

# Investor Satisfaction in Mutual Fund Markets

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## Abstract:

Mutual funds play an important role within the economic development of the respective countries. The active involvement of mutual funds within the economic development are often seen by their dominant presence within the money and capital markets world over past decade. open-end fund industry in emerging markets has become highly competitive thanks to the extraordinary growth being experienced by it in terms of total funds being managed, number of players and selection of latest innovative open-end fund schemes being offered to the investors. The highly competitive nature of this industry necessitates that open-end fund marketers must fully understand the investment behaviour of individual investors (hereon investors) to be ready to effectively market their open-end fund schemes (hereon MFs). the present state of data about the investor behaviour is found to not be quite satisfactory and actually it's inadequate when applied to know the investment behaviour of MF investors. The findings will help the open-end fund industry also as government agencies charged with regulating the market place in making their marketing and public policy decisions, respectively. Further this may improve consumer behaviour theory by deepening our understanding of how investors make buying decisions for the intangible financial products.

Keywords: mutual fund, intangible, investment behaviour, perceived purchase risk, knowledge, satisfaction

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## Introduction

Customer satisfaction is of utmost importance within the marketing of any product. Modern customers are trying to find not only product satisfaction but the entire process of interacting, purchase decision, purchasing process, after purchase process and therefore the future interaction process. Marketing of monetary services may be a difficult task in terms of retaining the customer. Customer retention and also patronising

new offers or products within the market completely depend upon how well the customer satisfied with the whole process. During this process many an factor affect the satisfaction of the customer towards the market offer. So it's important to know these features in customer satisfaction for any sponsor of the market offer for this and future operations. AMCs are more cautious in designing NFOs and analyse which factors affect satisfaction of the

customer more and check out to consider them, modify the opposite features so as to appeal to customer and his/her satisfaction. Review of literature:

Y.P Singh and Vanita (2002), conducted a survey on open-end fund investors perceptions and preferences during a transitionary era. The survey sample size was 150 from Delhi. The results had shown that investors didn't perceive the danger inherent in open-end fund investment and used it primarily as a tax saving instrument. Among various financial instruments available to the investors, Mutual funds are ranked below NSCs, PPF and LIC policies. However, among the varied open-end fund and schemes available for investment; private mutual funds, open-end schemes and balanced funds are most preferred by the investors to the general public sector owned and closed funds

Vyuptakesh sharan (2007) observed the longer term of the essential schemes along side the pre-1993 scenario and mentioned in short so as to make a background for main discussion. Reforms within the open-end fund business are multi-pronged.

Healthy regulations designing the organizational structure, resource mobilization and investment, valuation and disclosure norms and that specialize in SEBI's supervision are significant. The inclusion of personal sector companies both Indian and foreign in open-end fund business brought in competition and thereby helped to enhance efficiency. The mutual funds got sort of incentives and therefore the area of their operations was widened. All this had a positive impact on their functioning. The magnitude of resource mobilization soared fast. However this was accounted for primarily by the private sector companies. Again, the

open-ended schemes proved more attractive to the investors than the close-ended schemes. Similarly, the investors show the preference for income debt schemes and not such a lot for growth equity schemes. The positive impact of reforms had evident in fast growing net assets under management. during this case too, the private sector companies fared far well. Investment in debt and equity formed the most important share, although investment in market instrument has also improved in recent years. The govt securities lagged far behind on this issue. Tapan K Panda & Nalini Tripathy (2009) examined customer orientation in designing open-end fund products and located that a prudent product design by adding the features expected by investors will make the new fund attractive for the Indian investors.

Vennila A., Nandhagopal R. (2012) in their study on "Investors preference towards mutual funds in Coimbatore city" examined the factors influencing the investors to prefer mutual funds and attitude of investors towards mutual funds as investment avenue. They analysed the info and located that investors are now turning more to mutual funds due to safety, liquidity, capital gains and transparency. Moreover they want to route their investments through mutual funds. Most of the investors believe investment consultants to settle on the proper fund for them. They monitor their investments periodically. They find a requirement to extend the general public awareness of mutual funds. consistent with them, the most reason for the fast popularity of the mutual funds is that the guaranty to redeem at net asset values. They find that there's a necessity to determine more mutual funds in India to decentralize the concentration of mutual

funds from metro to semi urban and rural areas.

#### Research Question:

- i) What is the extent of satisfaction of investors over the current products and services of AMCs?

#### Research Design

Research design for measuring the investor satisfaction in mutual funds is an exploratory research and consists of four components.

#### Sampling Design

Universe: the universe/population is defined as Visakhapatnam city population only which is a finite universe in nature.

Sample frame: this paper involves only the sample from Visakhapatnam city only. The list of mutual fund investors available with intermediaries is used for the sample to be drawn from.

#### Sampling Technique

A stratified random sampling is used for selecting retail investors.

Intermediaries are selected on the basis of their sales volume.

#### Sample Size

Top four intermediaries based on sales volume of each select AMC are taken making the sample size of intermediaries 40.

The sample size for retail investors is 500 from select AMCs are chosen on the basis of stratified Random sampling technique.

#### Statistical Design

For this statistical tools namely chi-square test, Multinomial Logical

regression analysis are employed for the analysis and interpretation of the data collected from the Investors.

#### Observational Design

A structured questionnaire is employed for collecting the data from the Investors

#### Sources of Data

The data is collected by using both primary and secondary sources. Primary data is collected through a structured questionnaire from retail investors. Secondary data sources include official websites of AMCs, AMFI, IMF data book, open-end fund fact book, magazines, and empirical studies on mutual funds in various journals.

#### Research Objectives:

To study the factors affecting investor satisfaction in Mutual Fund Markets

To examine the relationship of investor satisfaction with other variables under the study

#### Results and Discussions

As many variables are given for the respondents to respond it is essential to find any kind of variance amongst the variables. For this factor analysis was employed to extract the factors using principal component analysis and varimax technique was applied to rotate the factors in order to give some meaning and interpreting the factors.

To test the suitability of data KMO and Bartlett's test was run and the result was given in Table 1.1.

TABLE 1.1  
KMO AND BARTLETT'S TEST

|                                                  |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .645     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 2614.609 |
|                                                  | Df                 | 406      |
|                                                  | Sig.               | .003     |

The result from the Table 1.1 had shown KMO as 0.645 indicating the info suitable for correlational analysis . Bartlett's test was significant at .003 which is a smaller amount than .05. This Bartlett's test of sphericity indicated that the info matrix wasn't an unit matrix and there existed some association among the variables.

#### Extraction of Factors

Factor analysis consists of choosing the tactic of extracting the components, the amount of components to be extracted, and therefore the method of rotation for interpretation of the factors. For this extraction PRINCIPAL COMPONENT METHOD of extraction is used and therefore the VARIMAX

method of rotation is employed to offer the meaning and interpreting of the factors extracted. the amount of things extracted and retained is predicated on Eigen value quite one rule (Kaiser's criterion).

#### Communalities

This table gives the proportion of variance explained by the underlying factors. After extraction a number of the factors are discarded then some information is lost. the quantity of variance in each variable which will be explained by the retained factors is represented by the communalities after extraction. The communalities are presented within the table 1.2.

TABLE 1.2  
COMMUNALITIES

|                                                         | Initial | Extraction |
|---------------------------------------------------------|---------|------------|
| Returns                                                 | 1.000   | .560       |
| capital gain                                            | 1.000   | .724       |
| Liquidity                                               | 1.000   | .589       |
| Maturity                                                | 1.000   | .664       |
| diversification of risk                                 | 1.000   | .528       |
| Range of schemes offered and available at the outlet    | 1.000   | .562       |
| Tax benefits                                            | 1.000   | .666       |
| Brokerage paid to the outlet distributor                | 1.000   | .432       |
| Safety                                                  | 1.000   | .687       |
| Reliability                                             | 1.000   | .648       |
| Disbursement of returns in time                         | 1.000   | .656       |
| Overall performance                                     | 1.000   | .637       |
| Providing Information in time                           | 1.000   | .572       |
| Infrastructure                                          | 1.000   | .698       |
| Waiting period                                          | 1.000   | .726       |
| Hospitality                                             | 1.000   | .688       |
| Handling of customer complaints if any                  | 1.000   | .660       |
| Technology usage at the outlet                          | 1.000   | .613       |
| Know how of the distributor                             | 1.000   | .553       |
| Fees charged by the dealer/broker /national distributor | 1.000   | .579       |
| Flexibility                                             | 1.000   | .523       |
| Any other financial service                             | 1.000   | .639       |
| Post purchase service                                   | 1.000   | .597       |

|                      |       |      |
|----------------------|-------|------|
| News letter provided | 1.000 | .669 |
| Transparency         | 1.000 | .608 |
| Air condition        | 1.000 | .716 |
| Lobby                | 1.000 | .533 |
| Coffee/tea           | 1.000 | .646 |
| Web address          | 1.000 | .671 |

Extraction Method: Principal Component Analysis.

The output of the Table 7.36 had shown that all the variables have communalities above 0.432.

Total Variance Explained the entire Variance Explained table gives Eigen values, variance explained and cumulative variance explained for factor solution. the primary panel gives values supported initial Eigen values. For the initial solution, there are as many components or factors as there are variables. the entire column gives the quantity of variance within the observed variables accounted for by each component or factor. the share of variance column gives the percent of variance accounted for by each specific factor or component, relative to the entire variance altogether the variables. The cumulative percentage column gives the percent of variance accounted for by all components or factors up to and including the present one. as an example the cumulative percentage for

the second factor is that the sum of the share of variance for the primary and second factors. during a good correlation analysis , there are a couple of factors that specify tons of the variance and remainder of the factors explain relatively small amounts of variance. The extraction sums of squared loadings group gives information regarding the extracted factors or components. For principle components extraction, these values are going to be an equivalent as those reported under initial Eigen values. For other extraction methods, these values will generally be smaller than the initial values, thanks to errors in measurements. These are going to be reported in “rotation sum of squared loadings” if rotation of things is required. The variance accounted for by rotated factors or components could also be different from those reported for the extraction but the cumulative percentage for the set of things or components will always be an equivalent .

TABLE 1.3  
TOTAL VARIANCE EXPLAINED

| Compon<br>ent | Initial Eigen values |        |           | Extraction Sums of Squared |        |           | Rotation Sums of Squared |       |           |
|---------------|----------------------|--------|-----------|----------------------------|--------|-----------|--------------------------|-------|-----------|
|               | Total                | % of   | Cumulativ | Total                      | % of   | Cumulativ | Total                    | % of  | Cumulativ |
| 1             | 3.411                | 11.761 | 11.761    | 3.41                       | 11.761 | 11.761    | 2.382                    | 8.215 | 8.215     |
| 2             | 3.039                | 10.479 | 22.239    | 3.03                       | 10.479 | 22.239    | 1.869                    | 6.444 | 14.659    |
| 3             | 1.801                | 6.210  | 28.449    | 1.80                       | 6.210  | 28.449    | 1.810                    | 6.241 | 20.901    |
| 4             | 1.483                | 5.113  | 33.562    | 1.48                       | 5.113  | 33.562    | 1.765                    | 6.088 | 26.988    |
| 5             | 1.439                | 4.962  | 38.524    | 1.43                       | 4.962  | 38.524    | 1.663                    | 5.736 | 32.724    |
| 6             | 1.402                | 4.835  | 43.359    | 1.40                       | 4.835  | 43.359    | 1.613                    | 5.561 | 38.285    |
| 7             | 1.195                | 4.119  | 47.478    | 1.19                       | 4.119  | 47.478    | 1.502                    | 5.181 | 43.466    |
| 8             | 1.117                | 3.851  | 51.329    | 1.11                       | 3.851  | 51.329    | 1.488                    | 5.129 | 48.595    |

|    |       |       |         |      |       |        |       |       |        |
|----|-------|-------|---------|------|-------|--------|-------|-------|--------|
| 9  | 1.083 | 3.735 | 55.064  | 1.08 | 3.735 | 55.064 | 1.353 | 4.665 | 53.261 |
| 10 | 1.067 | 3.680 | 58.743  | 1.06 | 3.680 | 58.743 | 1.347 | 4.645 | 57.906 |
| 11 | 1.008 | 3.474 | 62.218  | 1.00 | 3.474 | 62.218 | 1.250 | 4.312 | 62.218 |
| 12 | .963  | 3.319 | 65.537  |      |       |        |       |       |        |
| 13 | .902  | 3.111 | 68.648  |      |       |        |       |       |        |
| 14 | .886  | 3.056 | 71.704  |      |       |        |       |       |        |
| 15 | .772  | 2.660 | 74.365  |      |       |        |       |       |        |
| 16 | .759  | 2.617 | 76.981  |      |       |        |       |       |        |
| 17 | .726  | 2.503 | 79.484  |      |       |        |       |       |        |
| 18 | .678  | 2.338 | 81.822  |      |       |        |       |       |        |
| 19 | .658  | 2.268 | 84.090  |      |       |        |       |       |        |
| 20 | .638  | 2.199 | 86.289  |      |       |        |       |       |        |
| 21 | .562  | 1.937 | 88.226  |      |       |        |       |       |        |
| 22 | .541  | 1.865 | 90.090  |      |       |        |       |       |        |
| 23 | .522  | 1.800 | 91.891  |      |       |        |       |       |        |
| 24 | .487  | 1.680 | 93.571  |      |       |        |       |       |        |
| 25 | .468  | 1.615 | 95.186  |      |       |        |       |       |        |
| 26 | .426  | 1.468 | 96.653  |      |       |        |       |       |        |
| 27 | .383  | 1.320 | 97.974  |      |       |        |       |       |        |
| 28 | .330  | 1.137 | 99.111  |      |       |        |       |       |        |
| 29 | .258  | .889  | 100.000 |      |       |        |       |       |        |

Extraction Method: Principal Component Analysis.

Analysis of the Table 1.3 found that 11 factors were extracted using principal component matrix technique with the principle Eigen value greater than one. All the 11 factors explained 62.218 percent of total variance.

#### ComponentMatrix

The component matrix gives the estimated factor loadings. the weather of this matrix describe the covariance or the correlations between the manifest variables and therefore the latent common factors counting on whether the covariance matrix or the matrix involved within the analysis. The sum of squares of the row elements

TABLE 1.4

COMPONENT MATRIX

|         | Component |      |      |   |   |      |   |   |      |      |      |
|---------|-----------|------|------|---|---|------|---|---|------|------|------|
|         | 1         | 2    | 3    | 4 | 5 | 6    | 7 | 8 | 9    | 10   | 11   |
| Returns | .586      | .062 | .041 | - | - | .225 | - | - | .088 | .146 | .140 |

of component matrix gives the communality of the corresponding variable. Using which the precise variances of the manifest variables are often estimated.. Similarly the sum of squares of the column elements of the component matrix gives the Eigen values of the covariance / matrix . These values help within the computation of the proportion of variance explained by each factor. the tactic of estimation is employed to urge the component matrix is that the principle component method of estimation. this is often mentioned as UNrotated factor solution.

|                                   |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| capital gain                      | .405 | .113 | .228 | .037 | -    | .245 | -    | .214 | -    | .217 | -    |
| Liquidity                         | .335 | .056 | -    | .075 | .304 | .093 | .256 | -    | -    | .400 | -    |
| Maturity                          | .241 | .189 | -    | .280 | -    | .202 | .411 | .432 | .078 | -    | -    |
| diversification of risk           | .551 | .184 | .254 | .141 | -    | -    | .019 | .206 | .077 | -    | .156 |
| Range of schemes offered and      | .479 | .180 | .338 | .043 | -    | -    | -    | .089 | .058 | -    | .115 |
| Tax benefits                      | .577 | -    | -    | -    | -    | -    | .420 | -    | .102 | -    | .099 |
| Brokerage paid to the outlet      | .373 | .052 | -    | .360 | .194 | .033 | .020 | .192 | -    | .130 | -    |
| Safety                            | .675 | .210 | -    | -    | .005 | -    | .008 | .111 | .009 | -    | -    |
| Reliability                       | .540 | .202 | -    | -    | .112 | -    | .128 | .244 | -    | -    | .118 |
| Disbursement of returns in time   | .371 | .287 | -    | -    | .060 | -    | -    | -    | .368 | .090 | -    |
| Overall performance               | .561 | .160 | -    | .194 | .091 | .216 | -    | -    | .016 | .242 | .276 |
| Providing Information in time     | -    | .323 | .151 | -    | .141 | .030 | -    | .202 | -    | .056 | .183 |
| Infrastructure                    | -    | .365 | -    | -    | .047 | -    | -    | -    | -    | -    | .410 |
| Waiting period                    | -    | .539 | -    | -    | -    | .181 | .092 | .016 | .231 | -    | -    |
| Hospitality                       | -    | .431 | -    | -    | -    | .314 | .252 | -    | .023 | .060 | -    |
| Handling of customer complaints   | -    | .503 | .152 | -    | -    | .123 | -    | .028 | .126 | .324 | .090 |
| Technology usage at the outlet    | -    | .378 | .099 | .434 | .033 | .058 | .001 | -    | .236 | -    | .232 |
| Know how of the distributor       | -    | .328 | -    | .269 | .003 | .230 | -    | .305 | -    | .049 | .050 |
| Fees charged by the dealer/broker | -    | .490 | -    | -    | .400 | .059 | -    | .098 | -    | -    | -    |
| Flexibility                       | -    | .208 | .507 | -    | -    | .027 | .202 | .018 | .034 | -    | -    |
| Any other financial service       | .079 | .474 | -    | -    | .293 | .156 | -    | -    | -    | -    | -    |
| Post purchase service             | -    | .284 | .356 | -    | .413 | .206 | .317 | -    | .089 | -    | .184 |
| News letter provided              | -    | .151 | -    | .021 | .076 | -    | .134 | .336 | .391 | .311 | -    |
| Transparency                      | -    | .413 | .200 | .172 | .367 | .279 | .179 | .110 | -    | .207 | .146 |
| Air condition                     | -    | .404 | .035 | -    | -    | -    | .217 | -    | -    | .210 | .044 |
| Lobby                             | -    | .571 | .027 | .186 | -    | -    | -    | -    | -    | .097 | .089 |
| Coffee/tea                        | -    | .306 | .019 | .419 | -    | -    | .042 | -    | -    | -    | -    |
| Web address                       | .105 | .371 | .523 | .152 | .212 | -    | -    | -    | .216 | .025 | -    |

Extraction Method: Principal Component Analysis

a. 11 components extracted.

In order to give meaningful interpretation to the variables on these factors with factor loadings more than 0.5 a technique called varimax was used for rotating these variables on the factors extracted.

#### Rotated Component Matrix

By using the Varimax rotation technique initial solution is rotated to give

some meaning to the variables on these 11 factors and for interpreting the data factor loadings of more than 0.5 only were absorbed into these extracted factors. All the variables that affect satisfaction of investor in mutual fund investment markets are divided into three categories as fund related variables, sponsor related variables and investor related variables.

TABLE 1.5  
ROTATED COMPONENT MATRIX

|                                   | Component |      |      |      |      |      |      |      |      |      |    |
|-----------------------------------|-----------|------|------|------|------|------|------|------|------|------|----|
|                                   | 1         | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11 |
| Returns                           | .646      |      |      |      |      |      |      |      |      |      |    |
| capital gain                      | .417      |      |      |      |      |      |      |      |      |      |    |
| Liquidity                         |           |      |      |      |      |      |      | .743 |      |      |    |
| Maturity                          |           |      |      |      |      |      |      |      |      | .768 |    |
| diversification of risk           | .555      |      |      |      |      |      |      |      |      |      |    |
| Range of schemes offered and      | .640      |      |      |      |      |      |      |      |      |      |    |
| Tax benefits                      |           |      | .726 |      |      |      |      |      |      |      |    |
| Brokerage paid to the outlet      |           |      |      |      |      |      |      | .486 |      |      |    |
| Safety                            |           |      | .525 |      |      |      |      |      |      |      |    |
| Reliability                       |           |      |      |      |      |      |      |      |      |      |    |
| Disbursement of returns in time   |           |      |      |      | .425 |      |      |      |      |      |    |
| Overall performance               | .597      |      |      |      |      |      |      |      |      |      |    |
| Providing Information in time     |           |      |      |      |      |      |      |      | .626 |      |    |
| Infrastructure                    |           |      |      |      |      |      |      |      |      |      |    |
| Waiting period                    |           | .784 |      |      |      |      |      |      |      |      |    |
| Hospitality                       |           | .763 |      |      |      |      |      |      |      |      |    |
| Handling of customer complaints   |           | .518 |      |      |      |      |      |      |      |      |    |
| Technology usage at the outlet    |           |      |      |      |      |      |      |      |      |      |    |
| Know how of the distributor       |           |      |      |      |      |      |      |      |      |      |    |
| Fees charged by the dealer/broker |           |      |      |      | .667 |      |      |      |      |      |    |
| Flexibility                       |           |      |      |      |      |      | .626 |      |      |      |    |
| Any other financial service       |           |      |      |      | .727 |      |      |      |      |      |    |
| Post purchase service             |           |      |      |      |      | .724 |      |      |      |      |    |
| News letter provided              |           |      |      |      |      |      |      |      |      | .770 |    |
| Transparency                      |           |      |      |      |      | .659 |      |      |      |      |    |
| Air condition                     |           |      |      | .781 |      |      |      |      |      |      |    |
| Lobby                             |           |      |      | .649 |      |      |      |      |      |      |    |
| Coffee/tea                        |           |      |      | .550 |      |      |      |      |      |      |    |
| Web address                       |           |      |      |      |      |      | .481 |      |      |      |    |

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 34 iterations.

The results of varimax with factor loadings were given in the Table 1.6.

TABLE 1.6  
FACTORS IN INVESTOR SATISFACTION

| No | Attributes Leading at 0.5 or more | Factor Related to | Loading | % of Extracted Variance | Cumulative % of Extracted variance |
|----|-----------------------------------|-------------------|---------|-------------------------|------------------------------------|
| 1  | Returns                           | Fund              | .646    | 11.761                  | 11.761                             |

|    |                              |              |      |        |        |
|----|------------------------------|--------------|------|--------|--------|
|    | Range of Schemes offered     | Sponsor      | .640 |        |        |
|    | Overall Performance          |              | .597 |        |        |
|    | Diversification of Risk      | Fund         | .555 |        |        |
| 2  | Waiting Period               | Investor     | .784 | 10.479 | 22.239 |
|    | Hospitality                  | Investor     | .763 |        |        |
|    | Handling of Customer         | Investor     | .518 |        |        |
| 3  | Tax Benefits                 | Fund         | .726 | 6.210  | 28.449 |
|    | Safety                       | Fund         | .525 |        |        |
| 4  | Air Condition                | Investor     | .781 | 5.113  | 33.562 |
|    | Lobby                        | Investor     | .649 |        |        |
|    | Coffee/Tea                   | Investor     | .550 |        |        |
| 5  | Any other Financial Service  | Investor     | .727 | 4.962  | 38.524 |
|    | Fees Charged by the          | Intermediary | .667 |        |        |
|    | Disbursement of Returns in   | Sponsor      | .425 |        |        |
| 6  | Post purchase Service        | Investor     | .724 | 4.835  | 43.359 |
|    | Transparency                 | Investor     | .659 |        |        |
| 7  | Flexibility                  | Investor     | .626 | 4.119  | 47.478 |
|    | Web                          | Investor     | .481 |        |        |
| 8  | Liquidity                    | Fund         | .743 | 3.851  | 51.329 |
|    | Brokerage paid to the outlet | Intermediary | .486 |        |        |
| 9  | Providing Information in     | Investor     | .626 | 3.735  | 55.064 |
| 10 | Maturity                     | Fund         | .768 | 3.680  | 58.743 |
| 11 | News letter provided         | Investor     | .770 | 3.474  | 62.218 |

Impact of Attributes on Investor Satisfaction

Multinomial Logistic Regression (MLR) are often wont to predict a variable on the idea of independents and to work out the percent of variance within the variable explained by the independents, to rank the relative importance of independents and to assess interaction effects. During this study, MLR was employed to hunt a relationship between Fund qualities that affect selection of MFs/Schemes and kinds of investors. Classification of Investors: Segmentation of investor groups involves identifying homogenous groups of investors who behave differently consistent with their characteristics. within the study on analysis of affect of attributes on customer satisfaction age was used as a criteria to classify the respondents. To classify the massive number of Fund

Qualities into smaller number of things with common constructs, correlational analysis using Principal Component Analysis was applied. 11 Principal Components out of 29 attributes were extracted and subsequently named. a crucial a part of correlational analysis is to get Factor scores for every case or individual survey respondent. Factor/ Component scores reflect the importance or otherwise of every component to every respondent. within the present study Anderson-Rubin (AR) Factor scores were obtained for every respondent, for every of the 11 extracted principal factors. The AR method of deriving Factor scores generates uncorrelated scores with zero mean and unit variance .

MLR technique was employed to hunt a relationship between the Factor scores and kinds of investors, to

point statistically important factors that influence the satisfaction of various sorts of investors. The latter acted because the variable within the regression procedure and factor scores were the experimental variable. the kinds of investors, during this study constitute a categorical variable. MLR is specially designed for situations during which the variable is categorical or discrete in nature. Given the 5 categorizations for the variable, MLR is just a polychotonomous extension of the

widely applied dichotonomous logistic regression model. Additionally, MLR permits independent variables which will be factors or covariates. The covariates must be continuous which is that the case for the survey respondents A-R Factor scores.

The AR factors that were generated were put to MLR analysis. Case processing summary given in table 7.41 had indicated the percentage of each type of investors based on age.

TABLE 1.7  
AGE PROFILE

|               | N   | Marginal Percentage |
|---------------|-----|---------------------|
| age           |     |                     |
| 20-30         | 27  | 5.6%                |
| 31-40         | 68  | 14.0%               |
| 41-50         | 176 | 36.2%               |
| 51-60         | 196 | 40.3%               |
| >60           | 19  | 3.9%                |
| Valid         | 486 | 100.0%              |
| Missing       | 14  |                     |
| Total         | 500 |                     |
| Subpopulation | 286 |                     |

Model Fitting Information: In the SPSS output for MLR analysis, Log Likelihood Tests appear as 'Sig' within the 'Final' row within the 'Model Fitting Information'. A well fitting model is critical at .05 levels or lesser than that. during this study, the 'Sig' value within the 'Final' row within the 'Model Fitting Information' is .001, which proves the analysis to be a well fitting model. The chi-square statistic is that the difference in -2 log-likelihood

between the ultimate model and a reduced model. Omitting an impact from the ultimate model forms the reduced model. The null hypothesis is that each one parameters of that effect are 0. The chi-square statistic shown a small p value ( $p \leq 0.05$ ), which rejected the null hypothesis and as such it is assumed a good model fit where parameters of that effect are not 0.

TABLE 1.8  
MODEL FITTING INFORMATION

| Model          | Model Fitting Criteria | Likelihood Ratio Tests |    |      |
|----------------|------------------------|------------------------|----|------|
|                | -2 Log Likelihood      | Chi-Square             | df | Sig. |
| Intercept Only | 1.260E3                |                        |    |      |
| Final          | 1.164E3                | 96.362                 | 44 | .002 |

In the Table 1.8 p value is .002 which indicated that parameters under study have greater than zero effect on the dependent.

Pseudo R-Square ratios:

When analyzing data with a logistic regression, the same statistic to R-squared doesn't exist. The model estimates from a logistic regression are maximum likelihood estimates received through an iterative process. they're not calculated to attenuate variance, therefore the OLS approach to goodness-of-fit doesn't apply. However, to gauge the

goodness-of-fit of logistic models, several pseudo R-squares are developed. These are "pseudo" R-squares because they appear like R-squared within the sense that they're on an identical scale, starting from 0 to 1 (though some pseudo R-squares never achieve 0 or 1) with higher values indicating better model fit, but they can't be interpreted together would interpret an OLS R-squared and different pseudo R-squares can reach very different values.

TABLE 1.9 PSEUDO R-SQUARE

|               |      |
|---------------|------|
| Cox and Snell | .180 |
| Nagelkerke    | .194 |
| McFadden      | .076 |

The output of pseudo R-Square had shown some of the ratios namely Cox and Snell, Nagelkerke and Mc Fadden. They show the improvement of the model to be good over intercept model. The smaller Cox and Snell ratio of 0.180 i.e., 18.0 percent indicated the greater the improvement over the intercept model. Nagelkerke ratio is an improvement of Cox and Snell ratio and in the study it was 19.4 percent. Mc Fadden ratio of .076 also signified the model to be good over intercept model.

Likelihood Ratio Tests

'Likelihood' is a probability, specifically the probability that the observed values of the dependent maybe predicted from the observed values of the independent. The log likelihood is its log and varies from 0 to minus infinity.

Likelihood ratio tests are used to rule-in or rule-out the parameters that have effect on dependent variables. The null hypothesis that was formulated is parameters have zero effects on dependent variable.

In order to test this if p value is less than .05 then the null hypothesis is rejected. So the parameters with less than 0.05 are considered as significant on effect on dependent variable. The results of likelihood tests were given in table 7.44. The output indicated that factors 4, factor 6, factor 7, factor 9 and factor 10 among the all extracted factors have p values less than 0.05 and hence they were proved to have significant effect on dependent variable. In the study dependent variable is satisfaction of respondents in mutual fund markets.

Therefore, the outcomes of the MLR analysis, allows the AMCs to spot which combination of variables have significant influence on the open-end fund investment behaviour and satisfaction of respondents in fund markets. The AMC can then apply this data for developing marketing strategies for all kinds of investors, present and potential, and also identify significant drivers that govern an investors' satisfaction in fund markets.

TABLE 1.10

LIKELIHOOD RATIO TESTS

| Effect    | Model Fitting Criteria             | Likelihood Ratio Tests |    |       |
|-----------|------------------------------------|------------------------|----|-------|
|           | -2 Log Likelihood of Reduced Model | Chi-Square             | df | Sig.  |
| Intercept | 1.487E3                            | 323.130                | 4  | .0012 |
| FAC1_2    | 1.173E3                            | 9.000                  | 4  | .061  |
| FAC2_2    | 1.168E3                            | 3.768                  | 4  | .438  |
| FAC3_2    | 1.173E3                            | 8.732                  | 4  | .068  |
| FAC4_2    | 1.174E3                            | 10.445                 | 4  | .034  |
| FAC5_2    | 1.173E3                            | 9.166                  | 4  | .057  |
| FAC6_2    | 1.180E3                            | 16.519                 | 4  | .002  |
| FAC7_2    | 1.180E3                            | 16.357                 | 4  | .003  |
| FAC8_2    | 1.168E3                            | 4.474                  | 4  | .346  |
| FAC9_2    | 1.174E3                            | 10.610                 | 4  | .031  |
| FAC10_2   | 1.176E3                            | 11.907                 | 4  | .018  |
| FAC11_2   | 1.166E3                            | 1.620                  | 4  | .805  |

Effect of Parameters on Satisfaction of Investors Based on Age

TABLE 1.11

PARAMETER ESTIMATES

| Age             | B     | Std. Error | Wald  | df | Sig. | Exp(B) | 95% Confidence Interval for Exp(B) |             |
|-----------------|-------|------------|-------|----|------|--------|------------------------------------|-------------|
|                 |       |            |       |    |      |        | Lower Bound                        | Upper Bound |
| 20-30 Intercept | 1.225 | .522       | 5.516 | 1  | .019 |        |                                    |             |
| FAC1_2          | -.008 | .316       | .001  | 1  | .981 | .992   | .534                               | 1.844       |
| FAC2_2          | -.170 | .355       | .229  | 1  | .632 | .844   | .421                               | 1.693       |
| FAC3_2          | .642  | .377       | 2.904 | 1  | .088 | 1.900  | .908                               | 3.977       |
| FAC4_2          | .839  | .341       | 6.065 | 1  | .014 | 2.314  | 1.187                              | 4.511       |
| FAC5_2          | .290  | .308       | .889  | 1  | .346 | 1.337  | .731                               | 2.443       |
| FAC6_2          | -.282 | .350       | .651  | 1  | .420 | .754   | .380                               | 1.497       |

|                 |       |      |        |   |      |       |       |       |
|-----------------|-------|------|--------|---|------|-------|-------|-------|
| FAC7_2          | .185  | .386 | .230   | 1 | .631 | 1.204 | .565  | 2.566 |
| FAC8_2          | -.275 | .334 | .677   | 1 | .411 | .760  | .395  | 1.462 |
| FAC9_2          | -.926 | .359 | 6.653  | 1 | .010 | .396  | .196  | .801  |
| FAC10_2         | -.652 | .355 | 3.373  | 1 | .066 | .521  | .260  | 1.045 |
| FAC11_2         | -.276 | .331 | .699   | 1 | .403 | .759  | .397  | 1.450 |
| 31-40 Intercept | 2.277 | .484 | 22.150 | 1 | .001 |       |       |       |
| FAC1_2          | .263  | .285 | .847   | 1 | .357 | 1.300 | .743  | 2.275 |
| FAC2_2          | -.476 | .321 | 2.193  | 1 | .139 | .621  | .331  | 1.166 |
| FAC3_2          | .669  | .345 | 3.750  | 1 | .053 | 1.951 | .992  | 3.839 |
| FAC4_2          | .839  | .304 | 7.634  | 1 | .006 | 2.314 | 1.276 | 4.195 |
| FAC5_2          | .069  | .272 | .065   | 1 | .799 | 1.072 | .629  | 1.825 |
| FAC6_2          | -.681 | .315 | 4.663  | 1 | .031 | .506  | .273  | .939  |
| FAC7_2          | -.403 | .333 | 1.459  | 1 | .227 | .669  | .348  | 1.285 |
| FAC8_2          | -.377 | .295 | 1.625  | 1 | .202 | .686  | .385  | 1.224 |
| FAC9_2          | -.877 | .330 | 7.051  | 1 | .008 | .416  | .218  | .795  |
| FAC10_2         | -.753 | .320 | 5.550  | 1 | .018 | .471  | .252  | .881  |
| FAC11_2         | -.241 | .299 | .650   | 1 | .420 | .786  | .437  | 1.412 |
| 41-50 Intercept | 3.344 | .469 | 50.801 | 1 | .002 |       |       |       |
| FAC1_2          | .478  | .269 | 3.151  | 1 | .076 | 1.612 | .951  | 2.732 |
| FAC2_2          | -.444 | .309 | 2.068  | 1 | .150 | .642  | .350  | 1.175 |
| FAC3_2          | .798  | .332 | 5.781  | 1 | .016 | 2.220 | 1.159 | 4.253 |

|                 |       |      |        |   |      |       |       |       |
|-----------------|-------|------|--------|---|------|-------|-------|-------|
| FAC4_2          | .650  | .285 | 5.195  | 1 | .023 | 1.916 | 1.095 | 3.350 |
| FAC5_2          | .345  | .252 | 1.870  | 1 | .171 | 1.412 | .861  | 2.315 |
| FAC6_2          | -.358 | .295 | 1.471  | 1 | .225 | .699  | .392  | 1.247 |
| FAC7_2          | -.581 | .320 | 3.307  | 1 | .069 | .559  | .299  | 1.046 |
| FAC8_2          | -.126 | .273 | .214   | 1 | .644 | .882  | .517  | 1.504 |
| FAC9_2          | -.868 | .314 | 7.619  | 1 | .006 | .420  | .227  | .777  |
| FAC10_2         | -.676 | .303 | 4.972  | 1 | .026 | .509  | .281  | .921  |
| FAC11_2         | -.124 | .285 | .191   | 1 | .662 | .883  | .506  | 1.542 |
| 51-60 Intercept | 3.444 | .469 | 53.974 | 1 | .000 |       |       |       |
| FAC1_2          | .440  | .267 | 2.711  | 1 | .100 | 1.552 | .920  | 2.619 |
| FAC2_2          | -.401 | .308 | 1.695  | 1 | .193 | .670  | .367  | 1.225 |
| FAC3_2          | .833  | .331 | 6.313  | 1 | .012 | 2.299 | 1.201 | 4.402 |
| FAC4_2          | .781  | .284 | 7.554  | 1 | .006 | 2.183 | 1.251 | 3.809 |
| FAC5_2          | .455  | .250 | 3.301  | 1 | .069 | 1.575 | .965  | 2.572 |
| FAC6_2          | -.110 | .294 | .140   | 1 | .708 | .896  | .503  | 1.595 |
| FAC7_2          | -.291 | .319 | .836   | 1 | .361 | .747  | .400  | 1.396 |
| FAC8_2          | -.078 | .271 | .083   | 1 | .773 | .925  | .544  | 1.572 |
| FAC9_2          | -.723 | .313 | 5.347  | 1 | .021 | .485  | .263  | .896  |
| FAC10_2         | -.892 | .302 | 8.690  | 1 | .003 | .410  | .227  | .742  |
| FAC11_2         | -.210 | .282 | .556   | 1 | .456 | .810  | .466  | 1.408 |

Table 1.11 had shown the importance of different parameters on

satisfaction of respondents in mutual fund markets. For investors with in age group

20-30, factor 4, and factor 9 have significance on the satisfaction in the fund markets. For investors with in age group 31-40 factor 4, factor 6, and factor 9 and factor 10 are significant on their satisfaction. For investors with in age group 41-50 factor 3, factor 4, and factor 9 and factor 10 are significant on their satisfaction. For investors with in age group 51-60 factor 3, factor 4, and factor 9 and factor 10 are significant on their satisfaction. Thus AMC's need to concentrate on post purchase services, maturity, safety, tax benefits, transparency and providing information in time appeal to the customer in forming his satisfaction levels in the fund market.

#### Conclusion:

AMCs need to minimize the negative perception of investors towards mutual funds as stable income providers. They can do so by making fund offerings more transparent in valuation and scheme portfolio and communicating the same to the present and potential investors. It requires reorientation of AMC's overall marketing strategy towards meeting investor expectations.

AMCs were further suggested to bridge the gap between the investor expectations and repair delivery by incorporating attributes like fund design, tax benefits, expenses ratio and technical competency within the fund products. Because the 21st century investors search for value added services i.e., personalized attention, tailor made investment products, skills of monetary managers and infrastructure, fund companies should plan innovative fund products rather plain vanilla products. In order to restore the trust of investors in fund markets it is essential to make investors expectation over the fund performance in the future to be good. For this fund companies need to revise their marketing strategies and also product design to include returns earning capacity,

disbursement of dividends if any in time which are considered to be vital in judging the performance of funds.

Asset management companies were advised to concentrate more on designing fund products that deliver the expectations of investors. In a Tier-II city like Visakhapatnam, investors prefer regular returns with safety of capital. Thus, AMC's were suggested to induce an element of more safer and regular returns in fund offerings in order to convert investors from investing in traditional investment avenues like insurance policies and provident funds.

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