IMPACT OF MUTUAL FUND INVESTMENTS IN INDIAN EQUITY MARKET

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ABSTRACT

The mutual fund investments have emerged as important players in the Indian equity market in the recent past. This research makes an attempt to understand whether a relationship exists between Mutual Fund investment and Equity Market returns in India. The past ten years of data was analysed with appropriate statistical tools to prove the impact of Mutual Fund Investments in Indian Equity Market. Markets become more efficient with the growing presence of institutional investors who predominantly go by fundamentals. The popular belief that fund inflows and returns are positively related (Warther, 1995) is also proved.

Keywords : Mutual Fund Flow, Equity Market, Sensex, Nifty.

1.1. INTRODUCTION

A Mutual Fund is a trust that pools the savings of a number of Investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciations realized are share by its unit holder in proportion to the number of units owned by them. Thus a mutual fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. This study is to examine the relations between mutual fund investments and the share market volatility. It will test whether there is any impact of mutual fund investment in the equity market.

The period 2000-2009 is an important decade for the Indian Mutual Fund Industry. While the Industry got opened up for private and international fund houses in the 90's it is was during the last decade when the industry actually saw the emergence of the Mutual Funds as an industry to reckon with in the financial services space and more importantly started getting noticed by Investors across the length and breadth of the country and being used by them for managing their investments, In the financial year of 2009 the assets under management is Rs. 4, 17,300.

The year 2010, brings along a new decade and it is appropriate for us to look at the decade that went by and also identify the trends and changes that will not only provide us insights of what went by but also will give an understanding of what is in store.

1.1.2. CONCEPT OF MODERN MUTUAL FUNDS

The basis of a mutual fund is the 'pooling' concept. In other words, mutual funds pool money from a cross-section of investors by issuing units, construct a diversified portfolio of stocks, bonds and other investment instruments and invest the same in the capital market. But before they can mobilize resources and invest them in the capital market, they have to be registered with the regulating authority of the country.

The primary objective of all mutual funds is to provide better returns to investors by minimizing the risk associated with capital market investment. Naturally, the degree of risk associated with the expected returns and the associated benefits differs. All mutual funds aim at achieving one or more of the following.

Providing a steady flow of income
Providing high capital appreciation
Providing capital appreciation with income
Providing income or capital appreciation with tax benefits

1.1.3. ROLE OF MUTUAL FUNDS IN THE FINANCIAL MARKETS

The Mutual Fund history provide ample evidence that Indian financial institutions have played a dominant role in asset formation and intermediation, and contributed substantially to the process of macro economic development. Mutual funds, which have emerged as strong financial intermediaries, are playing an important role in this process. They are not only providing stability to the financial system, but have also helped rationalize the process of resource allocation. They have opened new vistas for investors and increase the level of liquidity in the system. In the process, they have challenged the hitherto dominant role of the commercial banks. We now examine the multi dimensional role of mutual funds in the country's financial sectors in relation to Equity market with an established mutual funds culture is given below.

1.1.4. MUTUAL FUND INVESTMENTS IN INDIA

The first mutual fund to be introduced in India was way back in 1963 when the Government of India launched Unit Trust of India (UTI). UTI enjoyed a monopoly in the Indian mutual fund market till 1987 when a host of other government controlled Indian financial companies came up with their own funds.

These included State Bank of India, Canara Bank, Punjab National Bank etc. This market was made open to private players in 1993 after the historic constitutional amendments brought forward by the then Congress led government under the existing regime of Liberalization, Privatization and Globalization (LPG).

1.2. PROBLEM IDENTIFICATION

In this research an effort has been made to develop an understanding of the influence of the mutual fund investment in the Indian equity market. The mutual fund investments have emerged as important players in the Indian equity market in the recent past. This research makes an attempt to understand whether a relationship exists between Mutual Fund investment and Equity Market returns in India.

1.3. NEED OF THE STUDY

For measuring the economic growth of the country the capital market also is to be considered. Stock market receives huge investments from the institutional investments. A mutual fund investment by a company is an institutional investment so it becomes important to study about mutual fund.

1.4. SCOPE OF THE STUDY

Mutual fund investment is the risk less investment in the equity market. If the mutual fund investment is huge in equity market the risk of the fund may be high. So it is important to find whether the investor prefers the mutual funds or the equity market.

2. REVIEW OF PAST RESEARCHES

A study has examined the dynamic interaction between mutual fund flows and security Returns and between mutual fund flows and volatility. The results based on the Contemporaneous relationship using daily data suggest that a positive relationship exist between stock market returns and mutual fund flows measured as stock purchases and Sales. (1)

A question to find whether our markets are being dominated by institutional investors is answered. The regression results show that the combined might of the Flls and mutual funds are a potent force. The Granger causality test has showed that the mutual funds in fact lead the market rise or fall This may actually raise questions on the market efficiency but on the contrary, markets become more efficient with the growing presence of institutional investors who predominantly go by fundamentals. (2)

The reform process has sent signals to a wave of changes in savings and investment behavior adding a new dimension to the growth of financial sector. The Indian financial system in general and the Mutual Fund (MF) industry in particular continue to take turnaround from early 1990s. During this period, mutual funds have pooled huge investments for the corporate sector. Growth and development of various mutual fund products in Indian capital market has proved to be one of the most catalytic instruments in generating momentous investment growth in the capital market. (3)

We find little herding by mutual funds in the average stock, but much higher levels in trades of small stocks and in trading by growth-oriented funds.(4)

The launching of new products by several AMCs signals to the rapid growing equity culture in the country with mutual funds as the long term investment vehicles. Investment in it encourages a regular investment habit for the investors, thus boosting the markets.(5)

The results provide the evidence that aggregate security returns are highly correlated with concurrent unexpected cash flows into mutual funds but unrelated to concurrent expected flows. His result supports the popular belief that fund inflows and returns are positively related.(Warther, 1995)

This author used Granger causality tests to investigate the lead–lag relationship between returns and fund flows for several categories of equity funds. The result provides the evidence that stock returns can be

used to predict the flows into aggressive growth funds, but the same does not apply in the case of income funds. (Potter, 1996)

During normal times, increases in mutual fund flows enhance stock market liquidity and trading volume, but during financial crises, U.S. government bond funds see higher inflows, resulting in increased bond market liquidity. Overall, this study deepens our understanding of the dynamics of liquidity in financial markets and suggests how asset allocation strategies might be designed to reduce trading costs. (7)

2.1 S&P CNX Nifty

S&P CNX Nifty is a well-diversified 50 stock index accounting for 23 sectors of the economy. It is used for a variety of purposes such as benchmarking fund portfolios, index based derivatives and index funds. S&P CNX Nifty is owned and managed by India Index Services and Products Ltd. (IISL), which is a joint venture between NSE and CRISIL. IISL is India's first specialized company focused upon the index as a core product. IISL have a consulting and licensing agreement with Standard & Poor's (S&P), who are world leaders in index services.

- The average total traded value for the last six months of all Nifty stocks is approximately 58% of the traded value of all stocks on the NSE
- Nifty stocks represent about 60% of the total market capitalization as on March 31, 2005.
- Impact cost of the S&P CNX Nifty for a portfolio size of Rs.5 million is 0.07%.
- S&P CNX Nifty is professionally maintained and is ideal for derivatives trading

3. RESEARCH METHODOLOGY

3.1. OBJECTIVES

- To find the impact of Mutual Fund investment in the Indian Equity market.
- To find the relationship between Mutual Fund flow and market Sensex.
- To find the level of influence of Mutual Fund on Equity market.

3.2. TYPE OF RESEARCH

Empirical research is used which is appropriate when proof is sought, that certain variables affect other variables in someway. Evidence gathered through experiments or empirical studies today considered to be the most powerful support possible for a given hypothesis.

3.3. RESEARCH DESIGN

Purposive sampling is used in this study, based on the secondary data drawn from the official websites of securities exchange board of India (SEBI), National stock exchange (NSE) and Bombay stock exchange (BSE).

The statistical tools like Karl Pearson's Coeffcient Of Correlation, Regression, Seasonal Variance, Trend Analysis are used for the analysis.

3.4. LIMITATIONS

- It is mainly based on the data available in various websites,
- The inference made is purely from the past year's performance.

3.5Hypothesis Development

Hypothesis 1

H0: There is no significant association between Mutual Fund and Nifty.

H1: There is a significant association between Mutual Fund and Nifty.

Hypothesis 2

H0: There is no relationship between Mutual Fund and Sensex.

H1: There is a relationship between Mutual Fund and Sensex.

4. DATA ANALYSIS DISCUSSION

The table 4.1 shows the volatile nature in the Mutual Funds investment in the equity market. The negative values show the higher sales and high profit trend period. There exist a positive relationship between Mutual Fund flow and Nifty value. But the correlation coefficient is low. Hence, if the Mutual Fund Flow increases, then Nifty value also gets increases.(Table 4.2) The null hypothesis (H0) is not accepted. It may be inferred that there is an association between Mutual Fund and Nifty. R^2 gives the percentage of variation in Nifty the total variation in Nifty is explained by Mutual Fund amounted to 1.4%. This implies for a unit increase in Mutual Fund flow the Nifty increase up to 1.4%. (Table 4.3). The effect of Mutual Fund on Sensex is positive but the correlation coefficient is low. Hence, if the Mutual Fund flow increases then Sensex also increases. (Table 4.4)
The above table shows more in Sensex and Nifty have similar influence. (Table4.5)
The result of yearly correlation shows the volatility of the relationship between mutual fund and BSE-Sensex. The negative correlation shows the higher withdrawal when the market is bullish. (Table 4.6)
This shows the high gap between predicted and actual value of investment. So Mutual Fund investment in the Equity market cannot be predicted exactly. (Table 4.7)
The table represents volatile nature of influence by the Mutual Fund in the Sensex. This means the Mutual Fund inflow does not make the difference but other variables make this difference. (Table 4.8)
The influence in Nifty also volatile but it shows there is at least a minimum influence by Mutual Fund flow in Nifty. (Table 4.9)

FINDINGS AND SUGGESTIONS

5.1. FINDINGS

- There is a low positive relationship between Mutual Fund flow and NSE-Nifty (11.9%).
- The R^2 value indicates that when the Mutual Fund flow increases one unit the Nifty will change by 1.40%
- The effect of Mutual Fund flow on Sensex is low (12%). There is less significant relationship between the Mutual Fund flow and Sensex.
- The R^2 value indicates that a unit increase in Mutual Fund flow will cause change in Sensex by 1.40%.
- Every year the significance of relationship get volatile because of the frequent purchase and sale of stocks by the Mutual Fund companies.
- Whenever the Mutual Fund companies raise the investment, the correlation value becomes positive.
- Likewise when the companies start to withdraw the investment the correlation becomes negative.
- The Mutual Fund investments make influence in the stock market out of their huge investment ensuring the minimum influence in every year.

5.2. SUGGESTIONS

- Both NSE and BSE receive significant investment from Mutual Fund flow, so the investors should consider the total investment of the company for the particular period.
- Based on the seasonal variance the investor should think of making direct investment in the Equity market at the first two quarters.

- Brokers must analyze the Mutual Fund investment in the aspects of the sectors they concentrate, the strategies; the exact time of their investment and withdrawal etc. by this way they can suggest their clients to have return with minimum risk.
- Most of the Mutual Fund amount is invested in the equity market. If the Mutual Fund can give more return means the individual investor can also make more return than equity by concentrating on Equity market.
- It is better to go for the Mutual Fund investment in the time of bearish market. It helps to safeguard the investment and get returns with minimum risk.
- Whenever the Mutual Fund investment is high in the market, this leads to at least a small growth phase. The individual investor can use this chance to liquidate their investment from the market.

6. CONCLUSION

From this study it is found that there is an impact of mutual fund flow in the Indian equity markets NSE and BSE. Because of the amount involved in the equity market the low impact amount to large sum of money. As any investor is interested in his return, the investor may monitor the equity market based on the analysis done and fine tune his investment.

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Table 4.1 Yearly trend of Mutual Fund flow in the Equity market

YEAR	MF Data(in crore)
2000-01	-2797.8
2001-02	-3795.1
2002-03	-2050.7
2003-04	1336.7
2004-05	448.6
2005-06	14189.1
2006-07	8921.2
2007-08	16305.5
2008-09	6981.8
2009-10	-10512.2

Table 4.2 Correlation between Mutual Fund flow and Nifty

		MF flow	nifty
MF flow	Pearson Correlation	1	.119
	Sig. (2-tailed)	.	.195
	N	120	120
Nifty	Pearson Correlation	.119	1
	Sig. (2-tailed)	.195	.
	N	120	120

Table 4.3 Regression between Mutual Fund flow and Nifty

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	MF flow(a)	.	Enter

a All requested variables entered.
b Dependent Variable: nifty

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.119(a)	.014	.006	1498.77860

a Predictors: (Constant), MF flow

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3821584.719	1	3821584.719	1.701	.195(a)
	Residual	265067799.993	118	2246337.288		
	Total	268889384.712	119			

a Predictors: (Constant), MF flow
b Dependent Variable: nifty

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2595.660	138.182		18.784	.000
	MF flow	.104	.080	.119	1.304	.195

a Dependent Variable: nifty

Table 4.4 Correlation between Mutual Fund flow and Sensex
Sensex

		MF flow	Sensex
MF flow	Pearson Correlation	1	.120
	Sig. (2-tailed)	.	.191
	N	120	120
Sensex	Pearson Correlation	.120	1
	Sig. (2-tailed)	.191	.
	N	120	120

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46581495.429	1	46581495.429	1.732	.191(a)
	Residual	3174165948.901	118	26899711.431		
	Total	3220747444.330	119			

a Predictors: (Constant), MF flow
b Dependent Variable: sensex

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8535.868	478.177		17.851	.000
	MF flow	.364	.277	.120	1.316	.191

a Dependent Variable: sensex

REGRESSION

H0: There is no relationship between Mutual Fund and Sensex.
H1: There is a relationship between Mutual Fund and Sensex.

Table 4.5 Regression between Mutual Fund flow and Sensex

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	MF flow(a)	.	Enter

a All requested variables entered.
b Dependent Variable: sensex

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120(a)	.014	.006	5186.4931 7

a Predictors: (Constant), MF flow

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8535.868	478.177		17.851	.000
	MF flow	.364	.277	.120	1.316	.191

a Dependent Variable: sensex

YEARWISE RELATIONSHIP CHANGE

Table 4.6 Year wise correlation between Mutual Fund flow and Sensex

YEAR	M.F CORRELATION WITH SENSEX	PERCENTAGE
2001	-0.046	-4.6
2002	-0.059	-5.9
2003	-0.33	-33
2004	0.376	37.6
2005	0.134	13.4
2006	-0.023	-2.3
2007	-0.389	-38.9
2008	0.074	7.4
2009	0.182	18.2
2010	-0.471	-47.1

Table 4.7 Year wise correlation between Mutual Fund flow and Nifty

YEAR	M.F CORRELATION WITH NIFTY	PERCENTAGE
2001	-0.154	-15.4
2002	-0.299	-29.9
2003	-0.331	-33.1
2004	0.386	38.6
2005	0.116	11.6
2006	-0.02	-2
2007	-0.386	-38.6
2008	0.043	4.3
2009	0.183	18.3
2010	-0.468	-46.8

4.8 Year wise regression between Mutual Fund flow and Sensex

YEAR	SENSEX	%	YEAR	NIFTY	%
2001	0.002	0.2	2001	0.024	2.4
2002	0.003	0.3	2002	0.089	8.9
2003	0.109	10.9	2003	0.11	11
2004	0.142	14.2	2004	0.149	14.9
2005	0.018	1.8	2005	0.013	1.3
2006	0.001	0.1	2006	0.0001	0.01
2007	0.151	15.1	2007	0.149	14.9
2008	0.005	0.5	2008	0.002	0.2
2009	0.033	3.3	2009	0.034	3.4
2010	0.222	22.2	2010	0.219	21.9

4.9 Year wise regression between Mutual Fund flow and Nifty

Table 4.10 Comparison of influence between Sensex and Nifty

YEAR	SENSEX (%)	NIFTY (%)
2001	0.2	2.4
2002	0.3	8.9
2003	10.9	11
2004	14.2	14.9
2005	1.8	1.3
2006	0.1	0.01
2007	15.1	14.9
2008	0.5	0.2
2009	3.3	3.4
2010	22.2	21.9
