# Preference Portfolio of Small Investors With Reference To Mutual Funds

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***Abstract -*** **A mutual fund is a single large professionally managed investment organization that gained a tremendous attention by the individual investors to satisfy their investment needs. The paper argues and supports the hypothesis stating that the small investor's perception towards the growth and success of mutual funds industry in India is positive. The survey was conducted in twin cities of Hyderabad and Secunderabad, State of Andhra Pradesh in India. It was concluded that the majority of the small investors are relatively young and equipped with high level education. They are all employed and belong to the range of up to 3 lac[1] income. The majority of the small investors preferred to invest in growth funds followed by open end funds, money market instruments, balanced funds and income funds in the order.**

***Keywords*** - Mutual Fund, Professional Management, Gilt Funds, Growth Funds.

## 1.       Introduction

Conceptually, a mutual fund is a single large professionally managed investment organization, that combines the money of many individual investors, having similar investments objectives. It invests this money in a wide variety of securities and individual investors share its income and expenses, its profits and losses, its capital appreciation and growth in proportion to their share holdings. In other words, a mutual fund is a type of investment institutions, which mobilizes savings of individuals and institutions and channelizes these savings' incorporate securities to provide investors a steady stream of returns and capital appreciation. Thus, the two prime advantages of investments in mutual funds of diversification and professional investment

management become recognized by the investors.

## 1.1       Classification of mutual funds

Broadly, mutual funds can be classified into three categories:

### 1.1.1     *Portfolio Classification of Mutual Funds*

In this category, funds differ one from another with respect to the types of securities, which comprise the portfolio. Different funds are designed to cater to the risk and return profile of different types of investors. Thus, objectives of the funds differ significantly giving rise to (i) Growth funds, (ii) income funds, (iii) balanced funds, (iv) monthly income plans, (v) gilt funds, (vi) liquid/ money markets funds, (vii) index funds, (viii) sector funds, (ix) tax-saving funds, (x) systematic withdrawal plans and (xi) miscellaneous funds, as follows:

a) *Growth Funds*: The objective of a growth fund is to achieve long-term capital appreciation by predominantly investing in growth oriented equity shares of companies.

b) *Income Funds*: The focus of such funds is to generate a steady stream of income consistent with preservation of capital and liquidity.

c) *Balanced funds*: The investment objective of a balanced fund is to provide periodic returns and capital appreciation over a long period of time from a judicious mix of equity and debt instrument.

d) *Monthly Income Plans*: The primary investment objective of an MIP is to generate regular income through investments in fixed income securities so as

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[1] Lac is a million Indian rupees or about £12,000.

to make monthly payment or distribution to its unit holders.

e) *Gilt Funds*: A Guilt Fund seeks to provide investors current income consistent with a portfolio invested in securities created and issued by the central government and/ are the state governments.

f) *Liquid / Money Market Funds*: The investment objective of such funds is to generate income and capital appreciation by investing 100 per cent of the corpus in a diversified portfolio and debt and money market securities.

g) *Index Fund*: The primary investment objective of index funds is to is to invest in companies whose securities are included in a stock market index for e.g. S&P CNX Nifty Index.

h) *Sector Funds*: A sector Fund is devoted to investing in a single or a group of industries.

i) *Tax-saving Funds*: In India, The tax-saving funds are launched in the nature of Equity Linked savings scheme (ELSS).

j) *Miscellaneous funds*: A Mutual fund may designed a fund to meet the specific needs of different segments of society like children, senior citizens, girl child, retired people etc.

### 1.1.2    *Functional Classification of Mutual Funds*

On the basic of Functional classification of Mutual Funds, they may be classified in to open ended or closed-ended.

a) *Open-end Funds*: An open end fund offers units for sale on a continuous basis without specifying any duration for redemption and always stands ready to buy units issued by it at any time at a repurchase price.

b) *Closed-End Funds*: Closed-end Funds has a definite target amount, a fixed period of subscription and a fixed number of units that can be offered to the investors.

### 1.1.3    *Geographical Classification of Mutual Funds*

Mutual Funds that operate within the Countries' boundaries by mobilizing savings of their citizens within the country are called domestic Mutual Funds.

## 1.2      **Benefits of mutual funds**

An investment in mutual Funds offers several benefits to investors. Some of them are:

a) *Professional Management*: Investment in stock markets requires a thorough understanding of the markets, analysis of performance of the markets, analysis of performance of companies, industries and the economy as a whole which a lay investor may not be able to do on his own.

b) *Diversification*: Mutual funds are able to reduce risk of a portfolio by investing in a large number of companies across a broad cross section of industries and sectors.

c) *Easy Administration*: By investing in a mutual Fund an investor is able to avoid large amount of paper work and the problems associated with bad deliveries, delayed payments and follow up with brokers and companies.

d) *Higher Return Potential*: Over a medium to long-term period, mutual funds have the potential to provide a better return then what an average investor could earn on his own as they invest in a diversified basket of selected securities.

e) *Comparatively Low Costs*: Mutual Funds are a relatively less expensive way to invest compared to directly investing in the capital markets because the benefits of the scale in brokerage, custodial and other fees translate in to lower costs to investors.

f) *Easy Liquidity*: In an open-end scheme, an investor gets the money back promptly at net asset value (NAV) related prices from a mutual Fund.

g) *Transparency*: An investor gets regular information on the value of his investment in addition to disclosure on the specific investments made by his scheme, the proportion invested in each class of assets and the fund managers' investment strategy and outlook.

h) *Flexibility*: Through future such as regular investment plans, regular withdrawal plans and dividend reinvestment plans, an investor can systematically invest or with draw funds according to his needs and convenience.

i) *Affordability*: An investor individually may not have sufficient funds to invest in the

shares of blue-chip companies as they are highly priced.

j) *Operate in a Legal frame work*: All Mutual funds are required to be registered to be SEBI[2] and they function within the provision of SEBI (Mutual Funds) Regulations, 1996.

## 2.      Results and Analysis

The data used are primary data. Table 1 refers to the distribution of the small investor respondents by their age. It is observed that the majority of the respondents (51.3 percent) are found in the age range of 31-50 years followed by 30 percent in the range of up to 30 years, and 18.3 percent in the range of above 50 years. Thus, the majority of the small investors are found to be relatively young.

### Table 1. Age

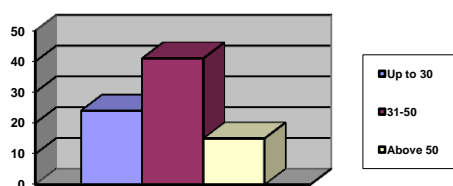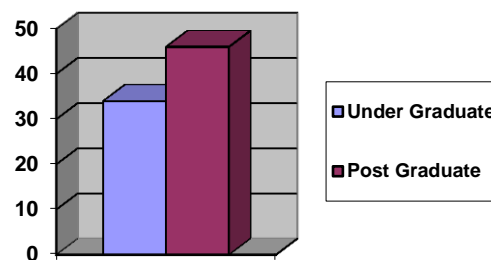| Age | Frequency | Percent | Cumulative Percent |
|-----|-----------|---------|--------------------|
| Up to 30 | 24 | 30.0 | 30.0 |
| 31-50 | 41 | 51.2 | 81.2 |
| Above 50 | 15 | 18.8 | 100.0 |
| Total | 80 | 100.0 | |



Table 2 refers to the distribution of the small investor respondents by their education. It is observed that 42.5 percent of the small investors are equipped with under graduation and 57.5 percent respondents

are equipped with post graduation education. Thus, majority of the respondents are well educated.

### Table 2. Education

| Education | Frequency | Percent | Cumulative Percent |
|-----------|-----------|---------|--------------------|
| Under Graduate | 34 | 42.5 | 42.5 |
| Post Graduate | 46 | 57.5 | 100.0 |



| Total | 80 | 100.0 | |
|-------|-----|-------|---|

Table 3 refers to the distribution of the small investor respondents by their profession. It is observed that 41.3 percent of the small investors are from industry, 45 percent respondents are from business and 13.8 percent small investors are from services.

### Table 3. Profession

| Profession | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| Industry | 33 | 41.3 | 41.3 |
| Business | 36 | 45.0 | 86.3 |
| Service | 11 | 13.7 | 100.0 |
| Total | 80 | 100.0 | |

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[2] Securities and Exchange Board of India.

**Table 5. Growth Funds**

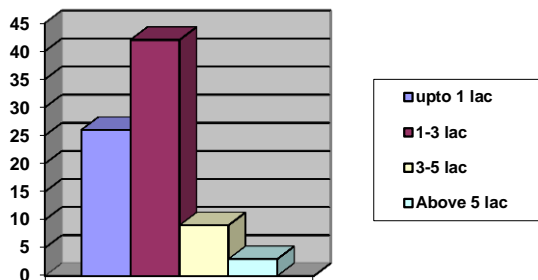| Growth Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 53 | 66.3 | 66.3 |
| No | 27 | 33.7 | 100.0 |
| Total | 80 | 100.0 | |

Table 4 refers to the distribution of the small investor respondents by their income. It is observed that 32.5 percent of the small investors are found in the income range of up to one lac followed by 52.5 percent respondents are in the income range of 1-3 lac, 11.3 percent in 3-5 lac and 3.8 percent from the income range of above 5 lac.

**Table 4. Income**

| Income | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Up to 1 lac | 26 | 32.5 | 32.5 |
| 1-3 lac | 42 | 52.5 | 85.0 |
| 3-5 lac | 9 | 11.3 | 96.3 |
| Above 5 lac | 3 | 3.7 | 100.0 |
| Total | 80 | 100.0 | |

Table 6 refers to the distribution of the small investors by their preference to invest in income funds. It is observed that 58.8 percent of the small investors have preferred to invest in income funds and 41.2 percent respondents did not endorse the said preference.

**Table 6. Income Funds**

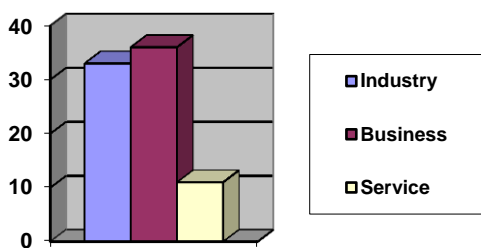| Income Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 47 | 58.8 | 58.8 |
| No | 33 | 41.2 | 100.0 |
| Total | 80 | 100.0 | |

Table 5 refers to the distribution of the small investors by their preference to invest in growth funds. It is observed that 66.3 percent of the small investors have preferred to invest in growth funds and 33.7 percent respondents did not endorse the said preference.

Table 7 refers to the distribution of the small investors by their preference to invest in balanced funds. It is observed that 37.5 percent of the small investors have preferred to invest in balanced funds and 62.5 percent respondents did not endorse the said preference.

**Table 7. Balanced Funds**

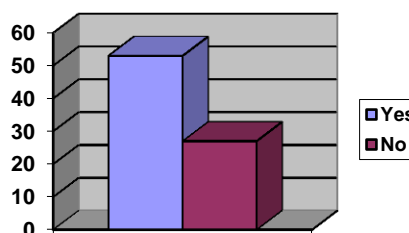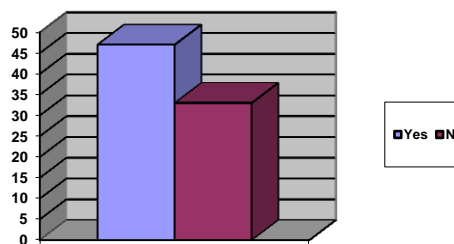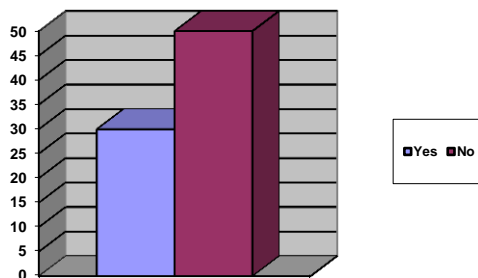| Balanced Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 30 | 37.5 | 37.5 |
| No | 50 | 62.5 | 100.0 |
| Total | 80 | 100.0 | |



Table 8 refers to the distribution of the small investors by their preference to invest in monthly income plans. It is observed that 48.8 percent of the small investors have preferred to invest in monthly income plans and 51.3 percent respondents did not endorse the said preference.

**Table 8. Monthly income Plans**

| Monthly Income Plans | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 39 | 48.8 | 48.8 |
| No | 41 | 51.3 | 100.0 |
| Total | 80 | 100.0 | |



Table 9 refers to the distribution of the small investors by their preference to invest in gilt funds. It is observed that 38.8 percent of the small investors have preferred to invest in gilt funds and 61.3 percent respondents did not endorse the said preference.

**Table 9. Gilt Funds**

| Gilt Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 31 | 38.8 | 38.8 |
| No | 49 | 61.3 | 100.0 |
| Total | 80 | 100.0 | |



Table 10 refers to the distribution of the small investors by their preference to invest in money market/ liquid funds. It is observed that 66.3 percent of the small investors have preferred to invest in money market/ liquid funds and 33.7 percent respondents did not endorse the said preference.

**Table 10. Liquid/Money Market Funds**

| Liquid/ Money Market Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 53 | 66.3 | 66.3 |
| No | 27 | 33.7 | 100.0 |
| Total | 80 | 100.0 | |

**Table 11** refers to the distribution of the small investors by their preference to invest in index funds. It is observed that 55 percent of the small investors have preferred to invest in index funds and 45 percent respondents did not endorse the said preference.

**Table 11. Index Funds**

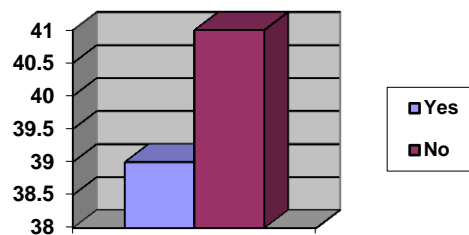| Index Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 44 | 55.0 | 55.0 |
| No | 36 | 45.0 | 100.0 |
| Total | 80 | 100.0 | |



**Table 12** refers to the distribution of the small investors by their preference to invest in sector funds. It is observed that 43.8 percent of the small investors have preferred to invest in sector funds and 56.2 percent respondents did not endorse the said preference.

**Table 12. Sector Funds**

| Sector Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 35 | 43.8 | 43.8 |
| No | 45 | 56.2 | 100.0 |
| Total | 80 | 100.0 | |



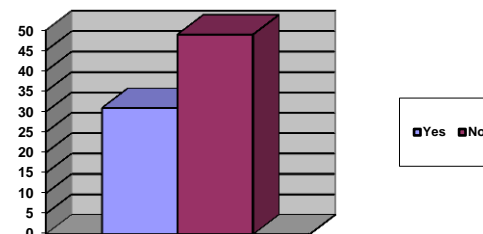**Table 13** refers to the distribution of the small investors by their preference to invest in tax saving funds. It is observed that 51.3 percent of the small investors have preferred to invest in tax saving funds and 48.7 percent respondents did not endorse the said preference.

**Table 13. Tax Saving Funds**

| Tax Saving Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 41 | 51.3 | 51.3 |
| No | 39 | 48.7 | 100.0 |
| Total | 80 | 100.0 | |



**Table 14** refers to the distribution of the small investors by their preference to invest in open end funds. It is observed that 63.8 percent of the small

investors have preferred to invest in open end funds and 36.2 percent respondents did not endorse the said preference.

### Table 14. Open End Funds

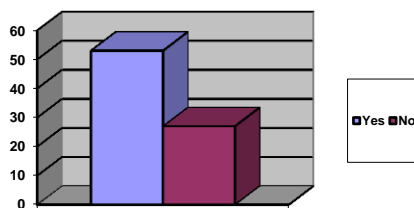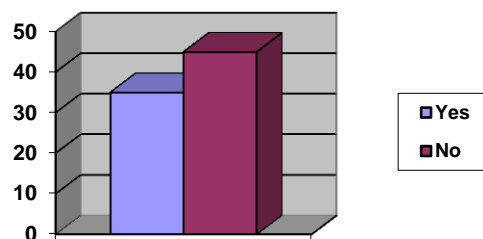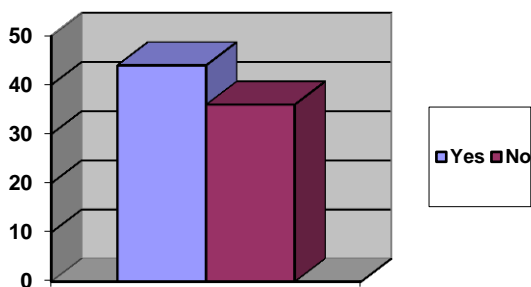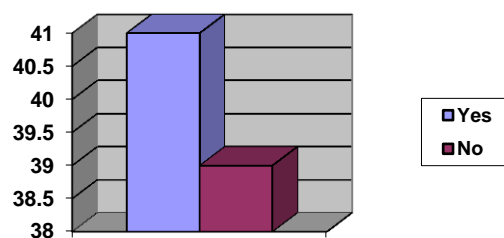| Open End Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 51 | 63.8 | 63.8 |
| No | 29 | 36.2 | 100.0 |
| Total | 80 | 100.0 | |
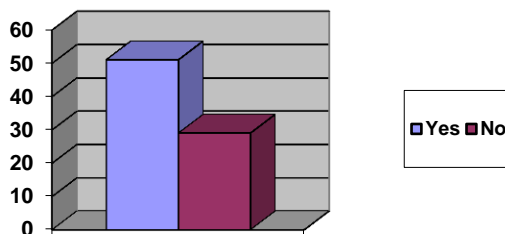


Table 15 refers to the distribution of the small investors by their preference to invest in closed end funds. It is observed that 30 percent of the small investors have preferred to invest in closed end funds and 70 percent respondents did not endorse the said preference.

### Table 15. Closed End Funds

| Closed End Funds | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Yes | 24 | 30.0 | 30.0 |
| No | 56 | 70.0 | 100.0 |
| Total | 80 | 100.0 | |



Table 16 refers to the joint distribution of the small investors by their age and by their preference to invest in growth funds. The correlation between the age of the respondents and their preference to invest in growth funds is positive (r = 0.130). The rejection of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that their preferences to invest in growth funds is statistically dependent of the respondents age.

### Table 16. Growth Funds

| Age | Growth Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 20 | 4 | 24 |
| | 83.3% | 16.7% | 100.0% |
| | 37.7% | 14.8% | 30.0% |
| 31-50 | 22 | 19 | 41 |
| | 53.7% | 46.3% | 100.0% |
| | 41.5% | 70.4% | 51.3% |
| Above 50 | 11 | 4 | 15 |
| | 73.3% | 26.7% | 100.0% |
| | 20.8% | 14.8% | 18.8% |
| Total | 53 | 27 | 80 |
| | 66.3% | 33.8% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square= 6.376, df=2, $\rho$=0.046, r=0.130

Table 17 refers to the joint distribution of the small investors by their age and by their preference to invest in income funds. The correlation between the age of the respondents and their preference to invest in income funds is positive (r = 0.024). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in income funds are statistically independent.

**Table 17. Age and Income Funds**

| Age | Income Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 14 | 10 | 24 |
| | 58.3% | 41.7% | 100.0% |
| | 29.8% | 30.3% | 30.0% |
| 31-50 | 25 | 16 | 41 |
| | 61.0% | 39.0% | 100.0% |
| | 53.2% | 48.5% | 51.3% |
| Above 50 | 8 | 7 | 15 |
| | 53.3% | 46.7% | 100.0% |
| | 17.0% | 21.2% | 18.8% |
| Total | 47 | 33 | 80 |
| | 58.8% | 41.3% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

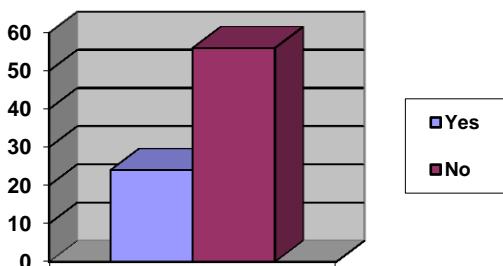Chi-Square= 0.267, df=2, ρ=0.875, r=0.024

Table 18 refers to the joint distribution of the small investors by their age and by their preference to invest in balanced funds. The correlation between the age of the respondents and their preference to invest in balanced funds is negative (r = -0.042). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in balanced funds are statistically independent.

**Table 18. Age and Balanced Funds**

| Age | Balanced Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto | 10 | 14 | 24 |

| | | | |
|---|---|---|---|
| 30 | 41.7% | 58.3% | 100.0% |
| | 33.3% | 28.0% | 30.0% |
| 31-50 | 12 | 29 | 41 |
| | 29.3% | 70.7% | 100.0% |
| | 40.0% | 58.0% | 51.3% |
| Above 50 | 8 | 7 | 15 |
| | 53.3% | 46.7% | 100.0% |
| | 26.7% | 14.0% | 18.8% |
| Total | 30 | 50 | 80 |
| | 37.5% | 62.5% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square= 2.968, df=2, ρ=0.227, r=-0.042

Table 19 refers to the joint distribution of the small investors by their age and by their preference to invest in monthly income plans. The correlation between the age of the respondents and their preference to invest in monthly income plans is negative (r = -0.017). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in monthly income plans are statistically independent.

**Table 19. Age and Monthly income Plans**

| Age | Monthly income Plans | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 11 | 13 | 24 |
| | 45.8% | 54.2% | 100.0% |
| | 28.2% | 31.7% | 30.0% |
| 31-50 | 21 | 20 | 41 |
| | 51.2% | 48.8% | 100.0% |
| | 53.8% | 48.8% | 51.3% |
| Above 50 | 7 | 8 | 15 |
| | 46.7% | 53.3% | 100.0% |

| | | | |
|---|---|---|---|
| | 17.9% | 19.5% | 18.8% |
| Total | 39 | 41 | 80 |
| | 48.8% | 51.3% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square= 0.208, df=2, ρ=0.901, r=-0.017

Table 20 refers to the joint distribution of the small investors by their age and by their preference to invest in gilt funds. The correlation between the age of the respondents and their preference to invest in gilt funds is negative (r = - 0.166). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in gilt funds are statistically independent.

**Table 20. Age and Gilt Funds**

| Age | Gilt Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 7 | 17 | 24 |
| | 29.2% | 70.8% | 100.0% |
| | 22.6% | 34.7% | 30.0% |
| 31-50 | 16 | 25 | 41 |
| | 39.0% | 61.0% | 100.0% |
| | 51.6% | 51.0% | 51.3% |
| Above 50 | 8 | 7 | 15 |
| | 53.3% | 46.7% | 100.0% |
| | 25.8% | 14.3% | 18.8% |
| Total | 31 | 49 | 80 |
| | 38.8% | 61.3% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square= 2.274, df=2, ρ=0.321, r=-0.166

Table 21 refers to the joint distribution of the small investors by their age and by their preference to invest in liquid/money market funds. The correlation between the age of the respondents and their preference to invest in liquid/money market funds is negative (r=-0.126). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in liquid/money market funds are statistically independent.

**Table 21. Age and Liquid / Money Market Funds**

| Age | Liquid / Money Market Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 12 | 12 | 24 |
| | 50.0% | 50.0% | 100.0% |
| | 22.6% | 44.4% | 30.0% |
| 31-50 | 32 | 9 | 41 |
| | 78.0% | 22.0% | 100.0% |
| | 60.4% | 33.3% | 51.3% |
| Above 50 | 9 | 6 | 15 |
| | 60.0% | 40.0% | 100.0% |
| | 17.0% | 22.2% | 18.8% |
| Total | 53 | 27 | 80 |
| | 66.3% | 33.8% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square = 5.649, df=2, ρ = 0.059, r = -0.126

Table 22 refers to the joint distribution of the small investors by their age and by their preference to invest in index funds. The correlation between the age of the respondents and their preference to invest in index funds is positive (r = 0.189). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in index funds are statistically independent.

**Table 22. Age and Index Funds**

| Age | | Index Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| | Upto 30 | 17 | 7 | 24 |
| | | 70.8% | 29.2% | 100.0% |
| | | 38.6% | 19.4% | 30.0% |
| | 31-50 | 20 | 21 | 41 |
| | | 48.8% | 51.2% | 100.0% |
| | | 45.5% | 58.3% | 51.3% |
| | Above 50 | 7 | 8 | 15 |
| | | 46.7% | 53.3% | 100.0% |
| | | 15.9% | 22.2% | 18.8% |
| Total | | 44 | 36 | 80 |
| | | 55.0% | 45.0% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 3.493, df=2, ρ=0.174, r=0.189

Table 23 refers to the joint distribution of the small investors by their age and by their preference to invest in sector funds. The correlation between the age of the respondents and their preference to invest in sector funds is positive (r=0.038). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that the age of the respondents and their preference to invest in sector funds are statistically independent.

**Table 23. Age and Sector Funds**

| Age | | Sector Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| | Upto 30 | 11 | 13 | 24 |
| | | 45.8% | 54.2% | 100.0% |
| | | 31.4% | 28.9% | 30.0% |
| | 31-50 | 18 | 23 | 41 |

| | | 43.9% | 56.1% | 100.0% |
|---|---|---|---|---|
| | | 51.4% | 51.1% | 51.3% |
| | Above 50 | 6 | 9 | 15 |
| | | 40.0% | 60.0% | 100.0% |
| | | 17.1% | 20.0% | 18.8% |
| Total | | 35 | 45 | 80 |
| | | 43.8% | 56.3% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square = 0.128, df = 2, ρ = 0.938, r = 0.038

Table 24 refers to the joint distribution of the small investors by their age and by their preference to invest in tax saving funds. The correlation between the age of the respondents and their preference to invest in tax saving funds is negative (r=-0.055). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom=2 implies that the age of the respondents and their preference to invest in tax saving funds are statistically independent.

**Table 24. Age and Tax Saving Funds**

| Age | | Tax Saving Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| | Upto 30 | 12 | 12 | 24 |
| | | 50.0% | 50.0% | 100.0% |
| | | 29.3% | 30.8% | 30.0% |
| | 31-50 | 20 | 21 | 41 |
| | | 48.8% | 51.2% | 100.0% |
| | | 48.8% | 53.8% | 51.3% |
| | Above 50 | 9 | 6 | 15 |
| | | 60.0% | 40.0% | 100.0% |
| | | 22.0% | 15.4% | 18.8% |
| Total | | 41 | 39 | 80 |
| | | 51.3% | 48.8% | 100.0% |

| | | 100.0% | 100.0% | 100.0% |
|---|---|---|---|---|

Chi-Square= 0.575, df=2, ρ=0.750, r=-0.055

Table 25 refers to the joint distribution of the small investors by heir age and by their preference to invest in open end funds. The correlation between the age of the respondents and their preference to invest in open end funds is positive (r=0.260). The rejection of the null hypothesis with level of significance = 0.05 and degree of freedom = 2 implies that their preference to invest in open end funds is statistically dependent of the age of the respondents.

**Table 25. Age and Open End Funds**

| Age | Open End Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 17 | 7 | 24 |
| | 70.8% | 29.2% | 100.0% |
| | 33.3% | 24.1% | 30.0% |
| 31-50 | 30 | 11 | 41 |
| | 73.2% | 26.8% | 100.0% |
| | 58.8% | 37.9% | 51.3% |
| Above 50 | 4 | 11 | 15 |
| | 26.7% | 73.3% | 100.0% |
| | 7.8% | 37.9% | 18.8% |
| Total | 51 | 29 | 80 |
| | 63.8% | 36.3% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square=11.022, df=2, ρ=0.004, r=0.260

Table 26 refers to the joint distribution of the small investors by their age and by their preference to invest in closed end funds. The correlation between the age of the respondents and their preference to invest in closed end funds is positive (r=0.021). The acceptance of the null hypothesis with level of significance= 0.05 and degree of freedom=2 implies that the age of the respondents and their preference to invest in closed end funds are statistically independent.

**Table 26: Age and Closed End Funds**

| Age | Closed End Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| Upto 30 | 9 | 15 | 24 |
| | 37.5% | 62.5% | 100.0% |
| | 37.5% | 26.8% | 30.0% |
| 31-50 | 9 | 32 | 41 |
| | 22.0% | 78.0% | 100.0% |
| | 37.5% | 57.1% | 51.3% |
| Above 50 | 6 | 9 | 15 |
| | 40.0% | 60.0% | 100.0% |
| | 25.0% | 16.1% | 18.8% |
| Total | 24 | 56 | 80 |
| | 30.0% | 70.0% | 100.0% |
| | 100.0% | 100.0% | 100.0% |

Chi-Square= 2.622, df=2, ρ=0.270, r=0.021

Table 27 refers to the joint distribution of the small investors by their income and by their preference to invest in growth funds. The correlation between the income of the respondents and their preference to invest in growth funds is negative (r= -0.374). The rejection of the null hypothesis with level of significance= 0.05 and degree of freedom=3 implies that their preference to invest in growth funds is statistically dependent of the income of the respondents.

**Table 27. Income and Growth Funds**

| Income | Growth Funds | | Total |
|---|---|---|---|
| | Yes | No | |
| upto 1 lac | 11 | 15 | 26 |
| | 42.3% | 57.7% | 100.0% |

Left column table (continuation of Table 28):

| | | Yes | No | Total |
|---|---|---|---|---|
| | | 20.8% | 55.6% | 32.5% |
| 1-3 lac | | 31 | 11 | 42 |
| | | 73.8% | 26.2% | 100.0% |
| | | 58.5% | 40.7% | 52.5% |
| 3-5 lac | | 8 | 1 | 9 |
| | | 88.9% | 11.1% | 100.0% |
| | | 15.1% | 3.7% | 11.3% |
| Above 5 lac | | 3 | | 3 |
| | | 100.0% | | 100.0% |
| | | 5.7% | | 3.8% |
| Total | | 53 | 27 | 80 |
| | | 66.3% | 33.8% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square=11.330, df=3, ρ=0.010, r=-0.374

Table 28 refers to the joint distribution of the small investors by their income and by their preference to invest in income funds. The correlation between the income of the respondents and their preference to invest in income funds is positive (r= 0.177). The rejection of the null hypothesis with level of significance= 0.05 and degree of freedom=3 implies that their preference to invest in income funds is statistically dependent of the income of the respondents.

**Table 28. Income and Income Funds**

| Income | | Income Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| upto 1 lac | | 22 | 4 | 26 |
| | | 84.6% | 15.4% | 100.0% |
| | | 46.8% | 12.1% | 32.5% |
| 1-3 lac | | 15 | 27 | 42 |
| | | 35.7% | 64.3% | 100.0% |
| | | 31.9% | 81.8% | 52.5% |

| | | Yes | No | Total |
|---|---|---|---|---|
| 3-5 lac | | 7 | 2 | 9 |
| | | 77.8% | 22.2% | 100.0% |
| | | 14.9% | 6.1% | 11.3% |
| Above 5 lac | | 3 | | 3 |
| | | 100.0% | | 100.0% |
| | | 6.4% | | 3.8% |
| Total | | 47 | 33 | 80 |
| | | 58.8% | 41.3% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 19.825, df=3, ρ=000, r=0.177

Table 29 refers to the joint distribution of the small investors by their income and by their preference to invest in balanced funds. The correlation between the income of the respondents and their preference to invest in balanced funds is positive (r= 0.059). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom=3 implies that the income of the respondents and their preference to invest in balanced funds are statistically independent.

**Table 29. Income and Balanced Funds**

| Income | | Balanced Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| upto 1 lac | | 10 | 16 | 26 |
| | | 38.5% | 61.5% | 100.0% |
| | | 33.3% | 32.0% | 32.5% |
| 1-3 lac | | 17 | 25 | 42 |
| | | 40.5% | 59.5% | 100.0% |
| | | 56.7% | 50.0% | 52.5% |
| 3-5 lac | | 2 | 7 | 9 |
| | | 22.2% | 77.8% | 100.0% |
| | | 6.7% | 14.0% | 11.3% |
| Above 5 lac | | 1 | 2 | 3 |
| | | 33.3% | 66.7% | 100.0% |

| | | 3.3% | 4.0% | 3.8% |
|---|---|---|---|---|
| Total | | 30 | 50 | 80 |
| | | 37.5% | 62.5% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 1.088, df=3, ρ=0.780, r=0.059

Table 30 refers to the joint distribution of the small investors by their income and by their preference to invest in monthly income plans. The correlation between the income of the respondents and their preference to invest in monthly income plans is negative (r= -0.107). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom = 3 implies that the income of the respondents and their preference to invest in monthly income plans are statistically independent.

**Table 30. Income and Monthly income Plans**

| Income | | Monthly income Plans | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| upto 1 lac | | 11 | 15 | 26 |
| | | 42.3% | 57.7% | 100.0% |
| | | 28.2% | 36.6% | 32.5% |
| 1-3 lac | | 21 | 21 | 42 |
| | | 50.0% | 50.0% | 100.0% |
| | | 53.8% | 51.2% | 52.5% |
| 3-5 lac | | 5 | 4 | 9 |
| | | 55.6% | 44.4% | 100.0% |
| | | 12.8% | 9.8% | 11.3% |
| Above 5 lac | | 2 | 1 | 3 |
| | | 66.7% | 33.3% | 100.0% |
| | | 5.1% | 2.4% | 3.8% |
| Total | | 39 | 41 | 80 |
| | | 48.8% | 51.3% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square=1.010, df=3, ρ=0.799, r=-0.107

Table 31 refers to the joint distribution of the small investors by their income and by their preference to invest in gilt funds. The correlation between the income of the respondents and their preference to invest in gilt funds is positive (r= 0.172). The acceptance of the null hypothesis with level of significance= 0.05 and degree of freedom=3 implies that the income of the respondents and their preference to invest in gilt funds are statistically independent.

**Table 31. Income and Gilt Funds**

| Income | | Gilt Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| upto 1 lac | | 12 | 14 | 26 |
| | | 46.2% | 53.8% | 100.0% |
| | | 38.7% | 28.6% | 32.5% |
| 1-3 lac | | 17 | 25 | 42 |
| | | 40.5% | 59.5% | 100.0% |
| | | 54.8% | 51.0% | 52.5% |
| 3-5 lac | | 2 | 7 | 9 |
| | | 22.2% | 77.8% | 100.0% |
| | | 6.5% | 14.3% | 11.3% |
| Above 5 lac | | | 3 | 3 |
| | | | 100.0% | 100.0% |
| | | | 6.1% | 3.8% |
| Total | | 31 | 49 | 80 |
| | | 38.8% | 61.3% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 3.587, df=3, ρ=0.310, r=0.172

Table 32 refers to the joint distribution of the small investors by their income and by their preference to invest in liquid/money market funds. The correlation between the income of the respondents and their preference to invest in liquid/money market funds is positive (r= -0.104). The acceptance of the null hypothesis with level of

significance= 0.05 and degree of freedom=3 implies that the income of the respondents and their preference to invest in liquid/money market funds are statistically independent.

### Table 32. Income and Liquid / Money Market Funds

| Income | | Liquid/Money Market Funds | | Total |
| --- | --- | --- | --- | --- |
| | | Yes | No | |
| | upto 1 lac | 18 | 8 | 26 |
| | | 69.2% | 30.8% | 100.0% |
| | | 34.0% | 29.6% | 32.5% |
| | 1-3 lac | 29 | 13 | 42 |
| | | 69.0% | 31.0% | 100.0% |
| | | 54.7% | 48.1% | 52.5% |
| | 3-5 lac | 5 | 4 | 9 |
| | | 55.6% | 44.4% | 100.0% |
| | | 9.4% | 14.8% | 11.3% |
| | Above 5 lac | 1 | 2 | 3 |
| | | 33.3% | 66.7% | 100.0% |
| | | 1.9% | 7.4% | 3.8% |
| Total | | 53 | 27 | 80 |
| | | 66.3% | 33.8% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 2.164, df=3, ρ=0.539, r=0.104

Table 33 refers to the joint distribution of the small investors by their income and by their preference to invest in index funds. The correlation between the income of the respondents and their preference to invest in index funds is negative (r=-0.023). The acceptance of the null hypothesis with level of significance= 0.05 and degree of freedom = 3 implies that the income of the respondents and their preference to invest in index funds are statistically independent.

### Table 33. Income and Index Funds

| Income | | Index Funds | | Total |
| --- | --- | --- | --- | --- |
| | | Yes | No | |
| | upto 1 lac | 13 | 13 | 26 |
| | | 50.0% | 50.0% | 100.0% |
| | | 29.5% | 36.1% | 32.5% |
| | 1-3 lac | 25 | 17 | 42 |
| | | 59.5% | 40.5% | 100.0% |
| | | 56.8% | 47.2% | 52.5% |
| | 3-5 lac | 6 | 3 | 9 |
| | | 66.7% | 33.3% | 100.0% |
| | | 13.6% | 8.3% | 11.3% |
| | Above 5 lac | | 3 | 3 |
| | | | 100.0% | 100.0% |
| | | | 8.3% | 3.8% |
| Total | | 44 | 36 | 80 |
| | | 55.0% | 45.0% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 4.772, df=3, ρ=0.189, r=-0.023

Table 34 refers to the joint distribution of the small investors by their income and by their preference to invest in sector funds. The correlation between the income of the respondents and their preference to invest in sector funds is negative (r=-0.235). The acceptance of the null hypothesis with level of significance = 0.05 and degree of freedom=3 implies that the income of the respondents and their preference to invest in sector funds are statistically independent.

**Table 34. Income and Sector Funds**

| Income | | Sector Funds | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| | upto 1 lac | 8 | 18 | 26 |
| | | 30.8% | 69.2% | 100.0% |
| | | 22.9% | 40.0% | 32.5% |
| | 1-3 lac | 19 | 23 | 42 |
| | | 45.2% | 54.8% | 100.0% |
| | | 54.3% | 51.1% | 52.5% |
| | 3-5 lac | 5 | 4 | 9 |
| | | 55.6% | 44.4% | 100.0% |
| | | 14.3% | 8.9% | 11.3% |
| | Above 5 lac | 3 | | 3 |
| | | 100.0% | | 100.0% |
| | | 8.6% | | 3.8% |
| Total | | 35 | 45 | 80 |
| | | 43.8% | 56.3% | 100.0% |
| | | 100.0% | 100.0% | 100.0% |

Chi-Square= 6.185, df=3, $\rho$=0.103, r=-0.235

## 3. Concluding Remarks

It is concluded that the majority of the small investors are relatively young, equipped with high level education. All of them are employed and are found in the income range of up to 3 lac income. The majority of the small investors preferred to invest in growth funds followed by open end funds, money market instruments, balanced funds, and income funds in the order. The age of the small investors and their preference portfolio of mutual funds by the small investors are statistically independent except in the case of the preference of investments in growth funds and open end funds. The income of the small investors and the preference portfolio of mutual funds by the small investors are statistically independent except in the case of preference of investments in growth funds and income funds.

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