

# 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<sup>1</sup> 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

<sup>1</sup> Lac is a million Indian rupees or about £12,000.

to make monthly payment or distribution to its unit holders.

- e) *Gilt Funds*: A Gilt 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 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 than 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<sup>2</sup> 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	

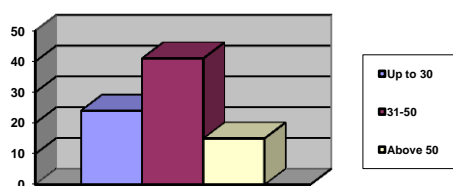
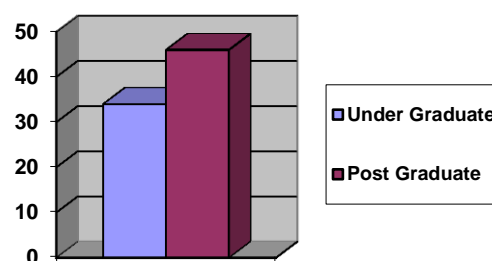


Table 2 refers to the distribution of the small investor respondents by their education. It is observed that 42.5 percent of the small investors are equipped with under graduation and 57.5 percent respondents

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	
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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	

<sup>2</sup> Securities and Exchange Board of India.

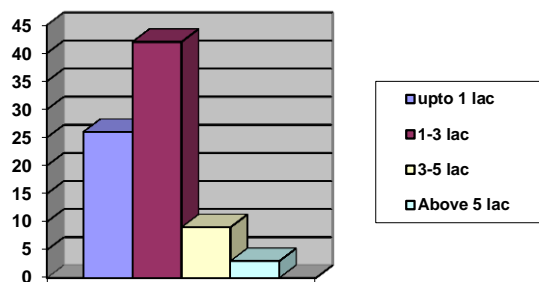


Table 4 refers to the distribution of the small investor respondents by their income. It is observed that 32.5 percent of the small investors are found in the income range of up to one lac followed by 52.5 percent respondents are in the income range of 1-3 lac, 11.3 percent in 3-5 lac and 3.8 percent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

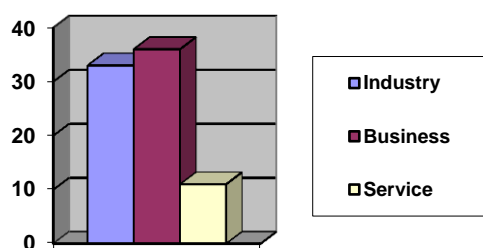


Table 5 refers to the distribution of the small investors by their preference to invest in growth funds. It is observed that 66.3 percent of the small investors have preferred to invest in growth funds and 33.7 percent respondents did not endorse the said preference.

**Table 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	

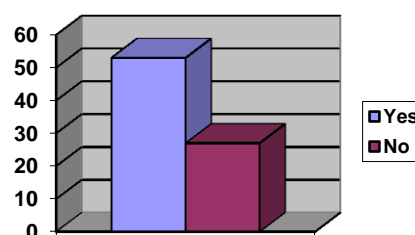


Table 6 refers to the distribution of the small investors by their preference to invest in income funds. It is observed that 58.8 percent of the small investors have preferred to invest in income funds and 41.2 percent respondents did not endorse the said preference.

**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	

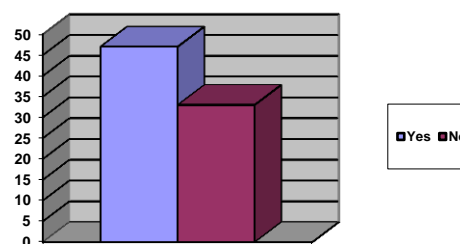


Table 7 refers to the distribution of the small investors by their preference to invest in balanced funds. It is observed that 37.5 percent of the small investors have preferred to invest in balanced funds and 62.5 percent respondents did not endorse the said preference.

**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	

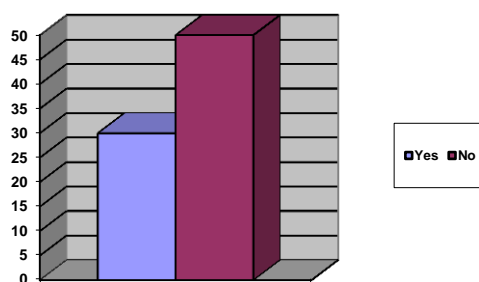


Table 8 refers to the distribution of the small investors by their preference to invest in monthly income plans. It is observed that 48.8 percent of the small investors have preferred to invest in monthly income plans and 51.3 percent respondents did not endorse the said preference.

**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	

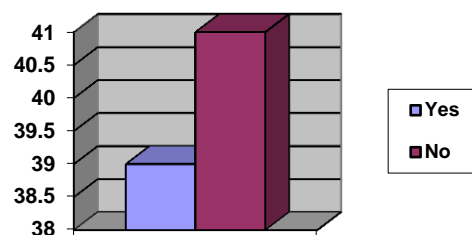


Table 9 refers to the distribution of the small investors by their preference to invest in gilt funds. It is observed that 38.8 percent of the small investors have preferred to invest in gilt funds and 61.3 percent respondents did not endorse the said preference.

**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	

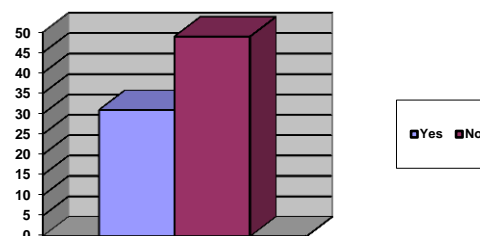


Table 10 refers to the distribution of the small investors by their preference to invest in money market/ liquid funds. It is observed that 66.3 percent of the small investors have preferred to invest in money market/ liquid funds and 33.7 percent respondents did not endorse the said preference.

**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	

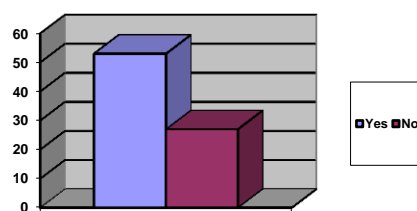


Table 11 refers to the distribution of the small investors by their preference to invest in index funds. It is observed that 55 percent of the small investors have preferred to invest in index funds and 45 percent respondents did not endorse the said preference.

**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	

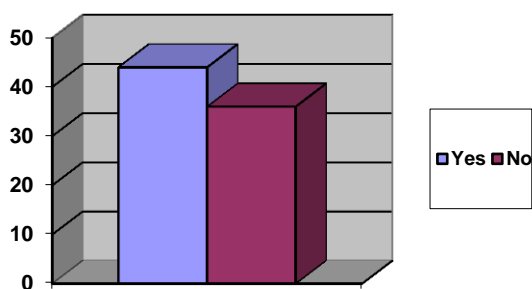


Table 12 refers to the distribution of the small investors by their preference to invest in sector funds. It is observed that 43.8 percent of the small investors have preferred to invest in sector funds and 56.2 percent respondents did not endorse the said preference.

**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	

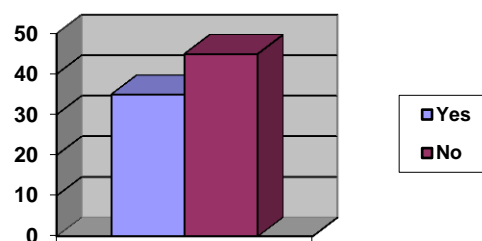


Table 13 refers to the distribution of the small investors by their preference to invest in tax saving funds. It is observed that 51.3 percent of the small investors have preferred to invest in tax saving funds and 48.7 percent respondents did not endorse the said preference.

**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	

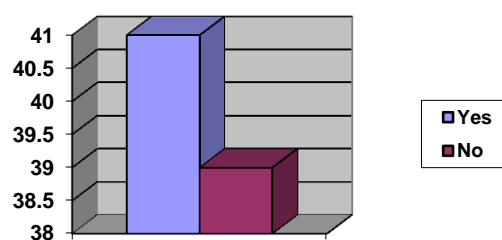


Table 14 refers to the distribution of the small investors by their preference to invest in open end funds. It is observed that 63.8 percent of the small

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	

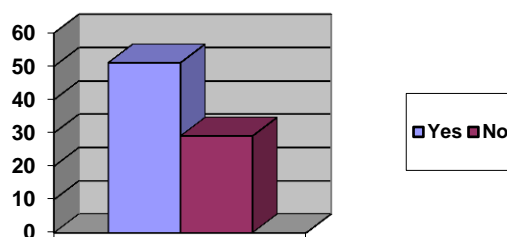


Table 15 refers to the distribution of the small investors by their preference to invest in closed end funds. It is observed that 30 percent of the small investors have preferred to invest in closed end funds and 70 percent respondents did not endorse the said preference.

**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	

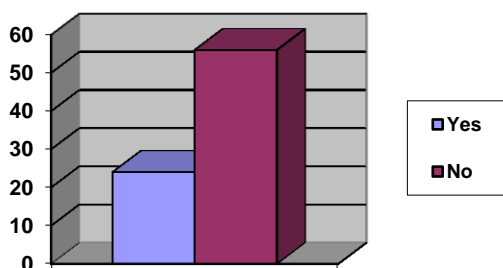


Table 16 refers to the joint distribution of the small investors by their age and by their preference to invest in growth funds. The correlation between the age of the respondents and their preference to invest in growth funds is positive ( $r = 0.130$ ). The rejection of the null hypothesis with level 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,  $p=0.046$ ,  $r=0.130$

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,  $p=0.875$ ,  $r=0.024$

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,  $p=0.227$ ,  $r=-0.042$

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,  $p=0.901$ ,  $r=-0.017$

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,  $p=0.321$ ,  $r=-0.166$

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,  $p = 0.059$ ,  $r = -0.126$

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, p=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,  $p = 0.938$ ,  $r = 0.038$ 

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%
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Chi-Square= 0.575, df=2,  $p=0.750$ ,  $r=-0.055$

Table 25 refers to the joint distribution of the small investors by their 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,  $p=0.004$ ,  $r=0.260$

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,  $p=0.270$ ,  $r=0.021$

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%

		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,  $p=0.010$ ,  $r=-0.374$

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%

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,  $p=0.000$ ,  $r=0.177$

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,  $p=0.780$ ,  $r=0.059$

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,  $p=0.799$ ,  $r=-0.107$

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,  $p=0.310$ ,  $r=0.172$

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, p=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, p=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, p=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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