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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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IMPACT OF CHANGES IN ENTRY LOAD STRUCTURE OF MUTUAL FUND SCHEMES – EVIDENCE FROM INDIAN MUTUAL FUND INDUSTRY

N. VENKATESH KUMAR
PROFESSOR
INTERNATIONAL SCHOOL OF BUSINESS & MEDIA
SOMPURA HOBLI, NELAMANGALA TALUK, BANGALORE-562132

DR. ASHWINI KUMAR BJ
PROFESSOR & HEAD
DEPARTMENT OF MBA
NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY
YELAHANKA, BANGALORE – 560 064

ABSTRACT

Mutual fund Investors were expected to benefit from the initiative taken by the Securities Exchange Board of India (SEBI) i.e. to remove entry load on all mutual fund schemes from 1st August 2009. This initiative was targeted at increasing the retail investors' participation in mutual funds but, it does not influence the investment style of investors who invest more than Rs. 5 crores. Removal of entry load brings certain amount of merits as well as demerits to the core participants of mutual fund industry say Investors, Distributors, Government and obviously Mutual fund. This study proposes to articulate the impact of changes in entry load structure on monthly Net New Money (Difference between redemptions and sales of mutual fund units) of mutual fund industry. The study considers 40 months Net New Money (December'2007 to March'2011); 20 months prior to changes in entry load and 20 months after changes in entry load structure. In order to analyse statistically significant impact on Net New Money on account of removal of entry load, Shapiro Wilk test (Normality), Durbin Watson test (Serial correlation of residual Net New Money), ANOVA (Homogeneity of average Net New Money) and Levene's statistic (Homogeneity of variance of Net New Money) were used and witnessed statistical insignificance i.e. changes in entry load structure did not impact the Net New Money during the study period.

KEYWORDS

Distributors, Entry Load, Mutual fund, Net New Money, Retail Investors, SEBI.

INTRODUCTION

Mutual funds are a prospective investment avenue (Khurana & Panjwani, 2010) for investors who would like to diversify their risks and avail the services of professional fund managers. In mutual funds, investors' investments are pooled into a scheme with a well defined investment objective and deployed into securities investments in the capital market. Mutual funds are constituted in the form of trusts, which have a Sponsor, Trustees, Asset Management Company (AMC) and Custodian. The trustees of the mutual fund hold its property for the benefit of the unit holders. Custodian, who is registered with SEBI, holds the securities of various schemes of the fund in its custody. The AMC, approved by SEBI, manages the funds by making investments in various types of securities in the capital market.

MUTUAL FUNDS IN INDIA

Mutual funds play an important role in mobilising the household savings for deployment in capital markets. The gross mobilisation of resources by all mutual funds during 2009-10 indicated an increase of 84.7% over the previous year. Redemption also rose by 82.2%. The assets under management by all mutual funds increased by 47.2% at the end of March 2010 compared at the end of March 2009. Unlike the previous year, private sector mutual funds dominated resource mobilisation efforts during 2009-10. All the open- ended and interval schemes of mutual funds recorded positive net inflows, the close-ended schemes witnessed net outflows during the financial year.

TABLE 1: MUTUAL FUND INDUSTRY KEY STATISTICS (Rs. Crore)

Period	Gross mobilisation	Redemption	Net Inflow	Assets at the end of period
99-00	61,241	42,271	18,970	1,07,946
00-01	92,957	83,829	9,128	90,587
01-02	1,64,523	1,57,348	7,175	1,00,594
02-03	3,14,706	3,10,510	4,196	1,09,299
03-04	5,90,190	5,43,381	46,808	1,39,616
04-05	8,39,708	8,37,508	2,200	1,49,600
05-06	10,98,149	10,45,370	52,779	2,31,862
06-07	19,38,493	18,44,508	93,985	3,26,292
07-08	44,64,376	43,10,575	1,53,802	5,05,152
08-09	54,26,353	54,54,650	-28,296	4,17,300
09-10	100,19,022	99,35,942	83,080	6,13,978

Source: Annual report – Securities Exchange Board of India – 2009-2010

TABLE 2: SCHEME RELATED KEY STATISTICS

Category	Open-ended	Closed-ended	Interval	Total
Income	210	346	35	**591**
Equity	318	9	1	**328**
Balanced	31	1	--	**32**
Liquid / Money	51	--	--	**51**
Gilt	37	--	--	**37**
ELSS (Tax Planning)	36	12	--	**48**
ETFs (Including Gold ETFs)	28	--	--	**28**
Fund-Of-Funds	16	--	--	**16**
Total	**727**	**368**	**36**	**1131**

Source: Monthly report 'March 2011 – Association of Mutual Funds in India

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When investors invest in mutual funds, for investment services provided by AMC, two types of expenses were hitherto charged to investors, upfront expenses familiarly known as entry load, and annual scheme related expenses, which includes Management fees. Besides, schemes also charge exit load for short-term redemptions made by investors. The entry and exit loads are costs to the investors at the time of investing as well as at the time of redeeming mutual fund schemes. Entry load may vary from 2.25% to 2.75% depending upon the style investment and investment objective of the scheme. Especially when any global Fund-Of-Funds or Thematic funds are floated that would certainly attract 2.75% as entry load. If mutual fund offers a New Fund Offer, which has a property of lock-in period for about 3 years, entry load is waived off due to the long-term nature of the investments. Entry load collected by mutual fund is used to compensate the intermediaries (Distributors) who play a dual role - that of an adviser to investors (New investment based on investors' risk appetite, Primary documentation, Fund Switching, Systematic Investment Plan, Systematic Transfer Plan, Closure and Miscellaneous services) and strategising markets for the mutual fund products.

Right from the inception of mutual funds in India till 31st July 2009, all fund houses charged entry load as percentage of amount invested and this proportion is used to compensate the intermediaries for their various services. On 31st December 2008, SEBI mandated no entry load on investments made directly by the investors (not routed through any distributor). Subsequently, in cases of all mutual fund investments, it was felt that to empower the investor in deciding commissions paid to the distributors and also ensure transparency in commissions being paid, the amount of payment should be decided by investor depending on level of service received, not by AMC (as in form of entry load). Upfront commission to distributors is to be paid by the investor to the distributor directly depending on quality of service rendered. It is expected that this would segregate the streams of payment for the two roles of distributor, a point of sale for the AMC and an adviser to the investor. On account of this reform, the initial impact will be on

1. The interest of distributors to market MF schemes (Stereotype towards the schemes that would enhance the incentives and not to concentrate on the schemes that does not offer monetary value addition and also the intermediaries provoke the investors to redeem their existing mutual fund investments and stress on new purchases)
2. The investors may land up in investing into schemes that do not meet their investment objective
3. Overall profitability of mutual funds (Gupta, 2009)
4. Service tax collections by the Government etc. (Bajaj and Venkitesh, 2009)

LITERATURE REVIEW

Walker (1997) had extensively used a data set of 222 mutual funds that were described by Fund Watch as growth oriented and included funds in existence for sufficient time to have a historical five year track record. He proposed that direct causal relationships exist between a fund's current relative performance and historical performance rankings. He had opted 4 exogenous factors namely Risk, Size, Degree of Diversification and Management fees and linked those variables to endogenous variables namely historical performance rankings and current performance of the funds. He concluded that the use of past performance and widely accepted indicators of performance as predictors of success in mutual fund selection was marginally successful. Significant specification errors, lack of consistency among regression coefficients and path signs that contradict widely accepted financial theories regarding diversification, risk, and cost show that investment selection success is impacted by random chance or unobserved variables far more that predictable patterns. Finally, he portrayed that identification funds charge very low management fees and select a diversified group of these funds.

Prather, Bertin and Henker (2004) examined the mutual fund performance by using an integrated approach to analyse a large set of mutual funds and a thorough list of fund specific characteristics. The study covers the period of 1996-2000 and extensively considers 5000 distinct equity funds. They have used multifactor regression model for analysis. The main fund specific factors focused were Popularity variables, Growth variables, Cost variables, and Management variables. The analysis exhibited that Expenses ratio (Parameter estimate: -1.822, t-statistic: -5.36) is statistically significant at 1% level. Literature on '**Reform of Mutual Funds in India' (2004)** by Cadogan Financial, UK has highlighted the power of distributors who transform the basis of competition and why majority of investors rely heavily on their advisers.

Lin (2006) examined three types of Taiwan mutual funds over various investment horizons. The explanatory variables included in the regression were NAV, Current Yield, Turnover rate, Expenses ratio, and Load charges. From the analysis, it was evident that expenses ratio negatively correlated (Beta = -4.8556) when performance evaluated for 3 months horizon and positively correlated for other investment horizons. There is no statistically reliable relation between the performance with Current yield, turnover ratio, and load charges.

Damodaran (2007) noted that if the stock market regulator has its way, investors could walk into the office of a mutual fund firm, buy any of its funds and walk out without paying any kind of entry load. SEBI proposes to waive the entry fee for direct applications received by mutual fund companies either through their investor service centers' or the Internet. SEBI's argument is that since the entry charge is utilized by fund firms towards meeting the distributor's commission, investors making direct investments shouldn't be asked to pay this charge. If implemented, the plan can bring down the cost of investing in mutual funds.

Dhirendra Kumar (2007) emphasised the current norms have been unfair to the do-it-yourself kind of investor who thinks he doesn't need guidance or advice of the distributors. But these investors have no incentive for going to the fund company as he still had to pay the entry fee. **Ajay Bagga (2007)** detailed that SEBI's proposal has merit, but adds that firms need to ensure that the direct route is not exploited by the investors. "Since there will be no entry load, investors can make quick entry and exit from the fund depending on the stock market movement. So the industry will need to ensure that there are sufficient exit barriers also.

In connection with the assortment of services offered by intermediaries, '**Retail Distribution Review' (2008)**, a report by Financial Services Authority-United Kingdom (FSA) asserts that there needs to be a distinction between 'Advice' and 'Sales'. Accordingly, advisers need to be independent in their remuneration that is determined without product provider influence. FSA has set out reduction of commissions paid by product provider in stages with year 2013 as final time line for complete detachment of adviser remuneration from product providers' remuneration. In Australia, Future of Financial Advice reforms have been undertaken to tackle conflicts of interest that had threatened advice generally passed on to distributors by AMC and thus envisages advisers having their own "product neutral" charges.

Saikat Das (2009) stated that with SEBI removing the entry load from purchase of mutual funds, wealth advisory firms find reason to rejoice such a decision foreseeing huge market potential for them. Going forward, such a decision is expected to give "big push" to the wealth management services which is still at a nascent stage in India. Wealth managers believe that this move may lead to a dominant emergence of advisory services considering the virtual end of distribution services in mutual fund schemes. They are of the opinion that investors will not desist from seeking investment advice and portfolio services. If they deliver quality advisory backed by strong independent research, retail investors would not hesitate to accept wealth management services at a nominal cost of 1-2 per cent advisory fees. After all, selection among 300-400 equity schemes is no joke. Earlier, major distributors were selling MF schemes charging around 2.25 per cent entry load – which was deducted from investors' money. There were cases of large scale "push selling" in a pass back system wherein an independent financial advisor shares a part of his commission with the investor by pushing a particular mutual fund scheme, which may not be worth buying, according to the wealth managers. **Kaustav Majumdar (2009)** accentuated that the mantle of power is going to shift from product pushers into a holistic financial planning model wherein any wealth advisory service with a strong research background is bound to witness triple digit growth, provided MF industry grows by 30 per cent CAGR.

Rajesh Saluja (2009) mentioned that SEBI's decision is both in the interest of investors and wealth managers. It leads to transparency with no involvement of hidden cost like load structure. Under this scenario, advisory is the only way forward. **Krishnan Sitaraman (2009)** emphasised as a concept the move is very good as it links loads (fee) to the extent of service rendered by the distributors, but the key issue is implementation. With poor financial awareness among investors, operational difficulties would always be there with this norm. Mutual fund investors, at present pay an entry load (or commission) of 2.5 per cent to the distributors. Besides that, asset management companies pay a commission of anything between 50 basis points and 3.5 per cent to their distributors.

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OBJECTIVE OF THE STUDY

To study the impact of changes in entry load structure of mutual fund schemes in terms of Redemptions (Withdrawals) and Sales (New purchases by the investors) made by the Mutual Fund houses in India.

DATA AND METHODOLOGY

The present study considers the entire mutual fund schemes offered in India. Currently Indian mutual fund industry consists of 41 (as on March'2011) AMCs offering multiple schemes that would cater to the needs of various categories of investors. This study proposes to consider the consolidated Net New Money of Indian Mutual fund industry because abolishment of entry load charges from 1st August 2009 would have presumably influenced the redemptions and sales made by the fund houses during the period of study. Theoretically, Net New Money (NNM) is the term used to understand the difference between the Redemptions and Sales made by the funds during specific period. The NNM of various fund houses have been obtained from Association of Mutual funds in India (AMFI) for 40 months period (From December'2007 to March'2011) that would exactly split the NNM for 20 months period in order to have precise estimation.

TESTABLE HYPOTHESIS

1. The Net New Money during the study period follows normal distribution.
2. There is no significant Auto correlation (ACF) between prior month Net New Money and current month Net New Money i.e. Prior month Net New Money do not contain any evidences to predict current month Net New Money (Mean value of Residual Net New Money is zero).
3. There is no significant difference between average Net New Money before and after removal of entry load ($\mu_{Before} = \mu_{After}$).
4. The Variance of Net New Money before and after removal of entry load is homogenous ($\sigma^2_{Before} = \sigma^2_{After}$).

The data analysis has been categorised into 4 distinctive parts:

1. Analyse the descriptive data structures pertaining to Net New Money including the test for normality (Symmetrical departure of the Net New Money using Shapiro Wilk test),
2. Test the emergence of significant autocorrelation among residual Net New money using Durbin Watson test,
3. Analyse the homogeneity of variance of Net New Money for changes in entry load structure, and
4. Analyse the homogeneity of mean of Net New Money for changes in entry load structure.

SHAPIRO-WILK TEST FOR NORMALITY OF NET NEW MONEY

Shapiro Wilk (1965) test has been used to test the null hypothesis that the sample NNM_t, NNM_{t+1}, NNM_{t+2} ......NNM_{t+n} are came from a normally distributed data structure against the alternate hypothesis that the sample does not support normal distribution. The test statistics can be computed as follows,

$$W = \frac{\left(\sum_{i=1}^{n} a_i x_{(i)}\right)^2}{\sum_{i=1}^{n}(x_i - \overline{x})^2} \qquad \text{................. (1)}$$

Where,

a) $X_{(i)}$ is the ith order statistic, i.e., the ith-smallest number in the sample NNM
b) X_i – Sample NNM
c) $\overline{x}$-Average NNM during the study period
d) a_i-Appropriate constant obtained through aggregating the expected values of order statistics of independent and identically distributed random variables from standard normal distribution as well as the covariance of those order statistics.

DURBIN WATSON STATISTIC FOR AUTO CORRELATION FUNCTION (ACF)

Since, the collected Net New Money follows time series regression model, the impact of independent variable can be computed by Ordinary Least Square (OLS) method and often the residual *(Error: Difference between the Actual Net New Money and the Predicted Net New Money through the regression model)* component in the regression model are not independent but instead are autocorrelated. Hence, it is highly essential to detect the autocorrelations. Durbin Watson (1950) test statistic for autocorrelation assumes that the residuals are stationary and normally distributed with mean zero. It tests the null hypothesis that the residual Net New Money are not correlated against the alternate hypothesis the residuals are autocorrelated. If the residuals are autocorrelated, there may be consequences for the computed results.

a) The estimated regression coefficients no longer have the minimum variance property
b) The Mean Square Error (MSE) may seriously underestimate the variance of the error terms
c) The computed standard error of the estimated parameter values may underestimate the true standard error, in which case the 't' values and confidence intervals may be incorrect.

The test statistic as follows,

$$d = \frac{\sum_{t=2}^{T}(e_t - e_{t-1})^2}{\sum_{t=1}^{T} e_t^2} \qquad \text{............................... (2)}$$

Where,

e_t – Error(Actual Net New Money-Predicted Net New Money) term of the current period
e_{t-1} – Error(Actual Net New Money-Predicted Net New Money) term of the previous period

LEVENE'S STATISTIC FOR HOMOGENIETY OF VARIANCE OF NET NEW MONEY

Levene's (1960) test is an inferential statistic used to assess the equality of in different samples. Some common statistical procedures assume that variances of the populations from which different samples are drawn are equal. Levene's test assesses this assumption. It tests the null hypothesis that the population variances are equal. If the resulting p-value of Levene's test is less than critical value (typically 0.05), the obtained differences in sample variances are unlikely to have occurred based on random sampling. Thus, the null hypothesis of equal variances is rejected and it is concluded that there is a difference between the variances in the population. This test has been used to test the statistical significance of homogeneity of variance of NNM before and after change in the entry load structure i.e. $\sigma^2_{(NNM-Before)} = \sigma^2_{(NNM-After)}$.

The test statistic, *W*, is defined as follows:

$$W = \frac{(N-k)}{(k-1)} \frac{\sum_{i=1}^{k} N_i (Z_{i\cdot} - Z_{\cdot\cdot})^2}{\sum_{i=1}^{k} \sum_{j=1}^{N_i}(Z_{ij} - Z_{i\cdot})^2} \qquad \text{..................... (3)}$$

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$$Z_{ij} = \frac{|Y_{ij} - \bar{Y}_{i\cdot}|}{|Y_{ij} - \tilde{Y}_{i\cdot}|} \qquad \text{....................... (4)}$$

$\bar{Y}_{i\cdot}$ – *Mean NNM of 'ith group*

$\tilde{Y}_{i\cdot}$ - *Median NNM of 'ith group*

$$Z_{\cdot\cdot} = \frac{1}{N} \sum_{i=1}^{k} \sum_{j=1}^{N_i} Z_{ij} \qquad \text{....................... (5)}$$

Where, Z_{ij} – Mean of All NNM

$$Z_{i\cdot} = \frac{1}{N_i} \sum_{j=1}^{N_i} Z_{ij} \qquad \text{....................... (6)}$$

Where, Z_{ij} – Mean NNM of 'ith group

Where,

- *W – Test Statistic*
- *k - Number of different groups to which the samples belong*
- *N - Total number of sample NNM(40 months)*
- *N_i - Number of sample NNM in the ith group (Before & After changes in entry load structure-20 months respectively)*
- *Y_{ij} is the value of the jth sample from the ith group*

ONE-WAY ANOVA FOR HOMOGENEITY OF AVERAGE NET NEW MONEY

The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. Analysis of variance is used to test the hypothesis that several means are equal. This technique is an extension of the two-sample 't' test. One way ANOVA has been used to test the null hypothesis that the average of Net New Money before and after changes in entry load structure are same against the alternate hypothesis that the average Net New Money before and after changes in entry load structure are not equal. The test statistic can be computes as follows.

Sources of Variance	df	Sum of Squares	Mean sum of square	F-Ratio
Variance between before and after changes in entry load structure	C-1	SSC	M_{SSC}=SSC/C-1	F_C= M_{SSC}/ M_{SSE}
Variance within the split period	N-C	SSE	M_{SSE}=SSE/N-C	

ANALYSIS AND FINDINGS
PANEL A - DESCRIPTIVE STATISTICS

S. No.	Parameter	Value
1	Average Net New Money (Before)	Rs. 10723.1 Crores
2	Average Net New Money (After)	Rs. – 9520.35 Crores
3	Standard deviation of NNM (Before)	Rs. 62576.4 Crores
4	Standard deviation of NNM (After)	Rs. 99802.99 Crores
5	Shapiro Wilk Normality	0.978(Sig:0.600)

*Significant at 5% Level

Panel A enumerates the measures of average Net New Money, dispersion of Net New Money and departure of symmetrical distribution. It is evident from the analysis that Net New Money ranges between Rs. -162165 Crores and Rs. 185956 Crores during the study period and indeed average Net New Money after change in entry load structure exhibited a declining trend. The standard deviation of Net New Money after change in entry load is high compared prior to change in entry load structure and it indicates that the removal of entry load on mutual fund schemes impinged overall redemptions and sales made by the mutual fund houses. On account of high level of variation in average Net New Money as well as standard deviation of Net New Money, in order to understand the normality of Net New Money, the researcher has hypothesised that Net New Money follows symmetrical distribution, which has zero skewness against the alternate hypothesis that it does not follow normal distribution at 5% level of significance. Shapiro Wilk test for normality proved that the null hypothesis cannot be (Sig: 0.6 > 0.05) rejected at 0.05 level of significance i.e. Net New Money during the study period is normally distributed and no significant evidence found on account of changes in entry load structure.

PANEL B – DURBIN WATSON TEST FOR AUTO CORRELATION FUNCTION FOR RESIDUAL NET NEW MONEY

FIGURE 1: RESIDUAL NNM VS LAGGED RESIDUAL NNM

ACF	R-Squared	DW
-0.417 (First lag)	0.174	2.513

* 1% Level, **5% level

For 5%: 4- d_U: 2.446, 4-d_L: 2.558 (k=1)

For 1%: 4- d_U: 2.656, 4-d_L: 2.754 (k=1)

K – Single regressor excluding intercept
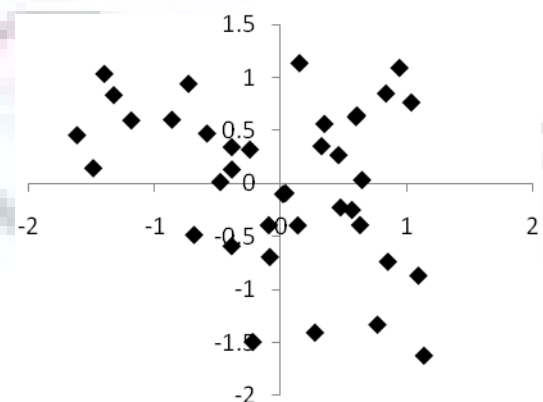
Panel B exhibits the serial correlation of residual Net new Money and its statistical significance at 0.01 & 0.05 level. The serial correlation coefficient facilitates to understand whether prior Net New money contains any valid information to explain the current Net New Money. The analysis revealed low degree of negative serial correlation exists to the extent of 0.417 and 17.4% variation in the current Net New Money can be explainable by the prior Net New Money, hence, to the extent of 82.6%, variation in current Net New Money can be explained by the fund related and macro economic variables pertaining to all mutual fund schemes. In order to understand statistical significance of the low degree of negative serial correlation, Durbin Watson test is used to test the hypothesis that there is no evidence for serial correlation against there is a negative serial correlation exists at 0.01 & 0.05 level of significance. Since, the serial correlation coefficient is -0.417 and DW statistic exceeding 2, the alternate hypothesis has been set as there is significant negative serial correlation.

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Residual Net New Money has been obtained by finding the difference between actual Net New money and estimated Net New Money of the respective month by using single predictor (first lag) variable. Figure 1 emphasis the scatter plot of Residual Net New Money with lagged Net New Money. The second quadrant and fourth quadrant of the scatter plot consists most of the coordinates, proves that there is a negative serial correlation exists among residual Net New Money and lagged Net New Money. Durbin Watson test is used to test the statistical significance of serial correlation. Since, the research considers only the first order lag structure of residual Net New Money, for single regressor (k=1), the Upper & Lower critical values at 0.01 and 0.05 level are d_U: 1.344, d_L: 1.246 & d_U: 1.554, d_L: 1.442 respectively and the resulting critical values for testing the negative serial correlation are 4- d_U: 2656, 4-d_L: 2.754 & 4- d_U: 2.446, 4-d_L: 2.558 respectively. If the calculated DW statistic is lesser (DW<4- d_U) than upper critical value then no serial correlation exists among the residual Net New Money and lagged Net New Money, If the calculated DW statistic is greater (DW>4-d_L) than lower critical value then statistically significant negative serial correlation exists among the residual Net New Money and lagged Net New Money, and If the calculated DW statistic is between (4- d_U<DW<4-d_L) upper & lower critical value then decision is inconclusive. The research reveals that the calculated DW test statistic value lies between the upper and lower critical values (4- d_U<DW<4-d_L: 2.446<2.513<2.558) at 5% level of significance, hence, we are unable to decide statistically significant negative serial correlation between residual Net New Money and lagged residual Net New Money and at 1% level of significance, the calculated DW test statistic value is less than the upper critical value (DW<4- d_U: 2.513<2.656), hence, we conclude that there is no serial correlation between residual Net New Money and lagged Net New Money. This test results accentuates that prior Net New Money do not contain any valid information to explain the current month Net New Money i.e. though there is considerable amount of variation is observed in Net New Money after changes in entry load structure, we are unable to account statistical significance for changes in entry load structure on mutual fund schemes.

PANEL C – ANOVA (TEST OF EQUALITY OF AVERAGE NNM BEFORE AND AFTER REMOVAL OF ENTRY LOAD)

Source of Variance	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Variance between before and after changes in entry load structure	4.098E9	1	4.098E9	0.591	0.447
Variance within the split period	2.637E11	38	6.938E9		
Total	2.678E11	39			

*Significant @ 5% Level

Universally, when the benefit (removal of entry load) is extended to the investors in terms of not paying the entry load, it is obvious that they would like to exploit the opportunity given by the market regulator SEBI and presumably increased investments will lead to higher purchases (sale of mutual fund units by the fund houses) of mutual fund units. In order to test the statistical significance of average Net New Money before and after the changes in entry load is same, we have used ANOVA at 0.05 level of significance. It is evident from the analysis that the significant value is greater than the probability (0.447>0.05); hence, we are unable to reject ($\mu_{Before} = \mu_{After}$) the null hypothesis at 5% level of significance. It statistically signifies that despite the change in entry load structure the average Net New Money (before) and Net New Money (after) remains same i.e. removal of entry load did not impact the net inflow into all mutual fund schemes.

PANEL D – LEVENE STATISTIC (TEST OF HOMOGENEITY OF VARIANCES OF NNM BEFORE AND AFTER REMOVAL OF ENTRY LOAD)

Levene's statistic is used test the equality of variances of Net New Money before and after changes in entry load structure at 0.05 level of significance.

Levene Statistic	*df_1*	*df_2*	*Sig.*
5.406	1	38	0.026*

*Significant at 5% Level

It is prudent from Panel D that the significant value is less than the probability (0.026<0.05); hence we reject the null hypothesis at 5% level of significance and conclude that the changes in entry load is statistically significant and variance of Net New Money before and after removal of entry load is not equal ($\sigma^2_{Before} \neq \sigma^2_{After}$). Though the variance before and after changes in entry load structure is significantly different, we cannot account the changes in entry load structure is alone cause for difference in variance but we can assess that changes in entry load structure on all mutual fund schemes is one of the prime causal variable for difference in the variance of Net New Money before and after changes in the entry load structure.

CONCLUSION

The prime objectives of removing the entry load on all mutual fund schemes are to,
a) Encourage retail investors to participate in the capital market leads to surge in capital inflow
b) Investors have the freedom to determine and negotiate the commission payable to the distributors according to services rendered
c) Asset Management Companies can introduce more schemes in order to enhance their asset base (Nine fresh NFO came with in less than 30 days from 18th June'09 to 15th July'09 and more)

but eventually there was no impact on Net New Money. This study proposed to analyse statistically significant impact on Net New Money during December 2007 to March 2011. Intuitively, if incentive (Removal of entry load) is offered, there will be variation in the underlying variable (Net New Money) and apparently accountability can be established by the explanatory variable and also either positive or negative skewness of Net New Money can be witnessed but Shapiro Wilk test for Normality of Net New Money at 0.05 level of significance emphasized that Net New Money is normally distributed (Skewness of Net New Money = 0) throughout the study period. Durbin Watson test accentuated that there is no statistically significant serial correlation between residual Net New Money & lagged residual Net New Money at 0.01 level of significance and the decision for statistically significant serial correlation were inconclusive at 0.05 level of significance, hence, prior Net New Money do not contain any valid information, which would explain current Net New Money. ANOVA test for homogeneity of average Net New Money enumerated that average Net New Money before and after removal of entry load were equal at 0.05 level of significance. Levene's test for homogeneity of variance of Net New Money exhibited that variance of Net New Money before and after removal of entry load was statistically significant at 0.05 level. Thus, removal of entry load on all mutual fund schemes did not influence the Net New Money. Indeed, not only entry load structure, there are other variables such as exit load, performance of the fund, prevailing interest rate, inflation rate, economic growth level, and demand-supply equations of securities traded in the capital market may influence Net New Money.

Further research can be mandated firstly on overall profitability of mutual funds because market regulator SEBI emphasized that even marketing and distribution charges incurred by Asset Management Companies cannot be recovered from the investors lead reduction in the overall profitability. Secondly, service tax collections (Bajaj and Venkitesh, 2009) by the Government through mutual funds because earlier the mutual fund directly deducts the tax at source on the commission payable to the distributors and paid the service tax directly to Government and now on account of removal entry load the commission would not be paid by the mutual fund and apparently commission comes from the investors, hence service tax should have to be paid by the distributor directly to the Government, leads to complications in determining the amount of service tax even perhaps lead to tax evasion (Bajaj, 2009). Thirdly, marketability risk pertaining to mutual fund products because most of the distributors are perhaps not interested to float mutual fund schemes aggressively as they were earlier on account of removal of entry load.

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