Exploring Strategies on Intelligent Funds Management

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Abstract. Apparently, management of portfolio is focused on developing optimal and superior investment plan for investor. Furthermore, managing the fund allocation of investor on different alternatives facilitates minimising the risk in comparison to fund investment within a single investment fund. Concerning the perspective of investor, it can be inferred that investors are likely to invest in alternative assets that will increase their ability to attain adequate amount of return in low risk profile. Hedging is an important tool that helps in increasing the quality of the investment and enhances the ability of the investor to mitigate the chances of risk associated with such transactions.

Introduction

Hedging is an important tool that helps in increasing the quality of the investment and enhances the ability of the investor to mitigate the chances of risk associated with such transactions. Investing the allocated fund in a portfolio of minimum risk and high return is important for a hedge fund manager with investment of fund into different financial instruments including stocks, bonds, shares, mutual funds, and/or cash among others. The fund manager often plans the portfolio that minimizes the risk associated with an investment by distributing the risk over a range of assets. This not only protects the investor from the risk with investment but also enhances the chances of attaining adequate return. Stock Track platform, an investor has an option to access virtual account of brokerage and develop their investment portfolio (Darst, 2013; Kevin, 2008). Stock Trak account enables an investor to investment in stocks, bonds, mutual funds, future and other financial assets traded worldwide. Investment decision emphasises over developing appropriate portfolio that intends to minimise the risk increasing the return earned. Apparently, management of portfolio is focused on developing optimal and superior investment plan for investor. Furthermore, managing the fund allocation of investor on different alternatives facilitates minimising the risk in comparison to fund investment within a single investment fund (Khan & Jain, 2011). Concerning the perspective of investor, it can be inferred that investors are likely to invest in alternative assets that will increase their ability to attain adequate amount of return in low risk profile. The role of investment management is to develop a portfolio considering the risk-return opportunities in the portfolio (Shailaja, 2008; Shim & Siegel, 2007). The portfolio includes Real Estate Investment (REIT), Large Capital Stocks (LCS), Small Capital Stocks (SCS), Intermediate Government Bonds (IGB) and cash.

Risk and Return Aspect in the Investment Measure

Investment in diversified financial instruments allows investors to develop their by distributing the risk associated with an investment and reap adequate returns. As asset alternative is often selected from different risk-return class. This supports the development of a proper portfolio that will help in hedging the risk aligned with a specific investment plan. For instance, five securities provide investor with the return of 10%, 12%, 14%, 15%, and 20% with relative risk of 2%, 2.5%, 4%, 7%, and 10% respectively. Thus, combining all the securities within one investment portfolio instead of investing in only one security will help to lower the risk and maximise the return. Correspondingly, REITs are identified to be total return investments and highly profitable for the investors in the previous years. Investing in such type of financial instrument will ensure gaining dividends at higher rate with prospective of capital appreciation in long run. REIT stock investment in long run is identified to have return, which is lower than the return from stock investment with high growth. In addition, the return on such investment provides higher return in comparison to bonds. Besides, 90% of REITs taxable income as defined by law and distributed every year to the shareholders. REITs investment also facilitates possibility of earning higher dividends. With the consideration of earning super return from investment, this financial instrument is included in the portfolio. Moreover, return of REITs in short run is noted to be reflecting on a similar trend with that of return from equities investment (National Association of Real Estate Investment Trusts, 2016; Figueiredo, 2011). On the other hand, investment in LCS adds stability to the portfolio with a boost in the return. As the large-cap companies are less likely to face insolvency and provide potentiality earning, the inclusion of such stock will help in attaining steady dividend. Additionally, including such investment alternative in the portfolio is that the price of stocks does not often slate for superior intensification within a particular time span due to well-established position of the company in the market. However, regardless of low growth in price of the stock, large companies often noted to be utilising their huge reserve to compensate its shareholders. Thus, such dividends facilitate to gain comprehensive return to the investors at lower level of risk (Villalta, 2012; Carlin, 2009).

The development of the performances of the Small Cap business has instigate the need for in-depth research and development (R&D) practices that helps in enhancing the prospect of growth in the share price of such companies (Bares, 2011). Moreover, IGB could also be a suitable approach of investment for the investors, as it enables an investor to acquire fixed rate of interest for the investment. Such type of investment is a secured form of investment and attaches low risk. The maturity period of such type of investment ranges from 5 to 10 years and include international and/or domestic bonds of government. The return of such investment depends on changes in rate of interest and often associated with lock-in-periods (Donaldson, 2013; Maeda, 2009). Conversely, cash investment is also a prominent financial instrument that can be effective for hedging within a portfolio. Investment in this type of portfolio allows earning return in short term and includes the form of interest payment. Moreover, such investment is often regarded to be earning low return in comparison to other investment alternatives (Fischer & Wermers, 2012). Generally, investor faces difficulty in determining optimal portfolio that will suiting his needs and safeguarding from exposure to market risk. Concerning the different set of investment objectives, portfolio of financial investment allow to lower, the possibility of risk attached with investment in a particular security and maximise their return from investment. In this context, the investment combination of different securities allows the investor to maximise the profitability reducing risk (Reilly & Brown, 2011; Swensen, 2009).

The return from the different securities including REIT, LCS, SCS, IGB, and cash during the recent year has been listed as below.

	REITs	**LCS**	**SCS**	**INGB**	**CASH**
1st Week	9.1202	10.6054	12.0457	2	0.0097
2nd Week	-3.4893	2.9102	4.8291	3.04	0.0049
3rd Week	14.29	11.82	15.72	4.73	0.0049
4th Week	10.41	12.59	12.25	2.82	0.0049

[Table 1]

The average return on the investments REIT, LCS, SCS, IGB and cash in the month was 7.58%, 9.48%, 11.21%, 3.14% and 0.0061% respectively. Additionally, the risk in the investments were 6.66% in REIT, 3.85% in LCS, 3.96% in SCS, 0.99% in IGB and 0.002% in Cash.

Efficient Frontier Portfolio

Efficient Frontier							
	REITs	LCS	SCS	INGB	CASH	Risk	Return
Max Risk	36%	27%	16%	6%	15%	0.8247	1.45035
	10%	13%	11%	24%	43%	0.3614	0.36137
Min Risk	3%	1%	3%	33%	60%	0.1458	0.35299

[Table 2]

Concerning the performance of securities, Efficient Frontier Portfolio has been developed. The calculated data revealed the fact that the portfolio with 36% REIT, 27% LCS, 16% SCS, 6% IGB, and 15% in cash is likely to provide maximum return with high risk. On the other hand, if the investor to build their portfolio with relatively lowers level of risk can invest in a portfolio that includes 3% REIT, 1% LCS, 3% SCS, 33% IGB, and 60% in cash portfolio and acquire lower return. The calculation reflected that return in the investment directly based on the mix of securities that are reflecting on diverse risk and return constrain. In this relation, from an analytical perspective of the calculation, high weighting in REITs, LCS, and SCS investment enhances the amount of return of the investor with relative increase in the risk level in comparison to portfolio with low weighting.

Current Weighting of Portfolio

The current portfolio of investment includes 10% investment in REITs, 40% in the large cap stocks, and 20% in the small cap stocks. The rest 25% of the total fund is allocated in bonds, which includes 15% in intermediate bonds and 15% in cash in the form of T-bills. From the data presented, it reflected that investing in small cap stocks is perceived to provide maximum return to investor but the risk of investing in such security is relatively higher. The combination of the investment in such weighing allows earning return of 1.45 with relative risk of investment of 0.63.

Current Weighting						Portfolio	
	REITs	LCS	SCS	INGB	CASH	Risk	Return
WGT	0.10	0.40	0.20	0.15	0.15	0.63	1.45

[Table 3]

Investors aim to maximise their level of profitability from their investment constantly with a simultaneous reduction in the associated risk level (Monks & Lajoux, 2010; Bhat, 2009). The following below table reflects the allocation of fund without investment in the real estate and attaining marginal risk and return under different investment horizon.

Portfolio with No Investment in REITs

No REITs							
	REITs	LCS	SCS	INGB	CASH	Risk	Return
Max Risk	0%	80%	20%	0%	0%	1.9403	4.9126
	0%	61%	39%	0%	0%	0.9720	2.5316
	0%	43%	22%	25%	10%	0.6949	1.8327
	0%	25%	17%	27%	31%	0.4768	1.2820
	0%	15%	3%	17%	65%	0.2170	0.5744
Min Risk	0%	0%	0%	0%	100%	0.0005	0.0015

[Table 4]

In the portfolio that comprises of combination of large and small cap stock in around 80% and 20% weighting relatively provide return and risk of 4.91 and 1.94 respectively. Additionally, if large cap stock reduces to 61% from 80%, with a simultaneous increase in SCS investment from 20% to 39% decreases return to 2.53 and risk of 0.97. Apparently, as per the above presented calculation, the investment measure comprises of around 43% of LCS, 22% of SCS, 25% in INGB and 10% in Cash providing a return of 1.83 and with a relative risk to be around 0.69. In addition, adding of other low risk securities in high proportion the relative risk as well as return is lowered, 15% of LCS, 3% of SCS, 17% in INGB and 65% in Cash, which is entitled to provide return of 0.57 with risk of 0.21. Furthermore, from the above calculation, 100% of cash investment significantly lowers the risk level and helps in avoiding greater amount of risk exposure. In this regard, risk and return from such portfolio would provide return of 0.0015 and 0.0005.

Comparing the investment measure with different option under portfolio with no investment in REITs under the efficient frontier portfolios, it is evident that portfolio with 43% of LCS, 22% of SCS, 25% in INGB and 10% in Cash provide superior return than the efficient frontier portfolio with relative lower level of risk in investment.

Portfolio with Investment in REITs

20% REITs							
	REITs	**LCS**	**SCS**	**INGB**	**CASH**	**Risk**	**Return**
Max Risk	20%	0%	80%	0%	0%	0.8991	2.0918
	20%	22%	31%	27%	0%	0.7335	1.5796
	20%	18%	24%	38%	0%	0.6714	1.4220
	20%	15%	24%	27%	14%	0.6265	1.2960
	20%	12%	13%	21%	34%	0.5043	0.9550
Min Risk	20%	0%	0%	0%	80%	0.2671	0.3043

[Table 5]

Similarly, the portfolio including 20% investment in REITs has been analysed with other investment alternatives to determine return and risk combination. Keeping the portfolio with 20% of total investment in REIT with rest 80% of the investment in SCS is identified to be attaining return of 2.09 and risk of 0.89. However, risk is identified to be less if 20% of the fund is invested in REITs along with 80% of investment in cash. Such investment alternative supplements return of 0.30 with related risk of 0.26 increasing portfolio performances. High rate of fluctuation in the equity market facilitate the opportunity of earning stabilised return by investing in REITs. Drawing inferences from the above calculation, 20% of investment in the REITs provides significant opportunities to the investor to take advantage of investing in other securities, which thereby allow maintaining efficient risk, and return trade-off. Apparently, investor with the intention to minimise the level of risk will be able to lower the risk by hedging the associated risk of one asset with that of the other.

Notably, comparing the different portfolios with 20% constant investment in REITs with efficient frontier portfolios, it can be inferred that investment portfolio with 20% of investment in REITs, 22% in LCS, 31% in SCS, and 27% in INGB are entitled to gain high return than the portfolios in efficient frontier with relative lower level of risk. This investment portfolio provides return of 1.57, which is comparatively higher than the return of efficient frontier security return calculated to be 1.45. On the other hand, the relative risk of this investment is 0.73, which is again lower than efficient frontier security risk attained is 0.82.

Portfolio with 20% investment in REITs & 10% in SCS

20% REITs & 20% SCS							
Max Risk	**REITs**	**LCS**	**SCS**	**INGB**	**CASH**	**Risk**	**Return**
Max Risk	20%	70%	10%	0%	0%	0.8864	1.8549
	20%	54%	10%	15%	1%	0.7904	1.6406
	20%	31%	10%	25%	14%	0.6350	1.2729
	20%	15%	10%	36%	19%	0.4618	1.0388
	20%	2%	10%	35%	33%	0.4311	0.7862
Min Risk	20%	0%	10%	35%	35%	0.4157	0.7483

[Table 6]

The portfolio having 20% of REIT and 10% of SCS as represented in the above table depicts risk return trade-off of different securities. The portfolio with 20% of REIT, 70% of LCS, and 10% of SCS is identified to have maximum return and has high risk. On the other hand, the security with 20% of REIT, 10% of SCS, 35% of INGB and 35% of Cash investment has minimum risk. Concerning the comparison of investment of 20% of fund in REIT and 10% of SCS along with different investment alternatives reflects that investment with 20% of the fund allocation in REIT, 54% in LCS, 10%in SCS, 15% LNGB and 1% in Cash is an efficient security combination in comparison to portfolios in other efficient frontiers.

Portfolio with 20% investment in REITs, 20% in LCS & 10% in SCS

20% REITs, 20% LCS & 10 SCS							
	REITs	**LCS**	**SCS**	**INGB**	**CASH**	**Risk**	**Return**
Max Risk	20%	20%	10%	42%	8%	0.5838	1.1713
	20%	20%	10%	40%	10%	0.5799	1.1587
	20%	20%	10%	39%	11%	0.5778	1.1524
	20%	20%	10%	38%	12%	0.5759	1.1461
	20%	20%	10%	36%	14%	0.5719	1.1336
Min Risk	20%	20%	10%	30%	20%	0.5601	1.0959

[Table 7]

From stated portfolio combinations, the risk and return trade-off with investment in 20% REITs, 20% LCS & 10% SCS along with other securities has been identified to be quite effective. The portfolio comprising an allocation of fund on REIT of 20%, LCS of 20%, SCS of 10%, INGB of 42%, and 8% of Cash provide maximum return of 1.17. Whereas, weighting in REIT of 20%, LCS of 20%, SCS of 10%, INGB of 30% and 20% of Cash respectively reduce the risk from 0.58 to 0.56. Such investment portfolio can be classified under low risk investment alternatives. Comparing the performance of portfolio risk and return with efficient frontier, it is worth mentioning that in the risk class, no portfolio provides higher return than efficient frontier portfolios.

GSPC S&P 500, FTSE 100, & S&P GSC Comparison with the Portfolio

The performance of GSPC S&P 500, FTSE 100, and S&P GSC in terms of risk and return on investment of last month has been presented below.

April to May	GSPC S&P 500			FTSE 100			S&P GSC	
	2,078.83			6,343.8 0			335.85	
1st Week	2,089.37	0.50		6,310.4 0	-0.52		345.69	2.92
2nd Week	2,067.17	-1.06		6,241.9 0	-1.08		348.34	0.76
3rd Week	2,057.55	-0.46		6,125.7 0	-1.86		343.39	-1.42
4th Week	2,057.55	0		6,104.1 9	-0.35		362.92	5.68
Return		-0.26			-0.96			1.99
Risk		0.58			0.59			2.63

[Table 8]

Based on comparison of the scenario of investment in such index in the market, it can be affirmed that return of GSPC S&P 500 and FTSE 100 in the last one month is weak and provide negative return. However, S&P GSC index provide positive return to investor but entails relatively high risk. Comparing the risk return trade-off of such indexes with the portfolio it can be affirmed that return in S&P GSC index is higher than the portfolio, as S&P GSC index provide return of 1.99 whereas, the portfolio return was 1.83. However, considering the risk in the investment, S&P GSC index is much riskier than that in current portfolio weighting. Thus, the obtained portfolio risk and return is noted to be outperforming the market indexes and provide higher profitability to investor. Thus, above critical assessment of different investment alternatives and portfolio investment that include 43% of LCS, 22% of SCS, 25% of INGB, along with 10% of Cash, is identified to be a suitable mix of securities that help in maximising overall return and lower the level of risk.

Overall, above analysis and discussion indicate that allocation of fund in diversified securities provides better opportunities to investor and minimise the risk maximising the return. Different combination of investment alternatives has been analysed in the paper and based on risk and return scenario of portfolios, it can be concluded that investment weighting 43% of LCS, 22% of SCS, 25% of INGB, with 10% of Cash is highly profitable investment alternative. The analysis thus attained reflects that this combination of securities out-perform the performance of three key market indexes including GSPC S&P 500, FTSE 100, and S&P GSC in the recent period.

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