significance level is 0.000, which meets the criteria of value lower than 0.05 in order to perform factor analysis. KMO measure of Sampling Adequacy is 0.937, which exceeds the minimum value of 0.6 required for good factor analysis.

Principal component analysis is done with Varimax rotation and the items are loaded on three factors, as shown in Table 5.48.

**Table 5.48. Factor analysis on product selection criteria**

Sl. No	Selection criteria	Fund sponsor quality	Fund quality	Service substance
1	Regular income	.123	<b>.666</b>	.228
2	Tax benefits	.115	<b>.756</b>	.178
3	Investment performance record	.393	<b>.645</b>	.147
4	Maturity of fund	.494	<b>.500</b>	.125
5	Assured return	.316	<b>.594</b>	.394
6	Reputation of the firm	<b>.528</b>	.529	.260
7	Company ownership	<b>.514</b>	.422	.382
8	Management fee of the fund	<b>.604</b>	.332	.239
9	Age of fund	<b>.781</b>	.216	.206
10	Rating by rating agency	<b>.738</b>	.150	.191
11	Well developed agency network	<b>.505</b>	.186	.490
12	Transparency in services	.093	.255	<b>.703</b>
13	Disclosure of NAV	.178	.182	<b>.741</b>
14	Responsiveness to enquiry	.468	-.010	<b>.600</b>
15	Facility of online services	.313	.456	<b>.557</b>
16	Information from agents	.409	.339	<b>.539</b>
17	Investors grievance redress machinery	.200	.430	<b>.551</b>

None of the variables fall into the unacceptable range, as all is above 0.5 factor loadings. Hence, it can be concluded that the items are measuring the constructs correctly. The identified factors are 'Fund quality', 'Fund sponsor quality' and 'Service substance'. Reputation of the firm is included in the fund sponsor quality; even though it has been loaded in fund quality since theoretically it is part of the fund sponsor quality. These factors can be used for further analysis.

**Fund quality:** This factor includes five variables - regular income, tax benefits, investment performance record, maturity of fund and assured return.

**Fund sponsor quality:** The six variables included in the factor are reputation of the AMC, company ownership, management fee, age of fund, rating by rating agency and well developed agency network.

**Service substance:** The next factor is service substance of the mutual fund operators. The six variables included are information from agents, facility of online services, and respond to inquiries, investor's grievance redress machinery, transparency in services and disclosure of net asset value (NAV).

### **5.8.3 Selection Criteria Used by Respondent Who Prefer Equity Funds versus Fixed Income Funds**

On the basis of the three factors, the selection criteria used by two categories of investors have been analysed. The purpose is to analyse whether there is any significant differences in the factors used for product choice by investors who prefer fixed income funds and equity funds. The

following hypotheses have been set to test the relationship among the three factors and the two groups.

**H031:** *There is no difference in fund quality selection criteria for mutual fund purchase among the equity fund and fixed income fund preferred investors.*

**H032:** *There is no difference in fund sponsor quality selection criteria for mutual fund purchase among the equity fund and fixed income fund preferred investors*

**H033:** *There is no difference in service substance selection criteria for mutual fund purchase among the equity fund and fixed income fund preferred investors*

Normality is important for assessing the data distribution and suitability of statistical tests for analysis. Normality of data has been assessed. All data distributions were explored for skewness, kurtosis and their Z scores. Analysis indicates that there are slight deviations from normal distribution for all the variables. Therefore, appropriate nonparametric tests are applied to test the hypotheses.

Mann-Whitney test is used to test the differences in the factors (fund quality, fund sponsor quality and service substance) considered by the two groups: those who prefer fixed income fund and those who prefer equity fund. The test results are presented in Table: 5.49 who prefer fixed income funds and equity funds.

**Table 5.49: Mann-Whitney test: Product selection factors used by investors who prefer fixed income funds versus equity funds**

Selection criteria	Equity fund (N=282)	Fixed income fund (N=188)	U-Value	sig	Result
	Rank mean				
Fund quality	224.85	251.47	2.088	.037	Null hypothesis rejected
Fund sponsor quality	235.59	235.37	.017	.987	Null hypothesis accepted
Service substance	219.55	259.42	3.128	.002	Null hypothesis rejected

The Mann-Whitney U test gives different results for the different factors at 5% significance level:

For the factor **‘fund quality,’** the P value (P=.037) is less than 0.05 and the null hypothesis is rejected. The inference is that there is difference among the equity funds and fixed income funds preferred investors with respect to the selection criteria relating to fund quality. The investors who prefer fixed income funds give more weight age to the fund quality factor.

However, in respect of the factor **‘fund sponsor quality,’** the P value (P=0.987) is greater than 0.05 and the null hypothesis accepted. The indication is that there is no difference among the equity funds and fixed income fund preferred investors with respect to the selection criteria relating to fund sponsor quality.



In respect of the factor ‘**Service substance**’, the P value ( $P=.002$ ) is less than 0.05 and the null hypothesis rejected. The test results show that there is significant difference among the equity funds and fixed income funds preferred investors with respect to the selection criteria relating to service substance. The investors who prefer fixed income funds give greater weightage to the service substance factor.

#### **5.8.4 Summary**

On the whole, while the investors with greater preference for equity funds give more weightage for fund sponsor quality, the group that prefers fixed income fund gives greater consideration for fund quality and service substance factors.

*.....❧.....*



**STRUCTURAL EQUATION MODELING ON  
INFLUENCE OF MUTUAL FUND MARKETING ISSUES  
AND SERVICE QUALITY ON THE BEHAVIOURAL  
INTENTIONS OF MUTUAL FUNDS INVESTORS**

**Contents**

- 6.1 *Introduction*
- 6.2 *Mutual Fund Marketing Issues and Behavioural Intentions: Structural Equation Model*
- 6.3 *Perceived Service Quality and Behavioural Intention: Structural Equation Model*
- 6.4 *Summary*

**6.1 Introduction**

This chapter provides the second part of data analysis. Two broad aspects are analysed here:

- 1) Investor's perceptions on mutual fund marketing issues and their influence on behavioural intention, using structural equation model
- 2) Perceived service quality and behavioural intention, using structural equation model

To find the influence of investors' perceptions on mutual fund marketing issues and perceived service quality on the behavioural intentions of mutual fund investors, structural equation modeling has been done.

## **6.2 Mutual Fund Marketing Issues and Behavioural Intentions: Structural Equation Model**

While the world mutual funds industry has experienced significant growth in the last few decades, the Indian mutual funds sector is yet to achieve substantial asset under management. The investment in mutual funds by household investors is relatively low. Perhaps several factors inhibit mutual funds investment by retail investors.

The important issues include lack of awareness among the investors, ineffective promotion, proliferation of schemes, distribution problems, lack of faith and confidence in the distributors, low returns, high cost, mis-selling by the distributors and ineffective marketing. The study addresses some of these issues.

The assumption is that some of these issues influence the mutual funds investment behaviour of individual (retail) investors, particularly the purchase behaviour. As there are too many issues involved, the focus of the study has been by and large limited to the marketing issues. Even these issues are numerous.

Hence, structural equation modeling (SEM) has been used to identify the influences of the mutual fund related issues relevant to

marketing on the purchase behavioural intentions of retail mutual fund investors.

The steps followed in the SEM analysis are as follows:

1. Identification of exogenous variables:

The exogenous variables have been identified from among the mutual fund issues. A scale developed by Stephen R Ennew and Christine T (1996) has been adopted and modified for the study.

2. Exploratory factor analysis:

Exploratory factor analysis was done to group the variables into different factors.

3. Conceptual model

A conceptual was developed after the factor analysis.

3. Reliability and validity

The goodness of measures was assessed by testing the reliability and validity of the instrument.

4. Structural equation modeling

After the proper evaluation of model fit of the data, SEM model was developed.

### **6.2.1 Research Instrument and Rating Scale**

A five point Likert scale has been used for data collection. The scale developed by Stephen R Ennew and Christine T (1996) was adopted

and it was modified based on literature survey and pilot study. Respondents were asked to rate (from one to five) the different issues.

Variables in the modified rating scale is given in Table 6.1

**Table 6.1: Variables Used in the Rating Scale**

Sl. No	Statements	Scale modified and adapted from
1	Difficult to identify the product from the different schemes	Stephen R Ennew, Christine T (1996)
2	Investment in certain mutual fund could lead to monetary loss	
3	Not comply with code of conduct	
4	Mutual fund products are not differentiated properly from other financial products	
5	Cluttered with different product /schemes	
6	It is very difficult to convert into liquid cash	
7	Charging higher fees than justified	
8	Fail to design fee structure to avoid product bias	
9	Charging additional fee for the premature redemption	
10	Use small print clause	
11	Promote inappropriate products to the clients	
12	Not disclosing the commission in the time of fund purchase	
13	Not inform investors about the security problem	
14	Exaggerating the return figure while describing the product	
15	Use misleading information about competitors	
16	Delayed payment of valid claims	
17	Distributors are not selling the right product to the right consumer	
18	Availability of AMC's branch near by	

### **6.2.2 Exploratory Factor Analysis**

Exploratory factor analysis (EFA) was done to identify the underlying factors and to test whether the factors extracted are similar to the dimensions proposed in the study.

Respondents expressed their opinions regarding the different issues. A total of 18 items have been measured. Factor analysis has been done with principal component analysis as the extraction method, with Varimax rotation with Kaiser Normalization. Bartlett's Test of Sphericity (Table 6.2) and KMO measure of Sampling Adequacy were performed to confirm the suitability of the data for Factor Analysis. Kaiser's criterion was used while performing factor analysis in order to decide the number of factors to be retained.

**Table 6.2: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.939	
Bartlett's Test of Sphericity	Approx. Chi-Square	4795.090
		190
		.000

The Chi-square value computed while performing Bartlett's test of sphericity is 4795.090; this is highly significant and the significance level is 0.000 and this meets the criteria of value lower than 0.05 in order to perform factor analysis. KMO measure of sampling Adequacy is 0.939 which exceeds the minimum value of 0.6 for good factor analysis.

Subsequently, principal component analysis has been done with Varimax rotation and the items are loaded on four factors as shown in Table 6.3.

**Table 6.3: Mutual fund issues: Factor analysis**

Issues dimensions	Promotional issue	Pricing issue	Product issue	Distributional issue
Difficult to identify the product from the different schemes	.123	.338	<b>.716</b>	-.040
Investment in certain mutual fund could lead to monetary loss	.047	.273	<b>.744</b>	.184
Not comply with code of conduct	.424	.132	<b>.691</b>	.033
Mutual products are not differentiated properly from other financial products	.232	.139	<b>.580</b>	.504
Cluttered with different product /schemes	.356	.334	<b>.417</b>	.336
It is very difficult to convert into liquid cash	.076	<b>.640</b>	.351	.367
Charging higher fees than justified	.292	<b>.734</b>	.207	.165
Fail to design fee structure to avoid product bias	.298	<b>.617</b>	.179	.338
Charging additional fee for the premature redemption	.517	<b>.607</b>	.183	-.059
Use small print clause	<b>.661</b>	.240	.099	.245
Promote inappropriate products to the clients	<b>.628</b>	.225	.250	.214
Not disclosing the commission in the time fund purchase	<b>.631</b>	.131	.339	.328
Not inform investors about the security problem	<b>.720</b>	.297	.114	.103
Exaggerating the return figure while describing the product	<b>.552</b>	.147	.396	.427
Use misleading information about competitors	<b>.669</b>	.246	.102	.269
Delayed payment of valid claims	.412	.186	-.027	<b>.674</b>
Distributors are not selling the right product to the right consumer	.388	.224	.059	<b>.572</b>
Availability of AMCs branch near by	.100	.400	.308	<b>.575</b>



All the variables except 'Cluttered with different product /schemes' fall into an acceptable range, as they are above 0.5 factor loadings. Previous studies and research have considered cluttering of product product/schemes as a product related issue. So this factor has also been considered for further analysis even if the loaded value is only 0.417. Hence, it can be concluded that the items are measuring the constructs correctly. These factors can be used for further analysis.

### **6.2.3 Behavioural Intention**

Behavioural intentions are assumed to be the immediate antecedent of a specific behaviour of the customer. Intentions are explicit decisions to act in a certain way, and they concentrate on a person's motivation towards a goal in terms of direction and intensity (Sheeran, 2002). The behavioural intention of the investors was measured using the scale adopted from Riyadh Ladhari, (2009) and Bitner (1990) and modified for the study. Behavioural intention of the investors is measured using a four item scale (Table 6.4).

**Table 6.4: Measurement of behavioural intention**

Dimension	Abbreviation	Statements	Modified & Adapted from	Cronbach's Alpha
Behavioural intention	BI1	I plan to retain my investment with mutual fund saving	Riadh Ladhari, (2009) Bitner (1990)	0.875
	BI2	If possible I will try to make more investment in mutual funds		
	BI3	It is likelihood that I will suggest mutual fund as an investment option to my friends/relatives		
	BI4	I always give positive word of mouth about mutual fund product		

Cronbach's alpha is the most common measure of internal consistency ("reliability") and the result is 0.875. The reliability coefficient is above the acceptable limit 0.7, as recommended by Nunally and Bernstein (1994). The behavioural intention variable is taken as the dependent variable. The attitudinal difference of investors towards the mutual fund issues and service quality, and influence of these factors on the behaviour intentions are measured and presented in the subsequent sections.

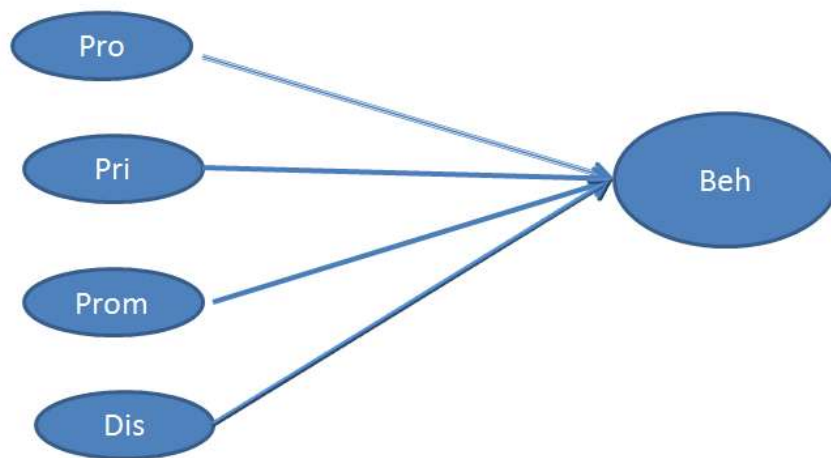
#### 6.2.4 Standardization of Data

The WarpPLS 5.0 software allows for standardization of the raw data read. Standardised data columns have means that equal zero and standard deviations that equal one. Standardized data usually ranges from -4 to 4, with outliers usually assuming values toward the left or right end

of those extremes, sometimes beyond 4 or 4. Normality of distribution therefore was ensured through this step

### **6.2.5 Conceptual Model: Mutual Funds Issues and Behavioural Intention (Model 1)**

Hypotheses 34 to 37 are about relationships among the variables under study. These hypotheses are proposed to be tested through Structural Equation Modeling using, Partial Least Square (WarpPLS 5.0) method. Figure 6.1. depicts the hypothesised relationships among the variables of the study through a path model. It analyses the relationship between the mutual funds issues and behavioural intention.



**Figure 6.1: Conceptual model on mutual funds issues and behavioural intention**

**Note:** *Pro* denotes product issue, *Pri* denotes pricing issue, *Prom* denotes promotion issues, *Dis* denotes distributional issues and *Beh* denotes behavioural intention

### **6.2.6 Measurement Model**

The precondition for accepting the estimated model is that the model should fit with the data. The validity and reliability criteria also should be met. The reliability and validity of measurement instrument has been assessed through WarpPLS 5.0. These important statistical issues are examined by assessing the convergent validity and reliability of each measure and followed by the discriminant validity. The convergent validity and reliability aspects have been evaluated by the combination of factor loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted. The details of the reliability and validity of the model are tested here.

### **6.2.7 Convergent Validity for Reflective Constructs**

The study has reflective constructs in the measurement Model 1 to check the influence of certain issues in the mutual fund sector with the behavioural intention of mutual fund investors. These issues include five reflective constructs such as product issues, pricing issues, promotional issues, distribution issues and behavioural intention.

The analysis has been performed by WarpPLS 5.0.

**Table 6.5: Item loading for the reflective construct**

Construct	Composite reliability	AVE	Cronbach's Alpha	Loading	P value
Prod	0.815	0.575	0.815	0.954	***
				0.963	***
				0.887	***
				0.918	***
				0.898	***
Pri	0.885	0.657	0.826	0.892	***
				0.995	***
				0.997	***
				0.860	***
Prom	0.899	0.597	0.865	0.997	***
				0.984	***
				0.972	***
				0.973	***
				0.866	***
				0.974	***
Dis	0.823	0.609	0.678	0.974	***
				0.989	***
				0.875	***
Beh	0.914	0.727	0.875	0.971	***
				0.993	***
				0.990	***
				0.971	***

**Note:** *Pro* denotes product issue, *Pri* denotes pricing issue, *Prom* denotes promotion issues, *Dis* denotes distributional issues and *Beh* denotes behavioural intention

Through the measurement model, convergent validity, discriminant validity and reliability have been examined. Convergent validity for reflective constructs is assumed when the loadings of their items are above 0.7 and are significant at the 0.05 level.

The measurement model discussed above has revealed that factor loadings were all above 0.7 and significant at 0.001 level. This supports the conclusion of convergent validity for the reflective constructs in the tested model. Cronbach's Alpha coefficients for all the constructs are approximately 0.7 (0.678 for distribution issue) or above 0.7. Therefore, the reflective constructs in this group meet acceptable requirements for validity and reliability.

### **6.2.8 Discriminant Validity for Reflective Constructs**

The model has measured the discriminant validity. Basically two criteria have to be met for discriminate validity: item loading and AVE. Item loading should be at least 0.7. The square root of the AVE calculated for a construct from its indicators should be at least 0.5 (i.e.,  $AVE > 0.50$ ). The correlation of the latent variable scores with the measurement items needs to show an appropriate pattern of loadings, one in which the measurement items load highly on their theoretically assigned factor and not highly on other factors (Gefen and Straub 2005). Squared multiple correlation values show the ability of the indicators to measure the latent dimensions. When these values are above 0.5, the ability of the indicators to measure the latent dimensions is considered good and between 0.5 and 0.3, it is considered moderate. The criteria of the measurement of AVE value, the model shows that the square roots of the AVE for all the constructs from their indicators are above 0.7 and exceed that construct's correlations with other constructs. Hence, the constructs have been shown to have adequate discriminant validity. The measurement is discussed in Table: 6.6.

**Table 6.6: Correlations among latent variable constructs**

	<b>Pro</b>	<b>Pri</b>	<b>Prom</b>	<b>Dis</b>	<b>Beh</b>
Pro	<b>0.758</b>				
Pri	0.676	<b>0.811</b>			
Prom	0.651	0.692	<b>0.772</b>		
Dis	0.564	0.624	0.699	<b>0.780</b>	
Beh	0.366	0.362	0.398	0.397	<b>0.853</b>

**Note:** *Pro* denotes product issue, *Pri* denotes pricing issue, *Prom* denotes promotion issues, *Dis* denotes distributional issues and *Beh* denotes behavioural intention

### 6.2.9 Reliability for Reflective Constructs

Based on the analysis in Table 6.6, the composite reliability coefficient is considered a more appropriate measure of reliability in SEM than Cronbach's alpha. The composite reliability coefficients for all the reflective constructs in the PLS model are above 0.7 and they pass the reliability criterion.

### 6.2.10 Multicollinearity

The factor loading for all the measurements are exceeding 0.70, and hence the analysis of multicollinearity has to be performed. By definition, the multicollinearity is a measure of the correlation between the predictors of a variable which falsely inflates the standard errors. Therefore certain model parameters may sometimes become unstable (Kock, 2012) to assess the degree of multicollinearity, variance inflation factors (VIFs) are evaluated for each of the predictor variables. VIFs lower than 5 suggest that there is no multicollinearity (Hair et al., 2009).

Variance inflation factors (VIFs) of the constructs are found in product issue (2.132), the pricing issues (2.422), promotional issues (2.692), distributional issues (2.178) and behavioural intention (1.249). It is clear that VIFs values meet the recommended threshold values which points to the nonexistence of multicollinearity among the predictors of this model. The estimated model of the study shows the Average Block VIF (AVIF) is 4.548 (acceptable if  $\leq 5$ , and ideally  $\leq 3.3$ ). Absence of multicollinearity is very evident in this model.

From the details described above, it is evident that all the latent variables show internal consistency ( $CR > .70$ ), adequate discriminant validity and no collinearity problem (full  $VIF < 3.3$ ). Finally, we kept these latent variables (independent) to find out causal relationships with the dependent variable to develop the structural model.

### 6.2.11 Model Fit Indices and P Value

The model fit indices and P values for model validation are given in Table 5.7 and as seen in the table, they satisfy the acceptance criteria

**Table 6.7: Model fit indices and P value**

(Average path coefficient (APC) =0.151, P<0.001
Average R-squared (ARS) =0.217, P<0.001
Average adjusted R-squared (AARS) =0.210, P<0.001
Average block VIF, AVIF) =3.881
Average full collinearity VIF (AFVIF) = 2.135

All the model fit indices are acceptable for further analysis.



### **6.2.12 Structural Model**

This section presents the results of structural models which test the causal relationships of product, pricing, promotion and distributional issues with behavioural intention. The model was developed as illustrated in Figure 6.2. It has been estimated and explained by using WarpPLS 5.0. The attitude of the mutual fund investors towards the different issues in the mutual fund sector and their impact on the investor's behavioural intention have been analysed by testing the following hypothesis.

**H34:** *Product issues significantly influence the behavioural intention of the mutual fund investors*

**H35:** *Pricing issues significantly influence the behavioural intention of the mutual fund investors*

**H36:** *Promotional issues significantly influence the behavioural intention of the mutual fund investors*

**H37:** *Distributional issues significantly influence the behavioural intention of the mutual fund investors*

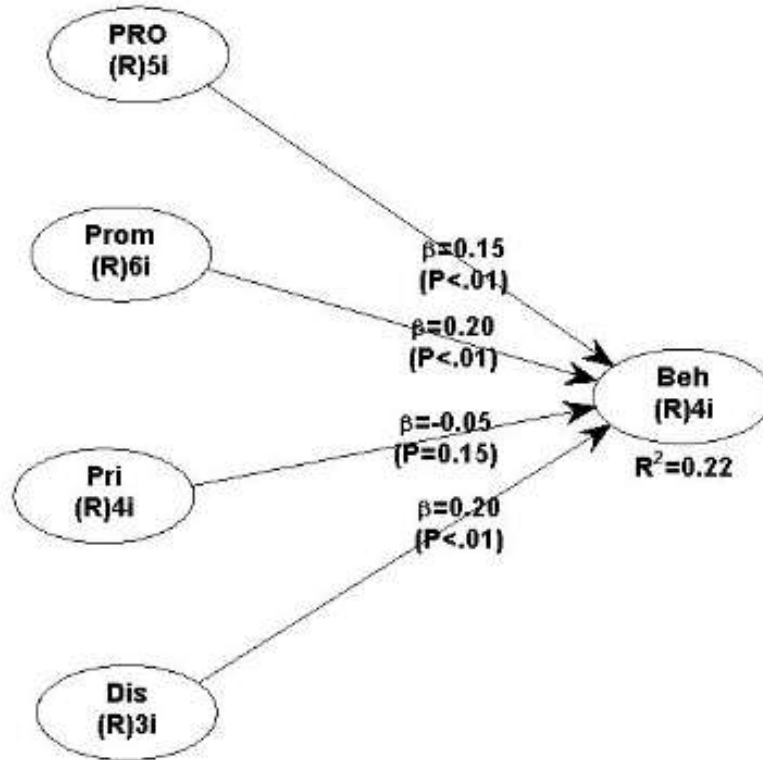


Figure 6.2: Structural Model

**Note:** *Pro* denotes product issues, *Pri* denotes pricing issues, *Prom* denotes promotion issues, *Dis* denotes distributional issues and *Beh* denotes behavioural intention

**Table 6.8: Summary for support for structural model relationships**

Path	Path coefficient ( $\beta$ )	P value	Significance	Test result
Pro $\longrightarrow$ Beh	0.15	<0.001	***	Supported
Pri $\longrightarrow$ Beh	0.04	0.145	Not significant	Rejected
Prom $\longrightarrow$ Beh	0.20	<0.001	***	Supported
Dist $\longrightarrow$ Beh	0.21	<0.001	***	Supported
R-squared coefficients 0.217				
Adjusted R-squared coefficients 0.210				

**Note:** Pro denotes product issue, *Pri* denotes pricing issue, *Prom* denotes promotion issues, *Dis* denotes distributional issues and Beh denotes behavioural intention

The results of the hypothesised path significance tests are given in Table: 5.8. The PLS results for the overall structural model are given in Figure 6.2. As per the evaluation of SEM results, all paths, except one path, in the theoretical model are supported.

The behavioural intention has been defined to include the following responses in the study:

- retain my investment with mutual fund saving
- make more investment in mutual funds
- suggest mutual fund as an investment option to my friends/ relatives
- give positive word of mouth about mutual fund product

The results of the hypotheses testing are as follows:

- 1) Product issues have significant influence on the behavioural intentions of the mutual fund investors, supporting H34
- 2) Pricing issues do not have any significant impact on behavioural intentions of the mutual fund investors, rejecting H35
- 3) Promotional issues have significant influence on the behavioural intentions of the mutual fund investors, supporting H36
- 4) Distribution issues have a significantly influence on the behavioural intention of the mutual fund investors, supporting H37

**Conclusion:**

The impact of the product, promotion and distributional issues on the behavioural intentions of mutual fund investors show that all these are important components for improving the behavioural intention of the investors. The  $R^2$  value of or the overall model is 0.22, which means that it explains 22 % of the variance on the behavioural intention.

### **6.3 Perceived Service Quality and Behavioural Intention: Structural Equation Model**

#### **6.3.1 Perceived Service Quality of Mutual Fund Service Providers**

This part provides the analysis of the service quality of the distributors and agents in the mutual fund sector, relating the service quality (as perceived by mutual fund investors) and its influence on investors' behavioural intentions. Technical service quality and functional service quality are the two different dimensions taken for the analysis of service quality.

The study tries to develop a model for finding the relationship between the perceived service quality and behavioural intention. The presumption is that technical and functional service qualities have significant impact on the behavioural intentions of mutual fund investors.

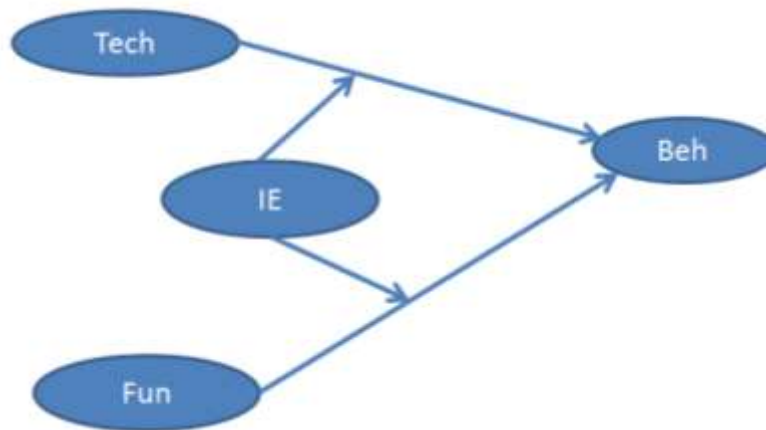
The study has adopted the multi-item scale from Sharma and Patterson (1999) and Hartline and Ferrell's (1996). The items (observed variables) measure the technical service quality and functional service quality. The scale is given in the Table: 6.9.

**Table 6.9: Multi-item scale for measuring the technical and functional service quality**

<b>Dimension</b>	<b>Abbreviation</b>	<b>Statements</b>	<b>Scale adaption</b>	<b>Cronbach's Alpha</b>
Technical service quality	Tech1	My service provider has assisted me to achieve my financial goals	Sharma and Patterson 1999	0.860
	Tech 2	My service provider has performed well in providing the best return on my investments.		
	Tech 3	My service provider has helped me to protect my current position by recommending the best investing options		
	Tech 4	My service provider has performed well in investing my money in appropriate investment options		
Functional service quality	Fun1	My service provider gives me personal attention.	Hartline and Ferrell's (1996)	0.821
	Fun2	My advisor has my best interests at heart.		
	Fun3	I can share my thoughts with my adviser		

### 6.3.2 Conceptual Model (2)

The conceptual model of the study has been explained in the Figure 3. Hypotheses 38 to 41 are about relationships among the variables under study. These hypotheses are proposed to be tested through Structural Equation Modeling using Partial Least Square (WarpPLS 5.0) method. Figure 3 depicts the hypothesised relationships among the variables of the study through a path model . It analyses the direct relationship between the perceived service quality towards the service operators and the behavioural intention. The moderating role of the investment expertise has been measured in the direct relationship between the variables.



**Figure 6.3: Conceptual model (2)**

**Note:** *Tech* denotes technical service quality, *Fun* denotes Functional service quality, *IE* denotes investment expertise, *Beh* denotes behavioural intention

### **6.3.3 Measurement Model**

The precondition for accepting the estimated model is that it should meet the validity and reliability criteria. The reliability and validity of measurement instrument has been assessed through WarpPLS 5.0. These important statistical issues are examined by assessing the convergent validity and reliability of each measure and followed by the discriminant validity. The convergent validity and reliability aspects have been evaluated by the combination of factor loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted. The details of the reliability and validity of the model are tested here.

### **6.3.4 Convergent Validity for Reflective Constructs**

The study has reflective constructs in the measurement model 2 to check the influence of perceived service quality on the behavioural intention of mutual fund investors. These issues include two reflective construct such as technical and functional service quality.

The analysis was performed by WarpPLS 5.0. Through the measurement model, convergent validity, discriminant validity and reliability were examined. Convergent validity for reflective constructs is assumed when the loadings of their items are above 0.7 and are significant at the 0.05 level.

**Table 6.10: Item loading for the reflective construct**

Construct	Composite reliability	AVE	Cronbach's Alpha	Loading	P value
Tech 1	0.907	0.711	0.862	0.768	***
Tech2				0.909	***
Tech3				0.878	***
Tech4				0.809	***
Fun1	0.894	0.737	0.822	0.849	***
Fun2				0.886	***
Fun3				0.840	***
Beh1	0.914	0.727	0.875	0.837	***
Beh2				0.866	***
Beh3				0.879	***
Beh4				0.828	***

The measurement model discussed above has noted that all item loadings are above 0.7 and significant at the 0.001 level. This supports the conclusion of convergent validity for the reflective constructs in the tested model. Cronbach's alpha coefficients for all the constructs are above 0.7. Therefore, the reflective constructs in this group meet acceptable requirements for validity and reliability.

### 6.3.5 Discriminant Validity for Reflective Constructs

This model has measured the discriminant validity as well. As for the criteria of the measurement of AVE value, the model shows that the square roots of the AVE for all the constructs from their indicators are above 0.7 and exceed that construct's correlations with other constructs. Hence, the constructs have adequate discriminant validity. The measurement is presented in the Table: 6.11.



**Table 6.11: Correlations among latent variable Constructs**

	<b>Tech</b>	<b>Fun</b>	<b>Beh</b>
Tech	0.843		
Fun	0.756	0.859	
Beh	0.702	0.675	0.853

**Note:** *Tech* denotes technical service quality, *Fun* denotes Functional service quality, *Beh* denotes behavioural intention

### **6.3.6 Reliability for Reflective Constructs**

Model 2 of the study has measured the composite reliability. In the SEM analysis composite reliability coefficient is considered more appropriate than Cronbach's alpha. It shows that all the composite reliability coefficients for all constructs in the PLS model are above 0.7. Hence the reliability criteria are met.

### **6.3.7 Multicollinearity**

To measure the multicollinearity, variance inflation factors (VIFs) are evaluated for each of the predictor variables. Variance inflation factors (VIFs) of the constructs are found: technical service quality (2.76), functional service quality (2.583), and behavioural intention (2.179). It is clear that VIFs values have met the recommended threshold values, which points to the nonexistence of multicollinearity among the predictors of this model. VIFs lower than 5 suggest no multicollinearity (Hair et al., 2009). The estimated model of the study shows the Average block AVIF=2.869, Good if < 5 (acceptable if ≤ 5, ideally ≤ 3.3). Absence of Multi collinearity is very evident in this model.

From the details described above all the latent variables show internal consistency ( $CR > .70$ ), adequate discriminant validity and no collinearity problem (full  $VIF < 3.3$ ). Finally, we kept these latent variables (independent) to find out causal relationship with dependent variable to develop the structural model.

### 6.3.8 Model Fit Criteria and P Value

The model fit indices and P values for model validation are given in Table 5.12 and as seen in the table, they satisfy the acceptance criteria

**Table 6.12: Model fit criteria and P value**

Average path coefficient (APC) =0.395, P<0.001
Average R-squared (ARS) =0.564, P<0.001
Average adjusted R-squared (AARS) =0.210, P<0.001
Average block VIF, AVIF) =2.869

Algorithm satisfies the overall model fit criteria. All the model fit indices are acceptable for further analysis.

### 6.3.9 Structural Model

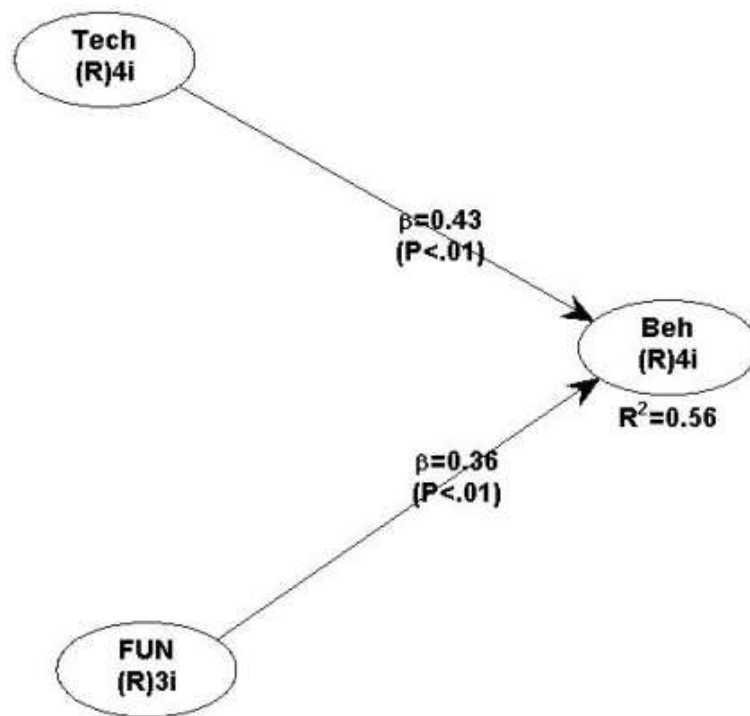
This section presents the results of several structural models testing the causal relationships of technical and functional service quality with behavioural intention. The final model has used PLS Regression with the Warp 5.0.

The model was developed as illustrated in figure 4, was estimated and explained by using WarpPLS 5.0. The perceived service quality of

the mutual fund investors towards the service quality of service providers and its impact on the investor's behavioural intention has been analysed by testing the following hypothesis.

**H38:** *Perceived technical service quality has significant influence on the behavioural intention of the mutual fund investors*

**H39:** *Perceived functional service quality has significant influence on the behavioural intention of the mutual fund investors*



**Figure 6.4: Structural Model Test Results**

**Table 6.13: Summary for support for structural model relationships**

Path	Path coefficient ( $\beta$ )	P value	Significance	Test result
Tech $\rightarrow$ Beh	0.43	<0.01	Significant	Supported
Fun $\rightarrow$ Beh	0.36	<0.01	significant	Supported
R-squared coefficients 0.564				
Adjusted R-squared coefficients 0.560				

**Note:** *Tech* denotes technical service quality, *Fun* denotes Functional service quality, *Beh* denotes behavioural intention

The results of the hypothesized path significance tests are shown in Table 5.13.

The PLS results for the overall structural model are shown in Figure 6.4. As per the evaluation of SEM result, all paths in the theoretical model are supported.

- 1. *Perceived Technical service quality has significant influence on the behavioural intention of the mutual fund investors, supporting H38***
- 2. *Perceived functional service quality has significant influence on the behavioural intention of the mutual fund investors, supporting H39***

The impact of the technical service quality and functional service quality on the behavioural intention shows that technical and functional service qualities of the service providers are important components for

improving the behavioural intention of the investors. The R<sup>2</sup> value of or the overall model was .56, which means it explained 56 % of the variance on the behavioural intention.

#### **6.3.10 Linkage between Perceived Service Quality and Behavioural Intention under Moderating Influence of Investment Expertise**

Investment expertise represents a customer's accrued knowledge about how a product should perform and a general understanding of the average performance of similar brands in a product category (Sharma and Patterson 2000). According to Simon J. Bell et.al (2005), expert customers can assess the technical attributes of the service more accurately, but the importance of functional service quality dimensions (e.g., tangible cues, empathy, and friendliness of staff) will decline due to customer expertise. Customer expertise focuses more on technical aspect of service quality and beneath the functional aspects of service offering. Based on these assumptions, the following hypotheses are formulated to test the moderating role of the investment expertise in the relationship of technical and functional service quality with the behavioural intention.

**H40:** *The positive relationship between technical service quality and behavioural intention will be stronger where clients have high investment expertise.*

**H41:** *The positive relationship between functional service quality and behavioural intention will be weaker where clients have high investment expertise.*

To identify the moderating effect of investment expertise in the relation between the perceived service quality and behavioural intention, WarpPLS 5.0 has been used in this study. It has already been indicated that higher the technical service quality, higher the behavioural intention and higher the functional service quality, higher will be the behavioural intention.

Moderating effects are checked by variable (investment expertise) whose variation influences the strength or the direction of a relationship between independent (Tech& Fun) and dependent variables (Beh). The moderating influence of investment expertise was found to be significant at 0.01 level of significance ( $p < 0.01$ ). Investment expertise was found to have a moderating influence on the link of technical and functional service quality with behavioural intention. The moderating effect and path coefficient value of the results are presented in Table 6.14.

**Table 6.14: Moderation effect and P value**

Variable	Path coefficient			
	Technical	Functional	Inv*Tech	Inv*Fun
Behavioural intention	0.442	0.270	0.139****	-0.236****

**Note:** *Tech* denotes technical service quality, *Fun* denotes Functional service quality, *IE* denotes investment expertise, *Beh* denotes behavioural intention

**Hypothesis 40** proposed the positive effect of the technical service quality on the behavioural intention would be stronger when the investment expertise is high. Our result shows that the positive effect of technical and behavioural intention is bolstered for the client with high level of investment expertise. The beta value of the relationship shows that  $\beta = 0.14$  and  $P < .01$ . It has been proved with 99 % of significant level.

**Hypothesis 41** proposed that relationship between the functional service quality and behavioural intention would be weaker when clients have high investment expertise. The beta value of the relationship shows that  $\beta = -0.236$  and  $P < .01$ . It has been proved with 99 % of significant level.

The path coefficients and p values are shown in Figure 5. Investment expertise has a significant moderating influence on the relationship between the exogenous variable (technical and functional service quality) with indigenous variable (behavioural intention). The moderating effects of investment expertise explains 57 % ( $R^2 = .57$ ). Investment expertise has a positive moderating influence on the technical service quality and behavioural intention. It has strengthened the relationship of technical service quality and behavioural intention. Investment expertise has negative moderating influence on the relationship between functional service quality and behavioural intention. It has made the relationship weaker.

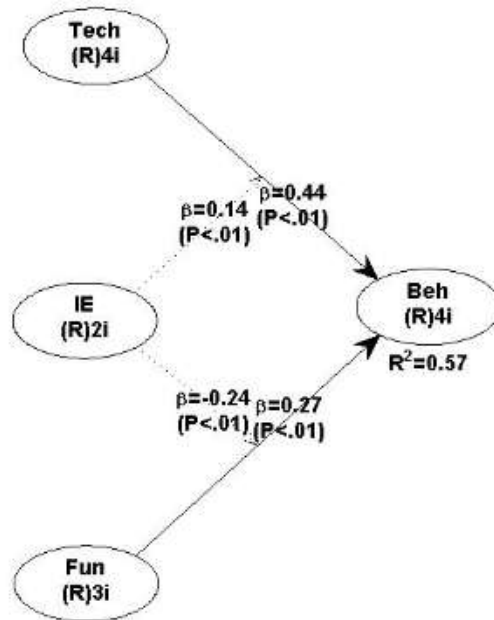


Figure 6.5: Structural model analysis: investment expertise as moderating variable

Table 6.15: Summary for moderating effect of structural model relationships

Path	Path coefficient ( $\beta$ )	P value	Significance	Test result
IE- Tech *Beh	0.14	<0.01	Significant	Supported
IE- Fun *Beh	-0.239	<0.01	significant	Supported
R-squared coefficients 0.571				
Adjusted R-squared coefficients 0.568				

**Note:** *Tech* denotes technical service quality, *Fun* denotes Functional service quality, *IE* denotes investment expertise, *Beh* denotes behavioural intention.



## **6.4 Summary**

Results of the analysis indicate that mutual fund issues related to product, promotion and distribution have significant influence on the behavioural intentions of the mutual fund investors. However, pricing issues do not show any significant impact on behavioural intentions. The SEM analysis further reveals that technical and functional service qualities of the service providers (distributors and agents) are important components for improving the behavioural intention of the investors.

The results of the study further support the hypothesis that investment expertise has a positive moderating influence on the technical service quality and behavioural intention. However, it has negative moderating influence on the relationship between functional service quality and behavioural intention.

## **References**

- [1] Bell, Simon, J., Seigyoung, Auh., & Karen, Smalley. (2005). Customer Relationship Dynamics: Service Quality & Customer Loyalty in the Context of Varying Levels of Customer Expertise & Switching Costs. *Journal of the academy of marketing science*, 16, 74-94
- [2] Bitner, M.J. (1990). Evaluating service encounters: the effects of physical surroundings & employee responses. *Journal of Marketing*, 54 (2), 69-82
- [3] Diacon, Stephen R., Christine T. Ennew. (1996). Ethical issues in insurance marketing in the UK. *European Journal of Marketing*. 30 (5), 67-80

- [4] Gefen, David., & Straub, Detmar. (2005). A Practical Guide To Factorial Validity Using PLS-Graph: Tutorial And Annotated Example. *Communications of the Association for Information Systems*, Vol. 16(5).
- [5] Hartline, Michael D., & O. C. Ferrell. (1996). "The Management of Customer-Contact Service Employees: An Empirical Investigation." *Journal of Marketing* 60,52-70
- [6] Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* , (7th ed.) Upper Saddle River, NJ: Prentice Hall
- [7] Kock, N. (2012). WarpPLS 3.0 User Manual. ScriptWarp Systems, Laredo, Texas. Retrieved online on June 18, 2016 from <http://www.scriptwarp.com/warppls/UserManual.pdf>
- [8] Ladhari, Riadh, (2009). Service quality, emotional satisfaction, and behavioural intentions: A study in the hotel industry, *Managing Service Quality: An International Journal*, Vol. 19 ( 3), 308-331
- [9] Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill, Inc
- [10] Sharma, Neeru., & Paul G. Patterson. (2000). Switching Costs, Alternative Attractiveness & Experience as Moderators of Relationship Commitment in Professional, Consumer Services. *International Journal of Service Industry Management*, 11 (5), 470-490
- [11] Sheeran, Paschal. (2002). 'Intention - Behavior Relations: A Conceptual and Empirical Review. *European Review of Social Psychology*, 12(1), 1 -36

.....❧.....

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

<b>Contents</b>	7.1 <i>Introduction</i>
	7.2 <i>Findings of the Empirical Analysis</i>
	7.3 <i>Discussions and Strategy Recommendations</i>
	7.4 <i>Scope for further Research</i>

### 7.1 Introduction

#### 7.1.1 Context of the Study

While the world mutual funds industry has experienced significant growth in the last few decades, the Indian mutual funds sector is yet to achieve substantial asset under management, considering international standards. The investment in mutual funds by household investors is relatively low. Perhaps several factors inhibit mutual funds investment by retail investors. Some of the relevant issues have been analysed in this study.

#### 7.1.2 Methodology

The broad objective of the study is to find the perception and behavior of retail investors towards mutual fund investment and to analyse the factors that influence or inhibit retail investors in investing in mutual funds.

The data analysis is based on a sample survey among 470 mutual fund investors in Cochin. The respondents were identified mainly from the customer lists of few selected mutual fund dealers and agents. Random sampling was used for respondent selection. The statistical techniques used for hypotheses testing included factor analysis, Mann-Whitney test, Chi square, etc. Structural Equation Modeling was also done. Data analysis has been done using SPSS 20 and Warp PLS 5.0.

### **7.1.3 Chapter Structure**

This chapter provides the summary of the analysis of empirical data furnished in Chapter 5 and Chapter 6. Data analysis in Chapter 5 addressed the following issues:

- 1) Demographic profile of respondents
- 2) Preference for different investment options
- 3) Investors' perceptions on risk, return and liquidity
- 4) Investment pattern of mutual fund investors in terms of the amount of investment, years of experience, number of AMCs used and channel preference for mutual fund purchase
- 5) Fund benefit expectation and types of funds preferred
- 6) Sources of information for mutual fund investment decision
- 7) Product selection criteria for mutual fund investment-Factor Analysis

Two broad aspects have been analysed in Chapter 6:

- 1) Investor's perceptions on mutual fund marketing issues and their influence on behavioural intention: structural equation model
- 2) Perceived service quality and behavioural intention: structural equation model

Structural equation modeling has been used for the analysis. WarpPLS 5.0 software was used for the analysis.

#### **7.1.4 Recommendations**

Recommendations relevant to the different stakeholders based on the empirical study shall be provided at the end of this chapter.

## **7.2 Findings of the Empirical Analysis**

### **7.2.1 Profile of Respondents**

The respondents are predominantly male (76 %), which perhaps indicates that the majority of mutual funds investors are males. More of them (87%) have qualifications of graduation and above, apparently implying that mutual funds investment increases with the level of education.

Age –wise analysis shows that over 44 % of the respondents are less than 30 years of age, and 78 % are 45 years or below, indicating that mutual funds investors are predominantly the youngsters. The salaried class forms the largest group among the respondents (69%), followed by the business and self employed categories, forming 19% and 12%, respectively.

## **7.2.2 Preference for Different Investment Options**

Respondents were asked to rank four investment options: mutual fund, bank deposit, security market investment and insurance. The survey reveals that bank deposit is the most preferred investment option, despite the fact that the respondents were mutual fund investors. Mutual fund is the second most preferred investment option, security market investment the third and insurance the least preferred option.

## **7.2.3 Investor's Perceptions on Risk, Return and Liquidity**

### **7.2.3.1 Risk Perceptions**

Risk perceptions of mutual fund investors with respect to bank deposit, insurance, security market investment and mutual fund have been analysed. Security market investment is perceived to be the most risky investment option. Mutual fund comes second. Bank deposit is perceived to be the least risky investment option.

Hypothesis testing reveals that there is no gender or age difference in risk perception among the investors. However, risk perceptions vary with the levels of education and occupations. Compared to the other groups, more investors with degree level qualification perceive high risk in security market investment. With respect to mutual fund investment, risk perception is more among the professionally qualified people. Further, while more of the salaried people find security market investment more risky, around one fourth of the self employed group finds mutual fund risky.

### **7.2.3.2 Perception on Return**

Study of the investors' perception on return from different investment options show that the security market is perceived to yield the maximum return. Mutual funds come second; bank deposits and insurance are perceived to provide relatively low returns.

Hypothesis testing pertaining to the relationship between the demographic variables and investors' perception on return from different investment options reveal that there is no gender difference in the perception on level of return. However, there is significant relationship between age and perception on the level of return; among the youngsters, 46.6% find security market investment as the most attractive option and another 31.2% find mutual fund as the most attractive option. Further, as age increases, security market return appears to become less attractive.

The relationship between education and perception on return is significant; mutual fund gets second rank in terms of return from all the groups, but the perception on higher return is more among professionally qualified investor. However, perception on return from different investment options is not significantly different among investors with different occupations.

### **7.2.3.3 Perception of Investors on Liquidity of Different Investment Options**

Bank deposits are perceived to have the highest liquidity among the investment options considered. Security market investment is perceived to be the next most liquid investment option; mutual funds come third in

terms of liquidity. Obviously, mutual fund has an inherent disadvantage in terms of liquidity perception.

Hypothesis testing indicates that there is no gender difference in liquidity perception among the different investment options. However, liquidity perception is significantly different among the different age groups. For example, among investors above 60 years, liquidity perception of bank deposit is very strong and none of the respondents in this group consider mutual fund or insurance as liquid.

Liquidity perception is not significantly different among investors with different levels of education. However, liquidity perception is significantly different among different occupational groups. Compared to other groups, the salaried group perceives bank deposit as the most liquid. Mutual fund is perceived as liquid by a small group among the businessmen.

#### **7.2.4 Investment Pattern of Mutual Fund Investors**

One of the objectives of the study relates to the analysis of the investment pattern of mutual fund investors in terms of the amount of investment, years of experience, number of AMCs used and channel preference for mutual fund purchase.

##### **7.2.4.1 Amount of Investment**

The survey reveals that the amount invested by individual investor in mutual fund is rather low. Around 62 % of the investors have mutual fund investment of less than or up to ₹ 25000. The average investment by the respondents has been estimated as ₹ 45000, approximately.



Results of hypothesis testing show significant relationship between the amount of investment and the gender. The amounts of investment are more for the males than females. Chi - Square analysis shows that age of the investor has significant influence on the amount of investment. Investors in the age group 46 -60 years have invested more amounts in mutual funds than the other age groups. However, there is no significant relationship between the level of educational of the investor and the amount of mutual fund investment. Occupation of the investor has significant relationship with the amount invested. Business persons and the self employed invest relatively more amounts in mutual fund than the salaried class.

#### **7.2.4.2 Years of Experience**

Survey results indicate that about 71 % of the respondents have been mutual fund investors for more than one year. Among them, 37 % have over three years of experience. Data reveal that 29% of the respondents are new investors with less than one year experience in mutual funds investment. This is perhaps an indication of the arrival of new investors into the mutual funds sector.

Hypothesis testing has been done using Chi-Square test to find the relationship between age and total years of experience in mutual fund, and the relationship has been found significant. What is pertinent is that 45% of the investors who joined mutual fund in less than one year are below the age of 30 years and 68 % are below 45 years. Among investors in the age group of less than 30 years, 78% joined mutual funds within the last three years or less. Most of the investors, who joined mutual funds in less

than three years, are relatively young. The indication is that more young people begin to invest in mutual funds.

#### **7.2.4.3 Number of AMCs (Asset Management Companies)**

Almost 43 % of the respondents have invested in one AMC only. The remaining 57 % have invested in two or more AMCs, including 22 % who have invested in more than three AMCs. Investing in multiple AMCs is predominant, indicating the investors' tendency to choose from different products offered by different AMCs.

Hypothesis testing has been done to find the relationship between the number of AMC used and three demographic variables: gender, age and level of education. While age and level of education show significant relationship with the number of AMC used, the null hypothesis has been accepted in the case of gender. As the level of education increases, the number of mutual fund AMCs chosen for investment also increases. Results of the analysis further reveal that 53% of investors with professional degrees have investments in three or more AMCs.

#### **7.2.4.4 Channel Preference for Mutual Fund Purchase**

The channel involving brokers and agents is the most preferred channel (45.1 %) for mutual fund purchase. Preference for direct purchase (either directly from AMCs or through internet) is the second most preferred channel (29 %). The least preference is for mutual fund purchase from banks.

Hypothesis testing to find the relationship between the number of AMC used and the demographic variables show significant relationship between the channel used and three demographic variables: gender, level

of education and occupation; the null hypothesis has been accepted in the case of age. For direct purchase, the preference is more among the males and the preference of the females is more for distributors / agents. The preference for purchase through brokers is more among people with relatively less education – less than graduates and graduates. Further, while more of the self employed prefer direct purchase, the business group prefers brokers / agents.

## **7.2.5 Types of Funds Preferred and Fund Benefit Expectation**

### **7.2.5.1 Types of Funds Preferred**

Respondents were asked to indicate their preference for two categories of funds: fixed income funds and equity funds. Survey results indicate that 60% of the respondents prefer equity funds. Possible inference is that the majority of the respondents prefer investments with relatively higher return and higher risk.

Results of the hypothesis testing reveal that there is no significant relationship between the types of mutual funds preferred and the gender or age.

### **7.2.6 Fund Benefit Expectations of Mutual Fund Investors**

Survey results indicate that high return is the single most important benefit expected from mutual fund investment, as majority of the respondents (51.3 %) indicated this. Tax benefit is of primary concern for 25% of the respondents. High liquidity (7.7%), regular income (8.1) and highly secured fund (7.9) are prime benefits expected by small minorities.

Hypothesis testing using Chi-Square test show that there is no significant relationship between benefit expected from mutual funds and gender or occupation. The influences of age and education are, however, significant on the benefit expected from mutual funds. People in the younger age groups (45 years and below) expect high return. Tax benefit expectation is more among people above 45 years. Funds benefit expectations of higher returns is predominant among investor groups with professional degrees and post graduation. Tax benefit expectation is more among investors with graduation and lower levels of education.

### **7.2.7 Source of Information**

The study reveals that the financial advisor is the most important source of information for investment decision. Performance ranking is second most important source of information. Friends and family come third in the ranking of the respondents and media advertisements get the lowest ranking.

### **7.2.8 Product Selection Criteria for Mutual Fund Investment**

The results of the survey show that the top ranking selection criterion is 'performance record'. The 'reputation of the firm' gets second rank and 'information from agents' gets third rank. 'Assured return,' 'grievance redressal measures' and 'maturity of fund' get the next three ranks, in their order.

As 17 variables are involved, factor analysis has been done to group the variables into relevant factors. The factors identified are 'Fund quality,' 'Fund sponsor quality' and 'Service substance'.

The analysis reveals that in fund quality, the most significant variables are regular income and tax benefits. In fund sponsor quality, the most important variables are age of fund and rating by rating agency. In service substance, the most significant variables are disclosure of net asset value (NAV) and transparency in service.

#### **7.2.8.1 Selection Criteria Used by Respondent who Prefer Equity Funds Versus Fixed Income Funds**

Mann-Whitney test has been used to test the differences in the factors (fund quality, fund sponsor quality and service substance) considered by the two groups: those who prefer fixed income fund and those who prefer equity fund.

The test results show that while the investors with greater preference for equity funds give more weightage to fund sponsor quality, the group that prefers fixed income fund gives greater consideration for fund quality and service substance factors.

#### **7.2.9 Influence of Mutual Fund Marketing Issues on Behavioural Intentions of Mutual Funds Investors: Structural Equation Model**

Two broad aspects have been analysed in Chapter 6:

- 1) Investor's perceptions on mutual fund marketing issues and their influence on behavioural intention: structural equation model
- 2) Perceived service quality and behavioural intention: structural equation model

Structural equation modeling has been used for the analysis. WarpPLS 5.0 software was used for the analysis.

The important issues analysed include lack of awareness among the investors, ineffective promotion, proliferation of schemes, distribution problems, lack of faith and confidence in the distributors, low returns, high cost, mis-selling by the distributors and ineffective marketing. Hence, structural equation modeling (SEM) has been used to identify the influences of the mutual fund related issues relevant to marketing on the purchase behavioural intentions of retail mutual fund investors.

The steps followed in the SEM analysis in the study are as follows:

- 1) Identification of exogenous variables and development of measurement scale
- 2) Exploratory factor analysis:
- 3) Development of conceptual model
- 4) Reliability and validity testing
- 5) Structural equation model

A five point Likert scale has been used. The scale developed by Stephen R Ennew and Christine T (1996) was adopted and it was modified based on literature survey and pilot study

### **Behavioural intention**

Behavioural intentions are assumed to be the immediate antecedent of a specific behaviour of the customer. The behavioural intention has been defined to include the following responses in the study:

- retain my investment with mutual fund saving
- make more investment in mutual funds

- suggest mutual fund as an investment option to my friends/ relatives
- give positive word of mouth about mutual fund product

Four hypotheses have been tested based on the four factors identified by grouping the variables.

The results of the hypotheses testing are as follows:

- 1) Product issues have significant influence on the behavioural intentions of the mutual fund investors, supporting H34
- 2) Pricing issues do not have any significant impact on behavioural intentions of the mutual fund investors, rejecting H35
- 3) Promotional issues have significant influence on the behavioural intentions of the mutual fund investors, supporting H36
- 4) Distribution issues have a significantly influence on the behavioural intention of the mutual fund investors, supporting H37

The impact of the product, promotion and distributional issues on the behavioural intentions of mutual fund investors show that all these are important components for improving the behavioural intention of the investors. The  $R^2$  value of the overall model is 0.22, which means that it explains 22 % of the variance on the behavioural intention.

### **7.2.10 Perceived Service Quality and Behavioural Intention: Structural Equation Model**

The study has adopted the measurement scale from Sharma and Patterson (1999) and Hartline and Ferrell's (1996). Using SEM model, two hypotheses have been tested and both the hypotheses have been supported.

- Perceived Technical service quality has significant influence on the behavioural intention of the mutual fund investors.
- Perceived Functional service quality has significant influence on the behavioural intention of the mutual fund investors

The impact of the technical service quality and functional service quality on the behavioural intention shows that technical and functional service qualities of the service providers are important components for improving the behavioural intention of the investors. The  $R^2$  value of the overall model was .56, which means it explained 56 % of the variance on the behavioural intention.

### **7.2.11 Linkage Between Perceived Service Quality and Behavioural Intention Under Moderating Influence of Investment Expertise**

Investment expertise represents a customer's accrued knowledge about how a product should perform. Expert customers can assess the technical attributes of the service more accurately, but the importance of functional service quality dimensions (e.g., tangible cues, empathy, and friendliness of staff) can decline due to customer expertise.



Two hypotheses have been tested, using SEM model.

- The positive relationship between technical service quality and behavioural intention will be stronger where clients have high investment expertise.
- The positive relationship between functional service quality and behavioural intention will be weaker where clients have high investment expertise.

Investment expertise has a positive moderating influence on the technical service quality and behavioural intention. It has strengthened the relationship of technical service quality and behavioural intention. Investment expertise has negative moderating influence on the relationship between functional service quality and behavioural intention. It has made the relationship weaker. The moderating effects of investment expertise explains 57 % ( $R^2 = .57$ ).

### **7.3 Discussions and Strategy Recommendations**

The structural equation models bring out some important marketing related issues pertinent to the mutual fund industry. Product, promotion and distribution related issues prevailing in the mutual fund industry have significant impact on the behavioural intentions of mutual fund investors. The implication is that these are important components for improving the behavioural intentions of the investors. It is further revealed that perceived service quality has significant influence on the behavioural intention of the mutual fund investors. Other findings of the study, related to the investment behaviour of the mutual fund customers, also have

significant implications for marketing strategy. This section provides discussions on the strategy implications of the major findings and outlines the strategy recommendations.

### **7.3.1 Opportunity for Mutual Fund Growth**

Mutual fund is perceived to provide the highest return after security market investment and return is the major factor that motivates investors, as reported in this study. Mutual fund is the second most preferred investment option after bank deposit and it has greater preference than security market investment and insurance. The implication is that there is large potential for mutual fund growth, considering the current size of investments in stock market or insurance. Strategic initiatives on the part of the government, the regulator SEBI, the industry associations and the AMCs are imperative for exploiting this vast potential.

### **7.3.2 Market Targeting**

The survey reveals that participation of women in mutual fund industry is low. Females form only 24% of the respondents. There is no evidence in the study for any factor that inhibits female participation in mutual fund investment. The female segment of the mutual fund market should be targeted, with product benefits and promotion strategies appropriate to the female segment.

The youth market is currently showing unusual interest in mutual fund industry: 78 % of the survey respondents are of 45 years or less ; 45% of the investors who joined mutual funds in less than one year are

below the age of 30 years and 68 % are below 45 years. The mutual fund industry should therefore target the youth market.

### **7.3.3 High Returns**

A significant finding of the study is that 60% of the respondents prefer equity funds. The study further reveals that high return is the single most important benefit expected from mutual fund investment by majority of the respondents. High liquidity (7.7%), regular income (8.1) and highly secured fund (7.9) are prime benefits expected by small minorities. The strategic implication is that high priority should be placed on the high return expectations of the customers. The AMCs should offer products that can meet this expectation and organise their investment processes to ensure the return objectives.

### **7.3.4 Tax Benefit**

Tax benefit is of primary concern for 25% of the respondents. The strategy is to offer new products that focus on high return and tax benefit at the same time to the target group with tax benefit expectations. Existing products, offering the two benefits, could be repositioned for this group by highlighting tax benefits.

### **7.3.5 Market Segmentation and Targeting**

The survey respondents fall into three groups: salaried group (69 %), business persons (19 %) and self employed (12 %). In many respects their perceptions and preference are different: i.e., in risk- return perceptions, benefit expectations and average amount of investment in mutual funds. The strategy implication is that occupation could be used as a segmentation

variable. Differentiated products with different risk return trade –offs and other features and benefits could be targeted at each group. The marketing mix strategies including promotion, pricing and distribution channels should be unique for each segment.

### **7.3.6 Product Selection Criteria: Managerial Implications**

In the choice of mutual fund products, the relevant factors are fund quality, fund sponsor quality and service substance. In fund quality, the most significant variables are regular income and tax benefits. In fund sponsor quality, the most important variables are age of fund and rating by rating agency. In service substance, the most significant variables are disclosure of net asset value (NAV) and transparency in service

These findings have significant managerial implications. Regular income and tax benefits are features that could be incorporated into the product. Rating by rating agency implies that the high standards of performance be maintained by the AMCs. Disclosure of net asset value (NAV) and transparency in service are also significant factors in the selection of mutual fund products. AMCs should ensure that these product choice criteria are incorporated as significant factors while formulating their marketing and operational strategies.

### **7.3.7 Brand Loyalty**

Brand loyalty is low in the mutual fund industry. The study brings out the fact that majority of the respondents (57 %) have invested in two or more AMCs, including 22 percent who have invested in more than three AMCs. Of the remaining 43 %, 29% are new investors with less than one year experience. Evidently, serious efforts are needed for brand

building in the mutual fund sector. AMCs should initiate advertising and communication programmes for corporate branding and product branding.

### **7.3.8 Distribution**

According to the study reports of most international business consulting organisations operating in India, distribution is the serious bottleneck in the growth of the mutual fund industry in India. However, the channel involving brokers and agents is the most preferred channel for mutual fund distribution, as reported by 45% of the respondents of this study. The second most preferred channel is direct purchase (29 %). The least preferred channel is the bank.

Penetration of mutual funds beyond the 15 major cities calls for expansion of the distribution network and vast geographical coverage.

Considering the channel preferences of the survey respondents, the task cannot be entirely transferred to the banks, as proposed by several sources. Further, banks are the major competitors for the household savings. However, the geographical coverage of the banking network could be used effectively for urban, semi-urban and rural penetration of mutual funds through a strategic partnership.

In the mean time, it is imperative that the distributor network of mutual funds industry be strengthened, offering adequate distribution margins and initiating skill training for the staff so that mis-selling and related unethical practices can be curtailed.

The results of the study indicate that 29 percent of the investors prefer direct purchase. The strategic implication is that AMCs should augment the facilities for online trading. On the whole, serious efforts are required on the part of AMCs to expand and strengthen distribution infrastructure by ensuring adequate margins and motivation for the distributors and agents, strengthening the existing partnership with banks and offering easy opportunities for customers for direct purchase, especially through online trading.

### **7.3.9 Source of Information: Financial Advisor**

Financial advisors are the most important source of information used by mutual fund investors. As such they are the key influencers in mutual fund product choices. The industry is fully aware of their role as reliable advisers. However, complaints are rampant about unethical practices. Reasons could be many: they are not well informed; they lack investment skills; they are not adequately rewarded for their services. The industry associations and AMCs could initiate action to resolve the issues. Training programmes for skill development, product knowledge and market information could be one of the solutions. Evolving a transparent system of fair compensation is another.

### **7.3.10 Word- of -Mouth Communication**

Among the sources of information, friends and family and business associates get significant ranking. This implies the significance of word-of-mouth communication. Social media and customer groups on company

websites could be effectively used by AMCs to generate favorable word -of -mouth communication.

### **7.3.11 Media Advertisements**

Media advertisements get the lowest ranking among the sources of information for mutual fund investment decisions. This does not imply that media advertisements do not have a role. There has been hardly any media advertisement for mutual fund products, except for some recent generic promotion of mutual funds. Brand promotion has been practically nonexistent. At the current stage of development of the industry, marked by limited market awareness about mutual funds, both generic and brand promotions are required. While the industry association takes the responsibility for generic promotion, AMCs should focus on brand promotion.

### **7.3.12 Perceived Service Quality: Managerial Implications**

SEM analysis indicates that perceived technical service quality of the distributors and agents has significant influence on the behavioural intention of the mutual fund investors. The implication is that the distributors and agents should have high level of product and market knowledge, skill in investment choices and decisions and should manage the client's investment with dedication and commitment.

Perceived functional service quality influences the behavioural intention of the mutual fund investor. This demands sincerity and commitment on the part of distributors and agents towards the customer and the soft skills to maintain rapport with the customer.

The strategy implication is that mutual fund distributors should ensure high quality of service. Improving the knowledge and investment skills of the agents and advisors as well as increasing their interpersonal skills and professional commitments are required. Industry associations and AMCs should assist the distributors in the capacity building endeavors.

### **7.3.13 Investor Education**

SEM modeling further shows that investment expertise of the investor has a positive moderating influence on the technical service quality and behavioural intention. It implies that high level of product knowledge and market information of the customer ensures that the investor gets better services from the distributors and agents and enables the customer to take better investment decisions. The strategic implication is that there should be serious efforts for investor education. The recent initiatives for customer awareness programmes, entrusted with industry associations, need to be strengthened and serious customer education programmes, incorporating product knowledge, market information and investment skills, be offered to current and potential investors. Joint efforts of the government, industry organisations and AMCs would be ideal in this endeavour.

## **7.4 Scope for Further Research**

The opportunities for research in the mutual fund sector are quite wide and varied. Some of the areas for further research related to the topic of this research study are mentioned here.

There is scope for a study among non investors covering their perceptions and attitude towards mutual fund investment and the factors that inhibit mutual fund investment. A study on the awareness and



perception of rural investors about mutual fund investment would be very relevant. There is scope for a study on the service quality of selected mutual fund companies (AMCs) relating it to behavioural intention.

Exclusive studies on the marketing of mutual fund would be appropriate on the following topics:

- Mutual fund distribution
- Mutual fund advertising and promotion
- Mutual fund branding and positioning
- Segmentation and targeting of mutual fund products
- Product proliferation and product differentiation in mutual fund industry

Such studies would be very relevant and necessary at this early stage of growth in the industry.

## **References**

- [1] Diacon, Stephen R., Christine T. Ennew. (1996). Ethical issues in insurance marketing in the UK. *European Journal of Marketing*.30 (5), PP.67-80.
- [2] Sharma, Neeru., & Paul G. Patterson. (2000). Switching Costs, Alternative Attractiveness & Experience as Moderators of Relationship Commitment in Professional, Consumer Services. *International Journal of Service Industry Management*, 11 (5), 470-490.
- [3] Hartline, Michael D., & O. C. Ferrell. (1996). "The Management of Customer-Contact Service Employees: An Empirical Investigation." *Journal of Marketing* 60,52-70.

.....❧.....



## Appendices

### Appendix 1

#### STUDY ON THE PERCEPTION AND BEHAVIOUR OF RETAIL INVESTORS TOWARDS MUTUAL FUND INVESTMENT

##### Research Schedule

1. Name of the person..... Age..... Gender M/F
2. Educational qualification.....
3. Source of income: salaried      Business       Self employed
4. Resident:      Urban       Rural
5. Total amount of asset you have invested in mutual funds:  
Less than ₹10000       ₹10000-₹25000       ₹25001-₹50000   
₹50001-₹100000       above ₹100000
6. Total number of years in mutual funds investment:  
Less than 1 year.      1-3 yrs       above 3 yrs
7. Total number of mutual fund family (AMCs) you have in your mutual fund saving:  
Only 1       1-3       above 3
8. What kind of fund do you prefer in your mutual fund investment:  
Fixed income fund       Equity fund
9. Tick your preferred source of mutual fund purchase:  
Direct       broker       Bank
10. Rank the following investment options in terms of your over all preference (1 for the most preferred and 4 for the least preferred)

Sl No	Financial products	Rank
1	Bank deposits	
2	Insurance saving plans	
3	Security market investment	
4	Mutual funds	

11. What is the reason for your priority in the above saving option  
 .....
12. Rank the following products based on their **easiness of converting into cash** (1 being the easiest)
- Bank deposit  Insurance  Security Market investment   
 Mutual funds
13. Rank the following products based on the **level of return** (1 being the highest return)
- Bank deposit  Insurance  Security Market investment   
 Mutual funds
14. Rank the following products based on the **level of risk** (1 being the highest risk)
- Bank deposit  Insurance  Security Market investment   
 Mutual funds
15. What is the main benefit you are expecting in your mutual fund investment (**Tick only one option**)
- High return  high liquidity  tax benefits   
 regular income  highly secured fund
16. Please indicate to what extent the following **modes of information** are important for a mutual fund investment decision: **1. Not at all important 2=not important 3=somewhat important 4=important 5=highly important**

Sl No	Source of information	1	2	3	4	5
1	Performance ranking					
2	Recommendation of business associate					
3	Advertising –news paper					
4	Advertising –magazine					
5	Advertising –radio					
6	Advertising –television					
7	Books or news letter					
8	Financial advisors					
9	Seminars					
10	Direct mail					
11	Recommendation of friends or family					

17. Please indicate to what extent the following **factors** are important for a mutual fund investment:

**1. Not at all important    2=not important**

**3=somewhat important    4=important    5=highly important**

SI No	Factors	1	2	3	4	5
1	Regular income					
2	Tax benefits					
3	Investment performance record					
4	Maturity of fund					
5	Assured return					
6	Reputation of the firm					
7	Company ownership					
8	Management fee of the fund					
9	Age of fund					
10	Rating by rating agency					
11	Well developed agency network					
12	Transparency in services					
13	Disclosure of NAV					
14	Responsiveness to enquiry					
15	Facility of online services					
16	Information from agents					
17	Investors grievance redress machinery					

18. Please indicate to what extent the following **issues** are happening in your mutual fund investment service:

**1. Always 2=very often 3=some times 4=rarely 5=never**

<b>Issues</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Difficult to identify the product from the different schemes					
Investment in certain mutual fund could lead to monetary loss					
Not comply with code of conduct					
Mutual fund products are not differentiated properly from other financial products					
Cluttered with different product /schemes					
It is very difficult to convert into liquid cash					
Charging higher fees than justified					
Fail to design fee structure to avoid product bias					
Charging additional fee for the premature redemption					
Use small print clause					
Promote inappropriate products to the clients					
Not disclosing the commission in the time of fund purchase					
Not inform investors about the security problem					
Exaggerating the return figure while describing the product					
Use misleading information about competitors					
Delayed payment of valid claims					
Distributors are not selling the right product to the right consumer					
Availability of AMC's branch near by					

19. Please indicate to what extent you agree to the following statement:  
**SDA-strongly disagree, DA-Disagree, NAND-Neither agree nor disagree, A-Agree, SA strongly agree**

Statements	SA	A	NAND	DA	SDA
My service provider has assisted me to achieve my financial goals					
My service provider has performed well in providing the best return on my investments.					
My service provider has helped me to protect my current position by recommending the best investing options					
My service provider has performed well in investing my money in appropriate investment options					
My service provider gives me personal attention.					
My advisor has my best interests at heart.					
I can share my thoughts with my adviser.					
I possess good knowledge of financial planning services and products					
I am quite experienced in this area					
I plan to retain my investment with mutual fund saving					
If possible, I will try to make more investment in mutual funds					
It is likely that I will suggest mutual fund as an investment option to my friends/relatives					
I always give positive word of mouth about mutual fund products					

Thank You

.....✍.....

## Appendix 2

### Wart PLS 5.0 Output Modal 1

```

*****
* General SEM analysis results *
*****

General project information
-----

Version of WarpPLS used: 5.0
Li

Model fit and quality indices
-----

Average path coefficient (APC)=0.151, P<0.001
Average R-squared (ARS)=0.217, P<0.001
Average adjusted R-squared (AARS)=0.210, P<0.001
Average block VIF (AVIF)=3.881, acceptable if <= 5, ideally
<= 3.3
Average full collinearity VIF (AFVIF)=2.135, acceptable if <=
5, ideally <= 3.3
Tenenhaus GoF (GoF)=0.370, small >= 0.1, medium >= 0.25,
large >= 0.36
Simpson's paradox ratio (SPR)=0.750, acceptable if >= 0.7,
ideally = 1
R-squared contribution ratio (RSCR)=0.925, acceptable if >=
0.9, ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if >=
0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=1.000,
acceptable if >= 0.7

*****
* Path coefficients and P values *
*****

Path coefficients
-----

      PRO  Pri  Prom Dis  BEh
PRO
Pri
Prom
Dis
BEh  0.146-0.049      0.2040.205

P values
-----

      PRO  Pri  Prom Dis  BEh
PRO
Pri
Prom
Dis
BEh  <0.001      0.145<0.001      <0.001

```



\*\*\*\*\*  
 \* Standard errors for path coefficients \*  
 \*\*\*\*\*

	PRO	Pri	Prom	Dis	BEh
PRO					
Pri					
Prom					
Dis					
BEh	0.045	0.046	0.045	0.045	

\*\*\*\*\*  
 \* Effect sizes for path coefficients \*  
 \*\*\*\*\*

	PRO	Pri	Prom	Dis	BEh
PRO					
Pri					
Prom					
Dis					
BEh	0.057	0.019	0.090	0.089	

\*\*\*

\*\*\*\*\*  
 \* Normalized combined loadings and cross-loadings \*  
 \*\*\*\*\*

	PRO	Pri	Prom	Dis	BEV		
Issues_	0.714	0.143	-0.151			-0.211	-0.051
Issues_	0.693	0.069	-0.228			-0.092	0.081
Issues_	0.674	-0.182		0.350	-0.234		-0.050
Issues_	0.617	-0.148		-0.014		0.367	-0.021
Issues_	0.582	0.170	0.053	0.398	0.061		
Issues_	0.239	0.637	-0.346			0.161	-0.022
Issues_	-0.004		0.649	-0.097		0.015	0.011
Issues_	-0.163		0.627	0.084	0.088	0.057	
Issues_	-0.091		0.636	0.409	-0.288		-0.049
Issues_	-0.195		0.065	0.648	-0.056		0.021
Issues_	0.024	0.085	0.636	-0.137			-0.069
Issues_	0.196	-0.123		0.622	-0.031		-0.012
Issues_	-0.160		0.124	0.623	-0.066		0.091
Issues_	0.354	-0.256		0.594	0.239	0.035	
Issues_	-0.187		0.089	0.637	0.072	-0.060	
Issues_	-0.198		-0.065		0.227	0.673	-0.091
Issues_	-0.052		-0.092		0.018	0.663	0.098
Issues_	0.316	0.196	-0.309		0.611	-0.006	
Service	0.008	0.179	-0.093		-0.130		0.807
Service	-0.072		0.063	0.054	-0.037		0.787
Service	0.095	-0.097		0.032	-0.005		0.786
Service	-0.036		-0.150		0.005	0.183	0.800

Note: Loadings are unrotated and cross-loadings are oblique-rotated, both after separate Kaiser normalizations.

Appendices

```
*****
* Pattern loadings and cross-loadings *
*****
```

	PRO	Pri	Prom	Dis	BEV		
Issues_	0.885	0.133	-0.140			-0.196	-0.047
Issues_	0.899	0.065	-0.213			-0.086	0.075
Issues_	0.819	-0.168		0.324	-0.216		-0.046
Issues_	0.693	-0.112		-0.010		0.277	-0.016
Issues_	0.494	0.094	0.029	0.219	0.034		
Issues_	0.214	0.797	-0.309			0.144	-0.020
Issues_	-0.003		0.898	-0.087			0.014
Issues_	-0.134		0.805	0.069	0.072		0.047
Issues_	-0.078		0.738	0.350	-0.247		-0.042
Issues_	-0.174		0.058	0.870	-0.050		0.018
Issues_	0.019	0.069	0.802	-0.111			-0.056
Issues_	0.158	-0.099		0.783	-0.025		-0.010
Issues_	-0.128		0.099	0.775	-0.052		0.072
Issues_	0.253	-0.183		0.618	0.171	0.025	
Issues_	-0.153		0.072	0.796	0.059	-0.049	
Issues_	-0.175		-0.058		0.200	0.837	-0.080
Issues_	-0.044		-0.078		0.015	0.837	0.083
Issues_	0.238	0.148	-0.233		0.659	-0.004	
Service	0.007	0.157	-0.082		-0.114		0.856
Service	-0.062		0.055	0.047	-0.032		0.864
Service	0.084	-0.085		0.028	-0.005		0.869
Service	-0.031		-0.127		0.004	0.154	0.821

Note: Loadings and cross-loadings are oblique-rotated.

```
*****
* Normalized pattern loadings and cross-loadings *
*****
```

	PRO	Pri	Prom	Dis	BEV		
Issues_	0.954	0.143	-0.151			-0.211	-0.051
Issues_	0.963	0.069	-0.228			-0.092	0.081
Issues_	0.887	-0.182		0.350	-0.234		-0.050
Issues_	0.918	-0.148		-0.014		0.367	-0.021
Issues_	0.898	0.170	0.053	0.398	0.061		
Issues_	0.239	0.892	-0.346			0.161	-0.022
Issues_	-0.004		0.995	-0.097			0.015
Issues_	-0.163		0.977	0.084	0.088		0.057
Issues_	-0.091		0.860	0.409	-0.288		-0.049
Issues_	-0.195		0.065	0.977	-0.056		0.021
Issues_	0.024	0.085	0.984	-0.137			-0.069
Issues_	0.196	-0.123		0.972	-0.031		-0.012
Issues_	-0.160		0.124	0.973	-0.066		0.091
Issues_	0.354	-0.256		0.866	0.239	0.035	
Issues_	-0.187		0.089	0.974	0.072	-0.060	
Issues_	-0.198		-0.065		0.227	0.947	-0.091
Issues_	-0.052		-0.092		0.018	0.989	0.098
Issues_	0.316	0.196	-0.309			0.875	-0.006
Service	0.008	0.179	-0.093			-0.130	0.971
Service	-0.072		0.063	0.054	-0.037		0.993
Service	0.095	-0.097		0.032	-0.005		0.990

Service -0.036 -0.150 0.005 0.183 0.971

Note: Loadings and cross-loadings shown are after oblique rotation and Kaiser normalization.

\*\*\*\*\*  
\*

\*\*\*\*\*  
\* Indicator weights \*  
\*\*\*\*\*

	PRO	Pri	Prom	Dis	BEV	Type (a	SE	F value
	VIF	WLS	ES					
Issues	0.255	0.000	0.000	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.581	1	0.186					
Issues	0.266	0.000	0.000	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.684	1	0.203					
Issues	0.270	0.000	0.000	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.657	1	0.210					
Issues	0.268	0.000	0.000	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.720	1	0.206					
Issues	0.260	0.000	0.000	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.589	1	0.194					
Issues	0.000	0.308	0.000	0.000	0.000	0.000	Reflect	0.044 <0.001
	1.799	1	0.249					
Issues	0.000	0.320	0.000	0.000	0.000	0.000	Reflect	0.044 <0.001
	1.945	1	0.270					
Issues	0.000	0.315	0.000	0.000	0.000	0.000	Reflect	0.044 <0.001
	1.843	1	0.261					
Issues	0.000	0.290	0.000	0.000	0.000	0.000	Reflect	0.044 <0.001
	1.561	1	0.220					
Issues	0.000	0.000	0.212	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.727	1	0.161					
Issues	0.000	0.000	0.213	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.736	1	0.162					
Issues	0.000	0.000	0.223	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.985	1	0.178					
Issues	0.000	0.000	0.208	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.657	1	0.155					
Issues	0.000	0.000	0.224	0.000	0.000	0.000	Reflect	0.045 <0.001
	2.027	1	0.180					
Issues	0.000	0.000	0.214	0.000	0.000	0.000	Reflect	0.045 <0.001
	1.748	1	0.163					
Issues	0.000	0.000	0.000	0.436	0.000	0.000	Reflect	0.044 <0.001
	1.367	1	0.347					
Issues	0.000	0.000	0.000	0.441	0.000	0.000	Reflect	0.044 <0.001
	1.388	1	0.355					
Issues	0.000	0.000	0.000	0.404	0.000	0.000	Reflect	0.044 <0.001
	1.244	1	0.298					
Service	0.000	0.000	0.000	0.000	0.288	0.000	Reflect	0.044 <0.001
	2.084	1	0.241					
Service	0.000	0.000	0.000	0.000	0.298	0.000	Reflect	0.044 <0.001
	2.299	1	0.258					
Service	0.000	0.000	0.000	0.000	0.302	0.000	Reflect	0.044 <0.001
	2.469	1	0.266					
Service	0.000	0.000	0.000	0.000	0.285	0.000	Reflect	0.045 <0.001

*Appendices*

---

2.0091 0.236

Notes: P values < 0.05 and VIFs < 2.5 are desirable for formative indicators; VIF = indicator variance inflation factor;

WLS = indicator weight-loading sign (-1 = Simpson's paradox in l.v.); ES = indicator effect size.

\*\*\*\*\*  
\* Latent variable coefficients \*  
\*\*\*\*\*

R-squared coefficients  
-----

PRO Pri Prom Dis BEV  
0.217

Adjusted R-squared coefficients  
-----

PRO Pri Prom Dis BEV  
0.210

Composite reliability coefficients  
-----

PRO Pri Prom Dis BEV  
0.871 0.885 0.899 0.823 0.914

Cronbach's alpha coefficients  
-----

PRO Pri Prom Dis BEV  
0.815 0.826 0.865 0.678 0.875

Average variances extracted  
-----

PRO Pri Prom Dis BEh  
0.575 0.657 0.597 0.609 0.727

Full collinearity VIFs  
-----

PRO Pri Prom Dis BEh  
2.132 2.422 2.692 2.178 1.249

Q-squared coefficients  
-----

PRO Pri Prom Dis BEh  
0.222

M

---

\* Ccorrelations among latent variables and errors \*  
 \*\*\*\*\*

Correlations among l.vs. with sq. rts. of AVEs  
 -----

	PRO	Pri	Prom	Dis	BEV
PRO	0.758	0.676	0.651	0.564	0.366
Pri	0.676	0.811	0.692	0.624	0.362
Prom	0.651	0.692	0.772	0.699	0.398
Dis	0.564	0.624	0.699	0.780	0.397
BEV	0.366	0.362	0.398	0.397	0.853

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

P values for correlations  
 -----

	PRO	Pri	Prom	Dis	BEV
PRO	1.000	<0.001	<0.001	<0.001	<0.001
Pri	<0.001	1.000	<0.001	<0.001	<0.001
Prom	<0.001	<0.001	1.000	<0.001	<0.001
Dis	<0.001	<0.001	<0.001	1.000	<0.001
BEV	<0.001	<0.001	<0.001	<0.001	1.000

\*\*\*\*\*  
 \* Block variance inflation factors \*  
 \*\*\*\*\*

	PRO	Pri	Prom	Dis	Beh
PRO					
Pri					
Prom					
Dis					
BEV	2.501	4.315	5.019	3.690	

Note: These VIFs are for the latent variables on each column (predictors), with reference to the latent variables on each row (criteria).

\*\*\*\*\*  
 \* Indirect and total effects \*  
 \*\*\*\*\*

Total effects  
 -----

	PRO	Pri	Prom	Dis	BEV
PRO					
Pri					
Prom					
Dis					
BEV	0.146	-0.049	0.204	0.205	

Number of paths for total effects

	PRO	Pri	Prom	Dis	BEV
PRO					
Pri					
Prom					
Dis					
BEV	1	1	1	1	

P values for total effects

	PRO	Pri	Prom	Dis	BEV
PRO					
Pri					
Prom					
Dis					
BEV	<0.001		0.145	<0.001	<0.001

### Appendix 3

#### Wart PLS 5.0 Output Modal 2

```

*****
* General SEM analysis results *perceived service quality and
behavioural intention
*****

General project information
-----

Version of WarpPLS used: 5.0

Model fit and quality indices
-----

Average path coefficient (APC)=0.395, P<0.001
Average R-squared (ARS)=0.564, P<0.001
Average adjusted R-squared (AARS)=0.563, P<0.001
Average block VIF (AVIF)=2.869, acceptable if <= 5, ideally
<= 3.3
Average full collinearity VIF (AFVIF)=2.510, acceptable if <=
5, ideally <= 3.3
Tenenhaus GoF (GoF)=0.640, small >= 0.1, medium >= 0.25,
large >= 0.36
Simpson's paradox ratio (SPR)=1.000, acceptable if >= 0.7,
ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if >=
0.9, ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if >=
0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=1.000,
acceptable if >= 0.7

Ge
*****
* Path coefficients and P values *
*****

Path coefficients
-----

      tech fun  beh
tech
fun
beh  0.428 0.362

P values
-----

      tech fun  beh
tech
fun
beh  <0.001  <0.001

*****
* Standard errors for path coefficients *

```

\*\*\*\*\*

```

tech fun beh
tech
fun
beh 0.044 0.044

```

\*\*\*\*\*  
\* Effect sizes for path coefficients \*  
\*\*\*\*\*

```

tech fun beh
tech
fun
beh 0.309 0.256

```

\*\*\*\*\*  
\* Combined loadings and cross-loadings \*  
\*\*\*\*\*

	tech	fun	beh	Type	(a)	SE	P value
Service	0.768	-0.022			-0.184		Reflect 0.042 < 0.001
Service	0.909	-0.057			0.006		Reflect 0.041 < 0.001
Service	0.879	-0.046			0.166		Reflect 0.041 < 0.001
Service	0.809	0.134	-0.012				Reflect 0.042 < 0.001
Service	0.130	0.849	-0.100				Reflect 0.041 < 0.001
Service	-0.160		0.886	0.015			Reflect 0.041 < 0.001
Service	0.038	0.840	0.085				Reflect 0.042 < 0.001
Service	-0.033		-0.067		0.837		Reflect 0.042 < 0.001
Service	0.076	-0.127			0.866		Reflect 0.041 < 0.001
Service	-0.029		0.036	0.879			Reflect 0.041 < 0.001
Service	-0.015		0.163	0.828			Reflect 0.042 < 0.001

Notes: Loadings are unrotated and cross-loadings are oblique-rotated. SEs and P values are for loadings. P values < 0.05 are desirable for reflective indicators.

s are oblique-rotated, both after separate Kaiser normalizations.

\*\*\*\*\*  
\* Pattern loadings and cross-loadings \*  
\*\*\*\*\*

	tech	fun	beh
Service	0.929	-0.022	-0.184
Service	0.950	-0.057	0.006
Service	0.791	-0.046	0.166
Service	0.705	0.134	-0.012
Service	0.130	0.820	-0.100
Service	-0.160		1.007 0.015
Service	0.038	0.741	0.085
Service	-0.033		-0.067 0.914
Service	0.076	-0.127	0.904
Service	-0.029		0.036 0.874



Service -0.015 0.163 0.716

Note: Loadings and cross-loadings are oblique-rotated.

\*\*\*\*\*  
 \* Normalized pattern loadings and cross-loadings \*  
 \*\*\*\*\*

	tech	fun	beh	
Service	0.981	-0.023		-0.194
Service	0.998	-0.060		0.006
Service	0.977	-0.056		0.205
Service	0.982	0.187		-0.017
Service	0.155	0.981		-0.120
Service	-0.157		0.987	0.015
Service	0.051	0.992		0.114
Service	-0.036		-0.073	0.997
Service	0.083	-0.139		0.987
Service	-0.034		0.041	0.999
Service	-0.020		0.222	0.975

Note: Loadings and cross-loadings shown are after oblique rotation and Kaiser normalization.

\*\*\*\*\*  
 \* Indicator weights \*  
 \*\*\*\*\*

	tech	fun	beh	Type	(a)	SE	P value	VIF	WLS	ES
Service	0.270	0.000	0.000	Reflect			0.045 < 0.001		1.809	1
	0.208									
Service	0.320	0.000	0.000	Reflect			0.044 < 0.001		3.017	1
	0.291									
Service	0.309	0.000	0.000	Reflect			0.044 < 0.001		2.426	1
	0.272									
Service	0.285	0.000	0.000	Reflect			0.045 < 0.001		2.106	1
	0.230									
Service	0.000	0.384	0.000	Reflect			0.044 < 0.001		1.812	1
	0.326									
Service	0.000	0.401	0.000	Reflect			0.044 < 0.001		2.099	1
	0.355									
Service	0.000	0.380	0.000	Reflect			0.044 < 0.001		1.744	1
	0.319									
Service	0.000	0.000	0.288	Reflect			0.044 < 0.001		2.084	1
	0.241									
Service	0.000	0.000	0.298	Reflect			0.044 < 0.001		2.299	1
	0.258									
Service	0.000	0.000	0.302	Reflect			0.044 < 0.001		2.469	1
	0.266									
Service	0.000	0.000	0.285	Reflect			0.045 < 0.001		2.009	1
	0.236									

Notes: P values < 0.05 and VIFs < 2.5 are desirable for formative indicators; VIF = indicator variance inflation factor;  
 WLS = indicator weight-loading sign (-1 = Simpson's paradox)

```
in l.v.); ES = indicator effect size.

*****
* Latent variable coefficients *
*****

R-squared coefficients
-----

tech fun beh
0.564

Adjusted R-squared coefficients
-----

tech fun beh
0.563

Composite reliability coefficients
-----

tech fun beh
0.907 0.894 0.914

Cronbach's alpha coefficients
-----

tech fun beh
0.862 0.822 0.875

Average variances extracted
-----

tech fun beh
0.711 0.737 0.727

Full collinearity VIFs
-----

tech fun beh
2.767 2.583 2.179

Q-squared coefficients
-----

tech fun beh
0.564

*****
* Ccorrelations among latent variables and errors *
*****

Correlations among l.vs. with sq. rts. of AVEs
-----

tech fun beh
```

```
tech 0.843 0.756 0.702
fun  0.756 0.859 0.675
beh  0.702 0.675 0.853
```

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

P values for correlations

```
-----
           tech fun  beh
tech 1.000 <0.001 <0.001
fun  <0.001 1.000 <0.001
beh  <0.001 <0.001 1.000
```

Co

```
*****
* Indirect and total effects *
*****
```

Total effects

```
-----
           tech fun  beh
tech
fun
beh  0.428 0.362
```

*Appendices*

---

```
*****
*
Version of WarpPLS used: 5.0
```

Path coefficients  
-----

	Tech	FUN	Beh	Inv	Inv*Tec	Inv*FUN
Tech						
FUN						
Beh	0.442	0.270			0.139	-0.236
Inv						
Inv*Tec						
Inv*FUN						

P values  
-----

	Tech	FUN	Beh	Inv	Inv*Tec	Inv*FUN
Tech						
FUN						
Beh	<0.001		<0.001			0.001 <0.001
Inv						
Inv*Tec						
Inv*FUN						

.....

## List of Publications and Presentations

### Paper presentation

- [1] Presented a paper “*is mutual fund providing monetary value to the investors?*” National Seminar on Creating and Delivering Value for Customers on March 27,& 28 at SMS ,CUSAT
- [2] Presented a paper “*A survey on the literature, in the area of retail investor’s option to mutual fund as their investment avenue*” on National Conference on Finance & Banking (NCFB 2010) 3rd & 4th September 2010 at Saint gist Institute of Management, Kottayam.
- [3] Paper titled “*The factors that influence investors when choosing mutual fund as their investment option*” in the two day National Seminar on “Innovation and strategic business practices on 15<sup>th</sup> &16<sup>th</sup> October 2014 at SNGIST N. Paravoor ,Cochin
- [4] A paper on “ *Impact of Service quality on customer loyalty in the mutual fund Industry: an empirical study from Kerala* ” in the National Seminar on Managing Turbulence: aligning Business with Culture ,society& consumers ,on 24<sup>th</sup> April 2015

### Best Paper Award

The paper titled “*the factors that influence investors when choosing mutual fund as their investment option* has been selected as the Best paper in the National Seminar on “Innovation and strategic business practices” at SNGIST N.Paravoor, Cochin

### Publications

- [1] *Low retail investor interest in mutual funds: an exploration into reason*, The Albertian journal of management, Vol.7.Issue 2: July 2013
- [2] *Impact of service quality on customer loyalty in the mutual fund industry: An empirical study from Kerala: Book of advanced practices in Business(International2015)*

.....✂.....