



An Empirical Study of Value Averaging Vs. Cost Averaging Using Diversified Equity Funds in India

* Chinmay Chopade

* Assistant Professor, AI's Allana Institute of Management Studies, Anjuman-I-Islam Complex, 92 DN Road, CST, Mumbai 400001

ABSTRACT

Cost averaging is widely publicized investment strategy in India and is implemented using Systematic Investment Plans (SIP) for Mutual Funds. Cost averaging is a technique in which a fixed amount is invested periodically resulting into averaging of the price at which the securities are bought. In contrast value averaging is a technique wherein the amount is invested depending on the required rate of return and the actual return attained in the last period. This paper is an attempt to compare the return of the investments made using the two techniques using selected diversified equity oriented mutual fund schemes in India over last five years.

Keywords : value averaging, cost averaging, mutual funds, SIP

INTRODUCTION

Indian Mutual Fund industry is widely promoting the Systematic Investment Plan's (SIP's) for investing in various schemes. SIP is based on the principal of cost averaging. Cost averaging involves buying a fixed amount of a particular investment at regular interval irrespective of its price. SIP's provided by Indian Mutual Funds provide investor to invest a fixed amount as low as Rs.500/- at weekly, monthly or quarterly intervals.

In recent times some of the online mutual fund service providers like FundsIndia.com are providing products based on principal of Value Averaging. Value averaging also includes buying of a particular investment at regular intervals but the amount is determined by the expected returns of the investor.

In this paper I have tried to compare the risk and returns by implementing both cost averaging and value averaging principals. I have used data for last five years from May 2008 to May 2013. The Net Asset Values (NAV's) are from 5th day of each month. I have considered five diversified equity mutual funds with growth option namely ICICI Prudential Focused Blue-chip, Quantum Long Term, UTI Opportunities, HDFC Top 200 and DSP Black Rock Top 100.

OBJECTIVES OF THE STUDY

- To calculate the returns obtained by investing a certain amount into various diversified equity mutual schemes in India over a period of 5 years using Cost Averaging and Value Averaging techniques
- To calculate the average cost of acquisition of mutual funds units over period of investment
- To compare and contrast the returns obtained by value averaging and cost averaging.

LITERATURE REVIEW

Cost Averaging

Cost averaging is a technique of gradually building up investment by investing a fixed amount at regular intervals. By investing a fixed amount regularly, one can average out the cost of acquisition and thus increase return on investment. There have been many critics about cost averaging stating that the principal does not consider the current value of the portfolio nor does it take into consideration the price of the investment.

Consider a hypothetical example illustrated in Table 1. A fixed amount of Rs.5000/- is invested for 5 months at different NAV's. The average cost of acquisition calculated at the end of 5 months is significantly lower than the NAV at which the units were purchased in individual months.

Table 1: Average Cost

Month	NAV	Amount (Rs.)	No. of Units
1	10.5	5000	476.19
2	11.5	5000	434.78
3	12.35	5000	404.86
4	13.25	5000	377.36
5	13.6	5000	367.65
Total		25000	2060.84
Average cost		12.13	

Value Averaging

The term Value Averaging was first coined by Thomas Edleson in 1988. According to him, in value averaging the investor predetermines the value of the portfolio at regular intervals. The investor then buys or sells the investment at the specific interval to match its value to predetermined one.

A common rule in investing is buy at low price and sell at high price. The principal of value averaging incorporates this rule. When the markets are low the value of the investment drops compared to that on predetermined value and more investment is bought; whereas when markets are high the value of the investment can exceed the predetermined value and investment can be redeemed. Thus more investment is done when prices are low and lesser investment is done when prices are high. Marshall in his paper in 2000 did statistical comparison between cost averaging and value averaging and concluded that value averaging provides advantage over more commonly practiced cost averaging.

For example illustrated in Table 2, the investor desires to increase the value of the portfolio by Rs.5000/- each month. At each period of investment the current value of portfolio is calculated and compared with the required value; after comparing if the current value is less than the required value, the difference between them is invested whereas if the current value exceeds the required value the excess amount is sold off.

It can be clearly seen that in this hypothetical example value averaging has an advantage over cost averaging in terms of average cost of acquisition as well as the returns calculated using internal rate of return.

Table 2: Comparison between value averaging and cost averaging

Month	NAV	Value Averaging				Cost Averaging	
		Required Value		Buy		Units	Amount
		Units	Amount	Units	Amount		
1	10.5	476.19	5,000	476.19	5,000	476.19	5000
2	11.5	869.57	10,000	393.37	4,524	434.78	5000
3	12.35	1,214.57	15,000	345.01	4,261	404.86	5000
4	13.25	1,509.43	20,000	294.86	3,907	377.36	5000
5	13.6	1,838.24	25,000	328.80	4,472	367.65	5000
		Average Cost	12.06			Average Cost	12.13
		IRR	3.94%			IRR	3.83%

METHODOLOGY

To compare the return from cost averaging and value averaging techniques, the NAV's of mutual funds for the period from May 2008 to May 2013 are under consideration.

For cost averaging a fixed amount of Rs.5000/- is invested on 5th day of every month. In value averaging the investor's required rate of return is assumed to be 12% per annum on initial investment of Rs.5000/-. The predetermined values are calculated at monthly intervals and new investments are made on last day of the month. The cost of acquisition is assumed to be zero.

The entire investment is assumed to be sold in May 2013 thus realizing the final value of the investment. The returns are calculated using XIRR formula in MS - Excel thus considering the time period of investment. The average cost of acquisition of units is calculated by dividing the total amount invested by total number of units available at the end of period in consideration.

FINDINGS

Findings of the study are tabulated in Table 3.

Table 3: Performance Comparison of Mutual Funds

Mutual Fund Scheme	Value Averaging		Cost Averaging	
	Returns (XIRR)	Avg. cost of acquisition of units	Returns (XIRR)	Avg. cost of acquisition of units
ICICI Prudential Focused Blue Chip	17.30%	12.34	14.70%	12.82
Quantum Long Term	17.74%	16.8	15.57%	17.18
UTI Opportunities	16.90%	21.54	14.62%	22.1
HDFC Top 200	14.49%	160.42	12.08%	164.61
DSP BR Top 100	15.96%	75.99	10.69%	82.94

CONCLUSION

Results strongly echo the finding made by Marshall in 2000. The value averaging technique of investing provides an advantage over the traditionally followed cost averaging technique. Returns on long term investments can be increased by a significant 150 to 250 bps by applying value averaging. Also the average cost of acquisition of mutual fund units is also lower in value averaging when compare to cost averaging.

REFERENCES

Journals Articles | [1] Marshall, P. S. (2000), "A Statistical Comparison of Value Averaging vs. Dollar Cost Averaging and Random Investment Techniques" Journal of Financial and Strategic Decisions, Volume 13 Number 1, 87-99 | [2] Rozeff, M. S. (1994), "Lump-Sum Investing versus Dollar-Averaging" The Journal of Portfolio Management, 45-50. | [3] Edleson, M. E. (1988), "Value Averaging: A New Approach to Accumulation" American Association of Individual Investors Journal, 11-14 | [4] Marshall, P. S. (2006), "A Multi-Market, Historical Comparison of the Investment Returns of Value Averaging, Dollar Cost Averaging and Random Investment Techniques" Academy of Accounting and Financial Studies Journal, Volume 10 Number 3, 81-97 | Books | [1] Sankaran, S. "Indian Mutual Funds Handbook" Revised Edition, Vision Books, 2008