International Journal of Marketing, Financial Services & Management Research
Vol.2, No. 1, January 2013, ISSN 2277- 3622
Online available at www.indianresearchjournals.com

VOLATILITY OF MUTUAL FUNDS RETURN IN RELATION TO ITS COMPOSITION

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ABSTRACT

Every Mutual Fund has a specific composition relating to its company and sector holdings. This composition varies over time and also across different Mutual Fund Schemes. In the recent past the financial markets all over the world have been extremely volatile owing to the global financial crisis. This grave situation has affected the Indian Financial Market including the Mutual Fund Industry and therefore returns generated by the funds. The Mutual Fund managers have tried to improve the returns generated through various strategies. One of the primary strategies has been the changes in Sector holding composition of the Mutual Fund Scheme to avoid the slump in return. They have assumed that the change in the Sector Holding will have a positive effect on the return generated by these funds. In this context I have studied the effect of Sector Holdings of Mutual Funds on their return by analysing 2 private sector mutual fund schemes (DSPBR SMALL & MIDCAP REG G and TATA EQUITY PE) between September 2010 and September 2011 covering the turbulent period of this economic crisis. The study is based on analysis of data collected from Valueresearchonline.com and various other individual mutual fund websites. The data has been analysed using Pearsons Correlation coefficient through SPSS and various graphical and statistical tools. In these trying times all sectors are getting affected adversely, the performance analysis of Mutual Funds is very pertinent in that context.

KEY WORDS: Equity Diversified Open Ended Mutual Fund Schemes, Sector/ Company Holdings.

INTRODUCTION

A mutual fund is just the connecting bridge or a financial intermediary that allows a group of investors to pool their money together with a predetermined investment objective. The essence of a Mutual Fund is the diversified portfolio of investment which diversifies the risk by spreading out the investor's money across available or different types of investments. According to the Association of Indian Mutual Fund Industry, "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 appreciation realized is shared by the unit holders in the 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." Mutual Funds invest in a well-diversified portfolio of securities which enables investor to hold a diversified investment portfolio (whether the amount of investment is big or small) thereby reducing the risk considerably as a loss in any particular investment is minimized by gains in others. Middle class, salaried employees, generally choose mutual fund investments, as they don't have the time or expertise to invest in company stocks directly or track the performance of various stocks on a regular basis. The Mutual Fund managers are experts who deal in these aspects and thus make investments easier and more profitable for this class of investors making mutual fund investment very popular in recent times.

SURVEY of LITERATURE:

Research work on Mutual Funds began as early as 1960s in the U.S.A. and European region. **William F. Sharpe** was one of the first to introduce a measure for the performance of Mutual Funds, popularly known as the Sharpe Ratio: $\mathbf{R(x) = (Rx - R_f) / \sigma_x}$ where, x is some investment; R_x is the average annual rate of return of x; R_f is the best available rate of return of a "risk-free" security (i.e. cash); σ_x is the standard deviation of Rx. **Jack Treynor** developed the Treynor Ratio that measures returns earned in excess of which could have been earned on a risk less investment per each unit of market risk. The ratio is: $\mathbf{(r_p - r_f) / \beta_p}$, where $\mathbf{r_p}$ = Average return of the portfolio; **rf = Average** return of the risk-free proxy; $\boldsymbol{\beta_p}$= Beta of the portfolio.

In their study **Guha Deb and Banerjee (2009)** used Value at Risk approach (VaR) as a single risk measure summarizing all sources of downward risk. They attempted to highlight the importance of VaR as a measure of 'downside risk' for Indian equity Mutual Funds. **Roy and Deb (2003)** used the Treynor-Mazuy model and Henriksson-Merton model to measure the Conditional Performance of Indian Mutual Funds**. Ferson and Schadt (1996)** advocated a technique called conditional performance evaluation measuring the performance with both unconditional and conditional form of - CAPM, Treynor-Mazuy model and Henriksson-Merton model. Several recent studies have empirically tested the persistence in fund performance like **Volkman and Wohar (1994)),** but didn't thoroughly investigate other systematic factors affecting future fund performance. Similar to previous studies, **Wohar (1995**) investigated the persistence between past and future fund performance using an empirical model that controls for these systematic factors. **Khorana, Servaes, Wedge (2006)** studied the level of portfolio manager ownership in the funds they manage and examined whether higher ownership affects improved future performance.

OBJECTIVE and METHODOLOGY:

I have analyzed the correlation between the percentage return of the Mutual Fund Scheme DSPBR Small and Midcap Reg G and its percentage sector holdings between the period of September 2010 and September 2011. A similar analysis has been done for TATA EQUITY PE. The Pearsons correlation coefficient is used through spss. The analysis is covering the turbulent period of this economic crisis. It seems that Mutual Fund Industry is a shock absorber to market fluctuations and if it fails to do so, it cannot be differentiated from other types of investments. In these trying times all sectors are getting affected adversely, the performance analysis of Mutual Funds is very pertinent in that context. The study is based on secondary data collected randomly for 2 Mutual Fund Schemes provided by Valueresearchonline (A popular and authentic mutual fund research organization).The sample schemes were analysed for performance and fluctuations, changes in their sector holdings to establish a relation between sector holdings and fund performance during business cycle fluctuations and Correlate various factors with return generated.

Null Hypothesis: H0: There is no correlation between percentage return generated and percentage Sector Holdings.

Alternate Hypothesis: H1: There is correlation between percentage return generated and percentage Sector Holdings.

RESULTS, ANALYSIS and INFERENCES:

1.TATA EQUITY PE:

In the beginning of the study period September 2010 it garnered very high return (10.41) which had dropped badly in December 2010 (0.63) and March 2011 (-6.49) but again picked up a little in June 2011 (-1.17, though still negative). It again dropped sharply in September 2010 (-10.61). This negative turn can be explained as:

a) The economy as a whole had taken a downward turn from the beginning of 2011 and we later witnessed difficult times both politically and socially which adversely affected the Indian Financial Markets including the Mutual Fund Industry.

b) (i)There is a weak negative correlation (-0.43) between the return and the sector holding in Automobile. This is clearly indicated in the initial part of the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increasing from 8.13 to10.35. With the gradual slowdown in the economy during this time demand for all luxury goods including the automobile sector decreased. This lead to a fall in the sector performance as a whole. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a certain extent.
(ii) There is a very weak negative correlation (-0.12) between the return and the sector holding in Chemicals. This is clearly indicated throughout the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increased from 3.14, 3.52, 4.01, and then again fell to 2.82 and 2.74. However it’s clearly indicated that the fluctuation in the sector holding is very limited. Thus it can’t be said that these changes in the sector holdings has a major impact on the return generated. This is especially true because the degree of holding in this sector is not major as compared to other major sectors. Thus the effect is marginal. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a limited extent.

(iii) There is a very weak and negligible negative correlation (-0.004) between the return and the sector holding in Diversified. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings hardly changed 6.14, 5.51, 5.97, 5.74 and 6.09. However it’s clearly indicated that the fluctuation in the sector holding is very limited. Thus it can’t be said that these minute changes in the sector holdings did not have a major impact on the return generated. This is especially true because the degree of holding in this sector is not major as compared to other major sectors. Thus the effect is marginal.

(iv)There is a strong negative correlation (-0.778) between the return and the sector holding in Energy. This is clearly indicated throughout the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increased from 14.31 to 15.73. Further as the return plummeted in September 2011 the sector holding had increased considerably from 18.65 to 21.38. Thus it can be said that these changes in the sector holdings has a major impact on the return generated. This is especially true because the degree of holding in this sector is major as compared to other major sectors. Thus the effect is considerable. This could be accounted for with the reason that during this period the energy sector as a whole has been going through a lot of fluctuations. The international economic crisis leads to an increase in the prices of crude oil, petroleum and other related energy sources. The economy again plunged to deep ebb during 2011. This severe slowdown was partly due to the Crisis in the US and European Markets. It was further aggravated by the 2g crisis, political scams. Thus the global economic meltdown was having its worst effect on the Indian economy at this period. However the energy sector holdings were considerably high December 2010 onwards leading to returns plummeting further. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a large extent.

(v) There is a weak positive correlation (0.196) between the return and the sector holding in Financial. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings hardly changed 14.10, 13.12, 14.97, 12.71, and 12.65. But though the change was little, as the return fell the sector holding had also fallen. This lead to the positive correlation, though weak. However it's clearly indicated that the fluctuation in the sector holding is very limited. Thus it can't be said that these minute changes in the sector holdings did not have a major impact on the return generated. Thus the effect is marginal.

(vi) There is a significantly strong negative correlation (-0.989) between the return and the sector holding in FMCG. This is clearly indicated throughout the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increased from 8.3 to 9.27. Further as the return plummeted in September 2011 the sector holding had increased considerably from 8.81 to 10.53. Thus it can be said that these changes in the sector holdings has a major impact on the return generated. This is especially true because the degree of holding in this sector is major as compared to other major sectors. Thus the effect is considerable. This could be accounted for with the reason that during this period the FMCG sector as a whole has been going through a lot of fluctuations due to the international economic crisis. This severe slowdown was partly due to the Crisis in the US and European Markets. It was further aggravated by the 2g crisis, political scams. Thus the global economic meltdown was having its worst effect on the Indian economy at this period. However the FMCG sector holdings were considerably high December 2010 onwards leading to returns plummeting further. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a large extent.

(vii) There is a positive correlation (.321) between the return and the sector holding in Healthcare. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings changed somewhat between4.65, 5.29, 5.08, 5.67 and 3.72. But though the change was little, as the return fell the sector holding had also fallen. This lead to the positive correlation, though not very strong. However it's clearly indicated that the fluctuation in the sector holding is very limited. The healthcare sector in general performed well during the study period. Though the economic meltdown did affect the sector overall, however in India specifically this sector grew. The demand for technically advanced pharmaceuticals or medical services saw a rising trend in India. The domestic demand for advanced healthcare services and systems were on an upward trend and are still increasing. With state of the art diagnostic and healthcare facilities becoming more and more readily available to the common man, this sector is doing well in spite of the global slowdown. Thus as the percentage holding in this sector increased, the return of the scheme increased and vice-versa. Thus it can be said that these changes in the sector holdings did have an impact on the return generated.

(viii) There is a positive correlation (.663) between the return and the sector holding in Metals. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings changed somewhat between 8.22, 9.39, 6.91, 6.45 and 5.82. As the return fell the sector holding had also fallen. This lead to the positive correlation. The Metals sector in general performed well during the study period. Though the economic meltdown did affect the sector overall, however in India specifically this sector grew. The holding in metals has its indirect relation and effect on other sector holdings also like engineering, energy, technology (to a certain extent), automobiles and others. This leads to an indirect effect on the return generated by the scheme also. Thus this positive correlation can be justified. Thus as the percentage holding in this sector increased, the return of the scheme increased and vice-versa. Thus it can be said that these changes in the sector holdings did have an impact on the return generated.

(ix) There is a weak negative correlation (-0.252) between the return and the sector holding in Services. This is clearly indicated in the initial part of the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increasing from 5.16 to 7.3. With the gradual slowdown in the economy during this time demand for all goods including the services sector decreased. This lead to a fall in the sector performance as a whole with a huge attrition rate. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a certain extent.

(x) There is a positive correlation (.538) between the return and the sector holding in Technology. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings changed between 11.16, 11.71, 10.43, 9.49 and 9.96. As the return fell the sector holding had also fallen. This lead to the positive correlation. The Technology sector in general performed well during the study period. Though the economic meltdown did affect the sector overall, however in India specifically this sector grew. The holding in Technology has its indirect relation and effect on other sector holdings also like engineering, energy, metals (to a certain extent), automobiles and others. This leads to an indirect effect on the return generated by the scheme also. Thus this positive correlation can be justified. Thus as the percentage holding in this sector increased, the return of the scheme increased and vice-versa. Thus it can be said that these changes in the sector holdings did have an impact on the return generated.

2.DSPBR SMALL and MIDCAP REG G:

In the beginning of the study period September 2010 it garnered very high return (15) which had dropped badly in December 2010 (-0.44) and March 2011 (-9.75) but again picked up a little in June 2011 (1.99). It again dropped sharply in September 2011 (-6). This negative turn can be explained as:

a) Same as 1.

b) (i)There is a positive correlation (0.635) between the return and the sector holding in Automobile. This is clearly indicated in the initial part of the period of this study. The return started falling from September 2010 to December 2010 when the percentage sector holdings started decreasing from 7.88 to 6.09. With the gradual slowdown in the economy during this time demand for all luxury goods including the automobile sector decreased. This lead to a fall in the sector performance as a whole.

(ii) There is a positive correlation (0.317) between the return and the sector holding in Constructions. This is clearly indicated throughout the period of this study. The return started falling from September 2010 to December 2010 when the percentage sector holdings started decreasing from 7.45 to 5.51. However it's clearly indicated that the fluctuation in the sector holding is very limited. Thus it can't be said that these changes in the sector holdings has a major impact on the return generated. This is especially true because the degree of holding in this sector is not major as compared to other major sectors. Thus the effect is marginal. Thus as the percentage holding in this sector decreased, it resulted in the fall in return generated by the fund to a limited extent.

(iii) There is a very weak positive correlation (0.167) between the return and the sector holding in Diversified. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings hardly changed 6.08, 6.09, 5.84, 7.01 and 6.28. However it's clearly indicated that the fluctuation in the sector holding is very limited. Thus it can't be said that these minute changes in the sector holdings did not have a major impact on the return generated. This is especially true because the degree of holding in this sector is not major as compared to other major sectors. Thus the effect is marginal.

(iv) There is a negative correlation (-0.395) between the return and the sector holding in Engineering. This is clearly indicated through the initial part of the period of this study. The return started falling from September 2010 to December 2010 when the percentage sector holdings started increased from 6.63 to 11.20. Thus it can be said that these changes in the sector holdings has an impact on the return generated. This is especially true because the degree of holding in this sector is major as compared to other major sectors. Thus the effect is considerable. This could be accounted for with the reason that during this period the engineering sector as a whole has been going through a lot of fluctuations. The economy again plunged to deep ebb during 2011. This severe slowdown was partly due to the Crisis in the US and European Markets. It was further aggravated by the 2g crisis, political scams. Thus the global economic meltdown was having its worst effect on the Indian economy at this period. However the engineering sector holdings were considerably high December 2010 onwards leading to returns plummeting further. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a large extent.

(v) There is a weak negative correlation (-0.266) between the return and the sector holding in Financial. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings hardly changed 9.34, 7.92, 11.71, 7.27, and 7.96. But though the change was little, as the return fell the sector holding had increased. This lead to the negative correlation, though weak. The Indian Economy was in doldrums affecting the return. Also the financial sector was adversely affected during this time with the international and Indian markets becoming extremely volatile and unpredictable. Thus the increase in the holding in this sector further affected the return. Thus as an overall effect we see that the holding pattern in this sector is negatively correlated to the return of this scheme.

(vi) There is a significantly positive correlation (0.635) between the return and the sector holding in FMCG. This is clearly indicated throughout the period of this study. The return started falling from September 2010 to December 2010 to March 2011 when the percentage sector holdings decreased from 11.42 to 10.02 to 8.93. Thus it can be said that these changes in the sector holdings has a major impact on the return generated. This is especially true because the degree of holding in this sector is major as compared to other major sectors. Thus the effect is considerable. This could be accounted for with the reason that during this period the FMCG sector as a whole has been going through a lot of fluctuations due to the international economic crisis. This severe slowdown was partly due to the Crisis in the US and European Markets. It was further aggravated by the 2g crisis, political scams. Thus the global economic meltdown was having its worst effect on the Indian economy at this period. However the FMCG sector holdings were considerably high December 2010 onwards leading to returns plummeting further as the sector holdings decreased. Thus as the percentage holding in this sector decreased, it resulted in the fall in return generated by the fund to a large extent.

(vii) There is a weak positive correlation (.034) between the return and the sector holding in Healthcare. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings changed somewhat between 6.98, 8.36, 7.03, 7.24 and 6.71. But though the change was little, as the return fell the sector holding had also fallen. This lead to the positive correlation, though not very strong. However it's clearly indicated that the fluctuation in the sector holding is very limited. The healthcare sector in general performed well during the study period. Though the economic meltdown did affect the sector overall, however in India specifically this sector grew. The demand for technically advanced pharmaceuticals or medical services saw a rising trend in India. The domestic demand for advanced healthcare services and systems were on an upward trend and are still increasing. With state of the art diagnostic and healthcare facilities becoming more and more readily available to the common man, this sector is doing well in spite of the global slowdown. Thus as the percentage holding in this sector increased, the return of the scheme increased and vice-versa. Thus it can be said that these changes in the sector holdings did have an impact on the return generated. But as healthcare is not a major sector as others, the impact on return of the Mutual Fund Scheme is marginal.

(viii) There is a negative correlation (-0.596) between the return and the sector holding in Services. This is clearly indicated in the initial part of the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increasing from 14.14 to 14.73. As the return fell further the sector holding kept increasing. This is also one of the major sectors in this fund's portfolio. This lead to the significant negative correlation. With the gradual slowdown in the economy during this time demand for all goods including the services sector decreased. This lead to a fall in the sector performance as a whole with a huge attrition rate. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a certain extent.

(ix) There is a weak negative correlation (-.177) between the return and the sector holding in Technology. This is clearly indicated throughout the period of this study. As the return fluctuated the percentage sector holdings changed between 4.86, 4.93, 4.91, 5.99 and 5.68. As the return fell the sector holding had increased. This lead to the negative correlation. The Technology sector in general performed well during the study period. The holding in Technology has its indirect relation and effect on other sector holdings also like engineering, energy, metals (to a certain extent), automobiles and others. This leads to an indirect effect on the return generated by the scheme also. Thus this negative correlation can be justified. Thus as the percentage holding in this sector increased, the return of the scheme decreased and vice-versa. However as the fluctuations in the sector holding are very marginal the impact on the return is less though the relation exists. Thus it can be said that these changes in the sector holdings did have an impact -on the return generated though it's limited.

(x)There is a significantly strong negative correlation (-0.726) between the return and the sector holding in Textiles. This is clearly indicated throughout the period of this study. The return started falling from December 2010 to March 2011 when the percentage sector holdings started increased from 5.72 to 6.81. Further as the return plummeted in September 2011 the sector holding had increased considerably from 6.72 to 8.04. Thus it can be said that these changes in the sector holdings has a major impact on the return generated. This is especially true because the degree of holding in this sector is considerable. Thus the effect is considerable. This could be accounted for with the reason that during this period the Textiles sector as a whole has been going through a lot of fluctuations due to the international economic crisis. This severe slowdown was partly due to the Crisis in the US and European Markets. It was further aggravated by the 2g crisis, political scams. Thus the global economic meltdown was having its worst effect on the Indian economy at this period. However the Textiles sector holdings were considerably high December 2010 onwards leading to returns plummeting further. Thus as the percentage holding in this sector increased, it resulted in the fall in return generated by the fund to a large extent.

CONCLUSION:

a) The economy performed well in the 1st quarter of 2010 then dipping a little and picking up momentum in September quarter of 2010. This was clearly reflected in the returns of all the chosen funds. The recovering economy again faced a down ward turn from December 2010 due to international debt crisis, political, social and economic problems in India, which is still continuing. This has also clearly affected the Financial markets and thereby the Mutual Fund Industry as a whole. Thus the better performing funds fluctuate along with the fluctuating economy. Thus there is a correlation between fund performance and financial market fluctuations brought on by the Global Economic Crisis.
b) The returns are also linked with the sector performance. All the funds had majorly invested in the Energy and Communications sector which met with a crisis thereby reducing returns. It was also seen that few funds had reduced their percentage holdings in the better performing sectors like Financial, Technology, Services and FMCG, thereby not being able to benefit from the sector returns. Thus there is a correlation between Sector Holdings, performance of those sectors in the economy and returns generated by the Mutual Fund Schemes.

Thus the Null Hypothesis is rejected and it can be concluded that there is a correlation between percentage sector holdings and percentage return generated by these two funds. Whether it’s a positive or negative effect one cannot disregard the correlation between the two.

TABLES:

TABLE 1: Percentage Return and Percentage Sector Holdings of Tata Equity PE

PRD	RTN/ SECTOR	AUTO MOBILE	CHEMICALS	DIVERSIFIED	ENERGY	FINANCIAL	FMCG	HEALTH CARE	METALS	SERVICES	TECH NOLOGY
Sep-10	10.41	9.10	3.14	6.14	13.27	14.10	6.41	4.65	8.22	5.87	11.16
Dec-10	0.63	8.13	3.52	5.51	14.31	13.12	8.30	5.29	9.39	5.75	11.71
Mar-11	-6.49	10.35	4.01	5.97	15.73	14.97	9.27	5.08	6.91	5.16	10.43
Jun-11	-1.17	10.64	2.82	5.74	18.65	12.71	8.81	5.67	6.45	7.30	9.49
Sep-11	-10.26	8.37	2.74	6.09	21.38	12.65	10.53	3.72	5.82	7.11	9.96

TABLE 2: TATA Equity PE Top 10 Sector Analysis for September 2010 to September 2011

Correlations

		RTN	AUTOMOBILE	CHEMICALS	DIVERSIFIED
RTN	Pearson Correlation	1	-.043	-.012	-.004
	Sig. (2-tailed)		.945	.985	.995
	N	5	5	5	5
AUTOMOBILE	Pearson Correlation	-.043	1	.168	.077
	Sig. (2-tailed)	.945		.787	.902
	N	5	5	5	5
CHEMICALS	Pearson Correlation	-.012	.168	1	-.193
	Sig. (2-tailed)	.985	.787		.755
	N	5	5	5	5
DIVERSIFIED	Pearson Correlation	-.004	.077	-.193	1
	Sig. (2-tailed)	.995	.902	.755	
	N	5	5	5	5
ENERGY	Pearson Correlation	-.778	.048	-.605	.177
	Sig. (2-tailed)	.121	.939	.279	.776
	N	5	5	5	5
FINANCIAL	Pearson Correlation	.196	.351	.817	.343
	Sig. (2-tailed)	.752	.562	.091	.572
	N	5	5	5	5
FMCG	Pearson Correlation	-.989**	-.004	-.127	-.016
	Sig. (2-tailed)	.001	.995	.838	.980
	N	5	5	5	5
HEALTHCARE	Pearson Correlation	.321	.563	.344	-.698
	Sig. (2-tailed)	.598	.323	.571	.190
	N	5	5	5	5
METALS	Pearson Correlation	.663	-.429	.426	-.506
	Sig. (2-tailed)	.223	.471	.475	.384

	N	5	5	5	5
SERVICES	Pearson Correlation	-.252	.030	-.930*	.023
	Sig. (2-tailed)	.683	.962	.022	.971
	N	5	5	5	5
TECHNOLOGY	Pearson Correlation	.538	-.609	.484	-.273
	Sig. (2-tailed)	.350	.276	.409	.656
	N	5	5	5	5

TABLE 3: Percentage Return and Percentage Sector Holdings of DSPBR Small and Midcap Reg G

PRD	RTN/ SECTOR	AUTO MOBILE	CONSTRUC-TION	DIVERSIFIED	ENGIN-EERING	FINANCIAL	FMCG	HEALTH CARE	SERVICES	TECHNO LOGY	TEXTILES
Sep-10	15.00	7.88	7.45	6.08	6.63	9.34	11.42	6.98	10.73	4.86	5.31
Dec-10	-0.44	6.09	5.51	6.09	11.20	7.92	10.02	8.36	14.14	4.93	5.72
Mar-11	-9.75	6.38	5.65	5.84	8.76	11.71	8.93	7.03	14.73	4.91	6.81
Jun-11	1.99	5.37	6.04	7.01	7.65	7.27	10.86	7.24	10.48	5.99	6.72
Sep-11	-6.00	6.10	7.95	6.28	7.39	7.96	11.32	6.71	11.26	5.68	8.04

TABLE 4: DSPBR Small and Midcap Reg G Sector Analysis for September 2010 to September 2011

Correlations

		RTN	AUTOMOBILE	CONSTRUCTION	DIVERSIFIED
RTN	Pearson Correlation	1	.635	.317	.167
	Sig. (2-tailed)		.250	.603	.788
	N	5	5	5	5
AUTOMOBILE	Pearson Correlation	.635	1	.431	-.594
	Sig. (2-tailed)	.250		.468	.291
	N	5	5	5	5
CONSTRUCTION	Pearson Correlation	.317	.431	1	.019
	Sig. (2-tailed)	.603	.468		.975
	N	5	5	5	5
DIVERSIFIED	Pearson Correlation	.167	-.594	.019	1
	Sig. (2-tailed)	.788	.291	.975	

	N	5	5	5	5
ENGINEERING	Pearson Correlation	-.395	-.369	-.744	-.280
	Sig. (2-tailed)	.511	.541	.149	.648
	N	5	5	5	5
FINANCIAL	Pearson Correlation	-.266	.434	-.204	-.736
	Sig. (2-tailed)	.665	.466	.742	.156
	N	5	5	5	5
FMCG	Pearson Correlation	.635	.240	.802	.462
	Sig. (2-tailed)	.250	.697	.103	.433
	N	5	5	5	5
HEALTHCARE	Pearson Correlation	.034	-.238	-.685	-.058
	Sig. (2-tailed)	.957	.700	.202	.927
	N	5	5	5	5
SERVICES	Pearson Correlation	-.596	-.102	-.679	-.678
	Sig. (2-tailed)	.289	.870	.208	.209
	N	5	5	5	5
TECHNOLOGY	Pearson Correlation	-.177	-.699	.222	.886*
	Sig. (2-tailed)	.776	.189	.720	.046
	N	5	5	5	5
TEXTILES	Pearson Correlation	-.726	-.560	.319	.216
	Sig. (2-tailed)	.165	.326	.601	.727
	N	5	5	5	5

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