

A Study of Factors affecting Mutual Fund Investments in India

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Abstract:

Consistent performance evaluation of mutual funds is crucial for investors and fund managers. In India mutual funds have not been as favourable investment options as in other developed countries. The Indian mutual fund industry continues to be extremely underpenetrated. India's AUM-to-GDP ratio is about 14% as compared to a worldwide average of 75-80% in March 2022. The equity AUM-to-GDP ratio is only 5%. Though, the situation is expected to change in the years to come. Retail investors are becoming more and more interested in mutual fund investments as per data shown by AMFI. The retail investors in the mutual funds' assets under management was 24%, which indicates an increase of 300 bps in September 2021 against the number in September 2020. In addition, AMFI's campaign "Mutual Fund Sahi Hai" has attracted retail investors from smaller cities. To extend the investor base for mutual funds in India, it is essential to know the impact of income on monthly investment behaviour of investors towards mutual funds during COVID-19, and impact of investor awareness program on monthly investment. In these circumstances, the present research work is dedicated to achieving these objectives. The data were collected from individual investors from different states of India in 2022. The study aims to find out the impact of income and awareness programs on monthly investments towards mutual funds investment during COVID-19. An attempt has also been made to study the level of impact of "Mutual Fund Sahi Hai" campaign on the retail investors. The data analysis has been done with the SPSS software and by using multivariate and bivariate techniques.

Keywords: *Mutual funds, Awareness campaign, Perception, Investor behaviour, COVID-19*

I. Introduction

In India the investment industry is distinctive as compared to the rest of the world. Mutual funds have become desirable investment choice over the last few years. Initially mutual funds were intended to allow the investors to get a part of the market considering that the investors would be less expert about financial markets and would have lesser investments to transact with. A mutual fund attracts the potential investors to join the fund by offering various schemes to match the needs of categories of investors. Consistent performance evaluation of mutual funds is crucial for investors and fund managers. In India mutual funds have not been as favourable investment options as in other developed countries. The Indian mutual fund industry continues to be extremely underpenetrated. India's Assets Under Management (AUM)-to- Gross domestic product (GDP) ratio is about 14% as compared to a worldwide average of 75-80% in March 2022 (cafemutual.com, 2022). The equity AUM-to-GDP ratio is only 5%. Though, the situation is expected to change in the years to come. Retail investors are becoming more and more interested in mutual fund investments as per data shown by Association of Mutual Funds in India (AMFI). The retail investors in the mutual funds' assets under management was 24%, which indicates an increase of 300 bps in September 2021 against the number in September 2020. In addition, AMFI's campaign "Mutual Fund Sahi Hai" has attracted retail investors from smaller cities (moneycontrol.com, 2021).

Economies worldwide have been badly affected by the COVID-19 pandemic and are gradually coming back into the recovery path. In a world of constant transformation, it helps to explain the current state of things. The volatility, uncertainty, complexity, and ambiguity (VUCA) concept were used to guide developing organizations in these situations for a long time. However, the COVID-19 created a scenario, brittle, anxious, nonlinear, and incomprehensible (BANI). These two terms were intended to describe the instability of their time, from a post-cold war world to the COVID-19 pandemic.

II. Literature Review

(Sethi, March 2021) examined in their study the role of media coverage of the COVID-19 information on the stock market returns and volatility for the 10 most adversely affected countries. They separated the COVID-19 period into two phases based on the spread of the virus to study its effect on stock returns and volatility during the 2 phases. The study found that stock market returns for most of the countries experienced low to negative returns and higher volatility at the beginning of COVID-19. In the later phase of COVID-19, returns were better, but volatility remained high. This may be due to reduced ambiguity related to the virus in the later phase. Volatility remained high in the later phase primarily due to lockdown restrictions in most of the countries studied. Stock markets in all the countries experienced adverse returns and high volatility when the coronavirus

was limited to China. This may be imputed to the active role of the media in these countries. The study results showed a positive and significant relationship between media coverage of COVID-19 and stock market uncertainty, but a negative and significant relationship between media coverage and stock returns. However, when we interacted media coverage with health-preparedness, the coefficient of the interaction term was positive for stock returns and negative for stock volatility, indicating that the effect of health preparedness helped to mitigate the negative impact of media coverage related to COVID-19 on the stock market.

(Ashraf, December 2020) examined the stock markets' effect to the COVID-19 pandemic by using everyday COVID-19 confirmed cases and deaths, and stock market yields data from 64 countries over the period January 22, 2020, to April 17, 2020. It was observed that stock markets reacted negatively to the growth in COVID-19 confirmed cases. Hence, stock market returns dropped as the number of confirmed cases augmented and stock markets reacted more aggressively to the growth in number of confirmed cases as related to the growth in number of deaths. The analysis also indicated that adverse market response was robust during initial days of confirmed cases and later between 40 and 60 days after the initial confirmed cases. Finally, the analysis suggested that stock markets rapidly respond to COVID-19 pandemic and this response varies over time depending on the severity of disruption.

(HaiYue Liu, April 2020) evaluated the short-term effect of the coronavirus epidemic on 21 noted stock market indices in major distressed countries including Japan, Korea, Singapore, the USA, Germany, Italy, and the UK etc. The study indicated that the stock markets in main affected countries and areas dropped rapidly after the coronavirus outbreak. Asian countries experienced more adverse returns as compared to other countries. From an investor's viewpoint, the results indicated the importance of not only the company's business aspects but also the investment risks brought on by such an unexpected incident. The study suggest that coronavirus outbreak has a substantial negative result on stock market returns across all affected countries and areas. Asian countries stock markets reacted more rapidly to the outbreak and few of them recovering slightly in the later phase of the pandemic. In Asia coronavirus confirmed cases have serious contrary effects on leading stock indices performances with those suffering a more decline in terms of abnormal returns. Investor's anxiety is demonstrated a lead towards the coronavirus's effect on stock markets. The study also shown a significant suggestion for policymakers.

(Nawazish Mirza, October 2020) assessed the price reaction, performance, and volatility timing of European investment funds during the outbreak of coronavirus. During the period between January and June 2020, it was demonstrated that although investment funds mostly showed strained performance, but social entrepreneurship funds underwent resilience. The study indicated that social entrepreneurship funds surpass their equivalents through the outbreak. The social funds also established instability timing that was not present for most of their corresponding. They found that the entire steadiness of these funds to their niche investments in social enterprises which focus in providing new solutions for social issues. During the first stage of coronavirus, the treasury funds were positive but as the epidemic intensified, the cumulative abnormal returns (CARs) became negative and this shift in treasury fund performance has resulted in greater CARs for social funds later. They concluded the study that social entrepreneurial funds have appeared as a feasible contestant in investment portfolios specifically during periods of high volatility.

(Khurram Shehzad, June 2020) studied by applying the Asymmetric Power GARCH (APGARCH) model to analyse the non-linear presence of financial markets of the US, Germany, Italy, Japan and China during the coronavirus and Global Financial Crises (GFC),

and found that coronavirus significantly damaged the US and Japan's market returns. Besides, coronavirus has influenced the change of the US, Germany, and Italy's stock markets greater than the Global Financial Crises (GFC). Though, GFC shown a more substantial influence on the financial volatility of the Nikkei 225 index and SSEC than COVID-19. The findings stated that COVID-19 has a significant and destructive impact on stock returns of the S&P 500, however, it showed an insignificant effect on the Nasdaq Composite index. During the COVID-19, the conditional variance of European and the US markets is huge as compared to the GFC period, but during the GFC period conditional variance was high in Asian markets. Thus, the European and the US markets are too much affected by COVID-19 related to Asian markets. Hence, Asian markets still deliver better chances to diversify financial risk. The study said that COVID-19 had interrupted the economic circle around the world, and it can matter more risky shocks in these markets. The study confirmed that the health crisis of COVID-19 has effectively produced the financial crisis worldwide, though, the Asian markets still offered better positioned for portfolio expansion. Subsequently, a substantial percentage of the budget should be disbursed to ease this kind of pandemic in the future. These results are crucial for policymakers, investors, academicians, portfolio managers, and researchers.

(Vashisht, JAN.– MARCH 2019) described that the people of India are experiencing a major change in their investment options from conventional tangible assets like gold and real estate to the contemporary financial

assets like mutual funds. The institutions like Association of Mutual Funds in India (AMFI) are doing diligently on designing educational and awareness programs to safeguard the maximum outreach among individuals. One such campaign “Mutual Fund Sahi Hai” is presently going very effectively as it has been proficient to add 32 Lakh new investors into mutual funds in a single year between 2017-2018. Hence, the infiltration into untapped market particularly in smaller tier cities in India is a must to expand the mutual industry beyond. Nevertheless, merely increasing the number of investors is not in the favour a beneficial growth of industry. Simultaneously, it should also be guaranteed that the investors understand the necessities of investing into mutual funds by remaining longer with their investments, which will also benefit the financial intermediaries in receiving improved margins in that way growing the progress of the industry.

(Arpita Gurbaxani, 2021) examined regarding the retail investors and the effect of Covid- 19 on their investment behaviour in Madhya Pradesh, India. Covid- 19 has extensively affected the Indian economy. The study reveals that there has been a decline in SIP investments during the Covid- 19 due to reduced domestic income, stock market downfall, and investor inclinations changing for more safe investment choices like bank deposits. Individual investor’s inclination to invest in mutual funds and the stock market has been affected adversely, because of steps taken by the government to restraint the spread of Covid- 19 for instance lockdown and the crash of stock market, which indicates that investors seem like to have become more risk hesitant and choose comparatively safe investment possibilities offering modest return with low risk.

III. Objectives of the Study

The present study aims on following objectives for analysis:

- To examine the impact of income on monthly investment behaviour of investors towards mutual funds during COVID-19.
- To evaluate the impact of investor awareness programs on monthly investments towards mutual funds investment during COVID-19 on the retail investors.

IV. Research Methodology

The primary data have been collected related to socioeconomic characteristics and awareness of respondents about the mutual fund through structured questionnaires. The data on various socioeconomic characteristics, such as age, occupation, investment criteria, income and level of savings invested in mutual funds, and impact of COVID-19 on investments in mutual funds have been collected. The attitude of an investor has been defined as the perception about investing in mutual funds. The perceptions regarding mutual funds on these criteria have been measured on a five-point Likert scale. Data has been collected from 150 respondents across different age, occupation, and income groups from different cities in India in 2022. The data analysis has been done with the SPSS software and by using multivariate and bivariate techniques.

V. Data Analysis

The present study uses descriptive statistics and regression analysis that allows identifying the relationships between dependent and independent variable using explanatory variables that can be used to predict one variable by another variable.

Table - 1 Summarized Descriptive statistics of Respondents

Questionnaire	Frequency	Percent	Mean	Std. Deviation
Age (in years)				
> 25	40	26.7		
25 – 35 years	71	47.3		
35 - 60 years	34	22.7		
> 60 years	5	3.3		
Occupation				
Salaried	80	53.3		
Business	7	4.7		
Professional	28	18.7		
Housewife	2	1.3		
Student	29	19.3		
Retired	4	2.7		
Ever invested your money in Mutual Fund				
Yes	100	66.7		
No	50	33.3		
Annual income				
<3 lakhs	33	22		

3 - 6 lakhs	33	22		
6 - 9 lakhs	25	16.7		
> 9 lakhs	59	39.3		
Percentage of your savings invested in Mutual Fund				
< 5 %	57	38		
5 % - 10%	39	26		
10% - 15%	14	9.3		
15% - 30 %	22	14.7		
> 30%	18	12		
Do you think that trading strategy of the fund manager affects the Mutual fund performance			4.25	.876
Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation			3.68	.951
Do you consider that the Mutual Fund is the best option for Capital Appreciation			3.82	.913
Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry			4.33	.815
COVID-19 pandemic has created a significant impact on the performance of mutual fund industry of India.			3.99	.945
The volatility of Financial markets is higher in the first wave compared to the second wave of COVID-19 spread, which affects the performance of mutual fund industry of India			4.03	.996
Monthly investments in Mutual Fund prior to the COVID-19 outbreak were equal to monthly investments in Mutual Fund during the COVID-19 outbreak			3.25	1.231

The research variables descriptive statistics are presented in Table 1. The sample means description given in the table for the trading strategy of the fund manager, primary objective of investing in mutual fund, mutual fund is the best option for capital appreciation, investment awareness programs about mutual fund, COVID-19 pandemic impact on the performance of mutual fund, the volatility of financial markets and monthly investments in mutual fund prior and during COVID-19 variables are based upon five pointer Likert scale type ranging from (1 = strongly disagree; 5 = strongly agree).

A surveyed varied in different age group. Majority of respondents are 47.3% in the age group of 25-30 years, followed by 26.7% and 22.7% are less than 25 years and 35-60 years respectively. Majority of respondents are salaried 53.3%. The sample consisted of 19.3% students and 18.7% are professional. For ever invested in mutual funds, respondents answered either in yes 66.7% or no 33.3%. Annual income of 39.3% respondents are above 9 lakhs, and the data reveals that 38% of respondents invest in mutual fund less than 5% of their savings.

Table - 2

Correlations		
	Do you think that trading strategy of the fund manager affects the Mutual fund performance	Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation
Pearson Correlation	Do you think that trading strategy of the fund manager affects the Mutual fund performance	.211
	Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation	1.000
Sig. (1-tailed)	Do you think that trading strategy of the fund manager affects the Mutual fund performance	.005
	Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation	.005

The coefficient correlation (r) shown in Table 2 is for study variables of primary objective of investing in mutual fund is hedge against inflation and trading strategy of the fund manager is .21, which indicates very low correlation. Although there is a positive correlation between these two variables, but we did not find any significant relationship between primary objective of investing in mutual fund and trading strategy of the fund manager.

Table –3

Correlations		
		Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry
	Do you consider that the Mutual Fund is the best option for Capital Appreciation	1.000
Pearson Correlation	Do you consider that the Mutual Fund is the best option for Capital Appreciation	.341
	Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry	1.000
Sig. (1-tailed)	Do you consider that the Mutual Fund is the best option for Capital Appreciation	.000
	Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry	.000

Table 3 indicates the positive low correlation for study variables of investment awareness programs about mutual fund and mutual fund is the best option for capital appreciation, the coefficient correlation (r) is .34. Hence, we found less significant relationship between investment awareness programs, and it is considered the best option for capital appreciation.

Regression Analysis:

In this study to find out the impact of primary objective of investing in mutual fund is hedge against inflation and trading strategy of the fund manager affects the mutual fund performance, we have conducted linear regression method using SPSS. Regression analysis is the process of constructing a model which describes the relationship between dependent and independent variable using explanatory variables that can be used to predict one variable by another variable. The next section will present the results of hypothesis testing through linear regressions with different study variables.

1. Hypothesis: Primary objective of investing in mutual fund and trading strategy of the fund manager.
- H0 - There is a no significant impact of primary objective of investing in mutual fund is hedge against inflation on trading strategy of the fund manager.
- H1 - There is a significant impact of primary objective of investing in mutual fund is hedge against inflation on trading strategy of the fund manager.

Table –4

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.211 ^a	.044	.038	.859	2.195

a. Predictors: (Constant), Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation
 b. Dependent Variable: Do you think that trading strategy of the fund manager affects the Mutual fund performance

Table –5

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.083	1	5.083	6.883	.010 ^b
	Residual	109.291	148	.738		

Total	114.373	149			
a. Dependent Variable: Do you think that trading strategy of the fund manager affects the Mutual fund performance					
b. Predictors: (Constant), Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation					

Table –6

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.538	.281		12.573	.000	2.982	4.094
	Do you think your primary objective of investing in Mutual Fund is Hedge against Inflation	.194	.074	.211	2.624	.010	.048	.341

a. Dependent Variable: Do you think that trading strategy of the fund manager affects the Mutual fund performance

Linear regression is given by equation as –

$$Y = b_0 + b_1 X_1$$

$$Y = 3.538 + .194 X_1$$

Trading strategy of the fund manager = 3.538 + .194 (primary objective of investing in mutual fund) explained in Table 6.

The strength of the model is R Square. R Square = .044, that is 44% presented in Table 4. Hence, 44% of trading strategy of the fund manager can be explained with the help of primary objective of investing in mutual fund. The balance 54% may be due to other factors.

The P value of the model is 0.01 indicated in Table 5. Since the value is less than 0.05, we reject H₀ and accept H₁. We have accepted the H₁, which states that there is a significant impact of primary objective of investing in mutual fund is hedge against inflation on trading strategy of the fund manager.

2. Hypothesis: Investment awareness programs about mutual fund and mutual fund is the best option for capital appreciation.

H₀ - There is no significant impact of investment awareness programs about mutual fund on mutual fund is considered the best option for capital appreciation.

H₁ - There is significant impact of investment awareness programs about mutual fund on mutual fund is considered the best option for capital appreciation.

Table –7

Model Summary ^b					
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin-Watson
1	.341 ^a	.116	.110	.861	1.906

a. Predictors: (Constant), Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry

b. Dependent Variable: Do you consider that the Mutual Fund is the best option for Capital Appreciation

Table –8

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.449	1	14.449	19.495	.000 ^b
	Residual	109.691	148	.741		
	Total	124.140	149			

a. Dependent Variable: Do you consider that the Mutual Fund is the best option for Capital Appreciation

b. Predictors: (Constant), Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry

Table –9

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.167	.381		5.689	.000	1.414	2.920
	Investment awareness programs about Mutual Fund is most important to increase the growth prospects of the Indian mutual fund industry	.382	.087	.341	4.415	.000	.211	.553

a. Dependent Variable: Do you consider that the Mutual Fund is the best option for Capital Appreciation

Linear regression is given by equation as –

$$Y = b_0 + b_1 X_1$$

$$Y = 2.167 + .382 X_1$$

Mutual fund is considered the best option for capital appreciation = 2.167 + .382 (investment awareness programs about mutual fund) explained in Table 9.

The strength of the model is R Square. R Square = .116, that is 11.6% (approximately 12%) presented in Table 7. Hence, 12% of mutual fund is considered the best option for capital appreciation can be explained with the help of investment awareness programs about mutual fund. The balance 88% may be due to other factors.

The P value of the model is 0.00 shown in Table 8. Since the value is less than 0.05, we reject H₀ and accept H₁.

We have accepted the H₁, which states that there is significant impact of investment awareness programs about mutual fund on mutual fund is considered the best option for capital appreciation. Hence, investment awareness programs about mutual fund are useful to increase the awareness, as mutual fund is considered the best option for capital appreciation.

VI. Conclusion

The study evaluated the factors affecting mutual funds investment behaviours. The descriptive statistics for the research variables indicate that most of the respondents 47.3% are in the age group of 25-30 years and 53.3% are salaried. 66.7% respondents ever invested in mutual funds and annual income of 39.3% respondents are above 9 lakhs. The study reveals that 38% of respondents invest in mutual fund less than 5% of their savings. Thus, it indicates that the Indian mutual fund industry has enormous opportunities to attract the investors to invest in mutual funds. One of the major challenges that the mutual fund industry deal with is the dearth of intense participation by the investors.

Further, the linear regression analysis has presented there is a significant impact of primary objective of investing in mutual fund is hedge against inflation on trading strategy of the fund manager. It shows that the fund managers choose to formulate the mutual funds strategies that best match the investment objective of the investors. In addition, the study suggests that there is a significant impact of mutual fund investment awareness programs on mutual fund is considered the best option for capital appreciation. Hence, investment awareness programs about mutual fund are useful to increase the awareness, as mutual fund is considered the best option for capital appreciation. This suggests that an extensive education program to expand awareness among the people. Information about the level of awareness about mutual funds among the investing public will enable asset management companies (AMCs) to generate an external atmosphere that can influence investment decisions of investors. Hence, perceptions and awareness among investors about mutual funds could be enhanced through suitable investor education measures.

VII. Limitations of the study

This study has the major limitation that the sample size is limited to 150 educated individual investors from different cities in India, which may not be a sufficient representation of the national market. In addition, this study has been done during early 2022 COVID-19 period and has not been done over an extensive period to include the ups and downs of stock market situations which have a significant impact on investor's buying pattern and preferences.

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