

Performance evaluation of mutual funds in Oman: An investors' perspective

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Abstract

Mutual Funds as one of the investment options have not been very popular particularly in the Middle East countries in spite of huge investment potential. Investors in the region have long been skeptical of the safety and returns of the investment options as the awareness about investment has been low for most of the investors of the region. This study aims to analyze the performances of mutual funds in Oman on the basis of risk and return criteria using different tools such as Sharpe ratio, Treynor ratio, and Jensen Alpha. The basic objective of the study is to provide to the investors a comparative study of the performances of the various mutual funds on offer in Oman and give an insight about the possible good choices to invest. The study concludes that mutual funds in Oman during the last five years have been performing consistently and earning good returns for its investors.

1. Introduction

Mutual Fund pools the saving of a number of investors who share a common financial goal. The money thus collected forms a fund which is invested in a cross section of industries and sectors. Mutual fund investment follows the principle of diversification as it reduces the risk and brings in better returns as all securities do not move in the same direction and in the same proportion at the same time. The profits and losses are shared by the investors in proportion to their investments. Thus increasingly mutual funds have become the most suitable instrument to the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at relatively low cost.

Mutual funds in Oman were launched for the first time in the year 1995 when the financial markets in Oman reached a maturity stage. Presently there are around 17 mutual funds in operation and three of them are sharia compliant funds. One of the funds, Tilal Fund, is a real estate fund and the sixteen others are focused on investment in the equities either listed at Muscat Securities Market (MSM) or in GCC countries. All funds provide an investment alternative for the residents in Oman. With the recent decline in oil prices across the globe, there is a subsequent decline in the economic performance of the financial sector in the entire Gulf Cooperation Council (GCC) countries. This has directly affected the investment climate and thus also the performance of the mutual funds. Mutual fund industry in Oman is well regulated by the Capital Market Authority (CMA) which keeps on bringing legislations for the protection of the investors. The main objective of all the funds in Oman is to attain long term capital appreciation in addition to dividends payouts for its unit holders.

Global Investors, especially Omani investors need to know whether Mutual Funds in Oman are performing as per their expectations or not and what the future hold for them by investing in these mutual funds.

2. Literature Survey

Measuring the performance of mutual funds has been the focus of numerous researchers all over the world since the concept of mutual fund evolved. The first such significant study was undertaken by Treynor (1965) wherein he hypothesized the concept of reward to volatility ratio as a methodology for evaluating mutual fund performance. This study was followed by Sharpe (1966) who gave 'Sharpe Index' as a measure which takes into account both risk and return. Capital Asset Pricing Model (CAPM) was used as a performance measure by Jensen (1968). Market indices as a proxy for the market to compare and measure mutual funds' performance were proposed by Carlson (1970). Later Kane and Marks (1988) developed conditions under which Sharpe measure would correctly and completely capture market timing of the fund managers. In later years' researchers focused on other factors which greatly affected the performance of mutual funds like size of mutual fund, characteristics of fund managers, investment style, transaction cost, and timing of investment. Researchers like Chen et al (1992), Ang et al (1998) and Golce (1996) established that there exists a positive relationship between the size of mutual funds and their performances. However, Grinblatt and Titman (1992) did not find any relationship between the size of mutual funds and their performances. Shukla and Inwegen (1995) in their research agreed that local fund managers outperform as compared to international fund managers as they have superior knowledge about local environment.

Research conducted by Ang et al argued that three basic characteristics of fund managers – risk taking abilities, insight into critical information, and personal superior skills of evaluation, are crucial in the performance of mutual funds.

Performance of mutual funds is directly affected by the investment style of the fund managers was established by Indro et al (1998) who also agreed that consistency in investment is a crucial aspect of investment style. Mc Clarnon (2004) established that performance of the MF has direct bearing to the timing of the mutual fund in financial markets. Many researchers like Blake *et al* (1993); Carhart (1997) Elton *et al* (1996) and Liljeblom and Loflund(2000) have hypothesized that there exists a link between performance of MF and its transactional cost called expense ratios. They agreed that when fund managers pursue an aggressive policy, they need bigger teams for research and this increases the transaction costs thus influencing the profitability of the mutual funds.

Merely understanding and calculating the performance of a mutual fund does not guarantee an investor that the performance of the MF will improve in future or at least continue to be the same. Mutual fund performances are not guarantee of continued future returns too. Several researchers such as Blake *et al* (1993), Bogle (1992), Brown and Goetzman (1995) and Brown *et al* (1992) have raised doubts on the ability of mutual funds to perform better in the future, based on their past performances.

However, Carhart (1997), Gruber (1996), Ippolito (1992) and Capon *et al* (1994) in their research have argued that the past performance of MFs does indicate clear future performances. In fact Goetzman and Ibbotson (1994) in their researches clearly indicate that past performance of any mutual fund for the last two years clearly predict the future performance of the mutual fund for at least next two years. The question is whether investors can rely on performance evaluation indices of MFs, to be assured of future good performance of the MF in which they have invested.

3. Objective of this Study:

The objective of this study is to:

- Analyze the quarterly performance of equity based mutual funds in Oman which were launched before 2012 using established tools and techniques.
- Study the relationship of NAV of all mutual funds with market based index (MSM)
- Evaluate and recommend which mutual funds hold more potential for investors in Oman.

4. Methodology:

This research is poised on the quarterly NAV data of mutual funds available in the website of Muscat Securities Market (www.msm.gov.om) from the year 2011 till Sept 2015 (the 3rd quarter of 2015). For the analysis of the data following techniques / instrument are used:

- Average quarterly return
- Total and market risks.
- Risk adjusted Performance.

The selected funds are analyzed using the above mentioned instruments and other statistical tools to determine their performances and rank them in order of the best performing MFs.

5. Results of Analysis:

The entire collected data was analyzed using the tools and the results obtained from them are discussed below

5.1 Average of Quarterly Return

Based on the average of the quarterly returns, Table 1 shows the MFs arranged in accordance to the average quarterly returns and shows that Oryx Fund, Vision Emerging GCC Fund, and Vision Real Economy Fund are the top three performing funds.

Funds	Ave Return
Oryx Fund	2.292%
Vision Emerging GCC Fund	2.270%
Vision Real Economy Fund	1.662%
United GCC Fund	1.515%
First Mazoon Fund	0.192%
Vision Emerging Oman Fund	0.147%
Oman Al Arabi Fund	-0.043%
Majan Capital Fund	-0.449%
Investment Stabilizer Fund	-1.206%
Muscat Fund	-1.232%
Al Amal Fund	-2.276%

Table 1 : Quarterly Average Return

5.2 Total and market Risks

Risk and volatility are important indicator to judge the performance and selection of the mutual funds. Table 2 shows the two types of risks- total risk and market risk.

Vision Emerging GCC Fund, Oryx Fund, and Vision Real Economy Fund are the top three funds showing higher degrees of volatilities as indicated by the standard deviation calculation given in the table

Table 2 indicates Vision Emerging GCC Fund, Oryx Fund, and Al Amal Fund are having higher beta values but with lesser R-square values. Though, these funds are riskier than others, their variations are less dependent on market variation. On the other hand, United GCC Fund is having its beta as 1.13 but 74.248% of its variation is explained by the market variations.

It can be noticed that beta values of the three funds are also among the highest indicating their sensitivity with the market fluctuations. However, their R^2 values ($0 \leq R^2 \leq 1$), which are not high, indicate that a significant portion of funds' returns do not depend on the market but are explained by the respective fund managers' decisions making skills.

ds	St. Dev.	Beta	R ²	P-value
Vision Emerging GCC Fund	10.384%	1.252	50.099%	0.00069
Oryx Fund	8.703%	1.218	67.486%	0.00002
Al Amal Fund	8.457%	1.186	67.824%	0.00001
Majan Capital Fund	8.401%	1.176	67.561%	0.00002
United GCC Fund	7.614%	1.130	74.248%	0.00002
First Mazoon Fund	8.053%	1.093	63.538%	0.00003
Vision Real Economy Fund	5.670%	1.075	55.283%	0.00026
Investment Stabilizer Fund	6.358%	1.026	89.823%	0.00000
MSM	5.872%	1	1	
S&P GCC	9.087%	1	1	
Muscat Fund	5.865%	0.994	98.981%	0.00000
Oman Al Arabi Fund	6.751%	0.960	69.735%	0.00001
Vision Emerging Oman Fund	8.488%	0.893	85.490%	0.00000

Table 2 : Total Risks and Market Risks of Mutual Funds

The last column of Table 2 shows the P-values for testing the following hypotheses for betas of all the chosen funds.

$H_0: \beta = 0$, against

$H_1: \beta \neq 0$

As per the P-values mentioned in the above table, the null hypotheses for all the funds are rejected and, therefore, the betas of the funds are not zero.

5.3 Risk Adjusted Performance:

It is a fact that all investments have inherent risk, leaving risk free investments. The returns and risks are quantifiable and can be analyzed using historical data. Investors and fund managers seek suitable indicators to project the funds' return and risks associated to them. The past performances of mutual funds are not definite indicators for the future results. However, some clues can be found about quality of funds if correct performance measuring tools are applied. This section will use the following measures to measure the past performances of the selected funds using:

- i. Sharpe Ratio
- ii. Treynor Ratio or Reward to Volatility Ratio
- iii. Jensen Alpha or Ex-Post Alpha

In calculation process, the annual risk free return is assumed to be 5% based on the government of Oman bonds during the last ten-year period. It is reduced to quarterly risk free return by using the following formula.

Annual risk free return = 5%:

$$\text{Quarterly rate of risk free return: } R_f = (1 + 0.05)^{\frac{1}{4}} - 1$$

$$R_f = 1.05^{0.25} - 1 = 0.0122722 = 1.22722\%$$

5.3.1 Sharpe Ratio

Sharpe ratio (William Sharpe 1966) is one of the most used tools in measuring performances of securities or funds because it is very simple to calculate and comprehend. The

Sharpe ratio shows the ratio extra return one takes by holding a riskier portfolio. It is calculated as:

$$\text{Sharpe Ratio} = \frac{(R_p - R_f)}{\text{St. Dev.}}$$

Where:

R_p : Expected portfolio return

R_f : Risk free return

St. Dev.: Standard deviation of the fund.

The following table (Table 3) lists the mutual funds in Oman ranked on the basis of the Sharpe ratio

Funds	Sharpe ratio	Rank
Oryx Fund	0.122	1
Vision Emerging GCC Fund	0.100	2
Vision Real Economy Fund	0.051	3
United GCC Fund	0.038	4
First Mazoon Fund	-0.129	5
Oman Al Arabi Fund	-0.188	6
Vision Emerging Oman Fund	-0.190	7
Majan Capital Fund	-0.199	8
Investment Stabilizer Fund	-0.383	9
Al Amal Fund	-0.414	10
Muscat Fund	-0.419	11

Table 3: Ranking of Funds According to Sharpe Ratio

5.3.2 Treynor Ratio or Reward to Volatility Ratio

Treynor ratio also uses the same concept of measuring the performance of portfolio by measuring the excess return against the systematic risk, the un-diversifiable risk. The ratio uses beta which measures the volatility of the portfolio or security against the market. The beta of the market is one.

$$\text{Treynor Ratio} = \frac{(R_p - R_f)}{\beta}$$

Where:

R_p : Expected portfolio return

R_f : Risk free return

β : Beta value of the fund.

Funds	Treynor Ratio	Rank
Oryx Fund	0.009	1
Vision Emerging GCC Fund	0.008	2
Vision Real Economy Fund	0.004	3
United GCC Fund	0.003	4
First Mazoon Fund	-0.009	5
Vision Emerging Oman Fund	-0.012	6
Oman Al Arabi Fund	-0.013	7
Majan Capital Fund	-0.014	8
Investment Stabilizer Fund	-0.024	9

Muscat Fund	-0.025	10
Al Amal Fund	-0.030	11

Table 4: Ranking of Funds According to Treynor Ratio

Rankings of the funds, as shown in Table 3 and Table 4, with respect to two ratios- Sharpe that indicates the security risk adjusted return, and Treynor ratio showing market risk adjusted return, indicate that top 5 funds are the same. This means that fund managers of the respective funds managed both the risks over the selected period of study efficiently and as a result gave reasonable good return to the investors. It is also noticeable that Oryx Fund manages security risk more efficiently than the Vision Emerging GCC Fund. The efficiency of handling portfolio risk of Oryx Fund is 22% more than Vision Emerging GCC Fund ($\frac{(0.122 - 0.100)}{0.100} \times 100$). However, managing the market risk, Oryx Fund is 12.5% more efficient than Vision Emerging GCC.

5.3.3 Jensen Alpha or Ex-Post Alpha

One of the main tenets in financial analysis is that the higher return is expected from the riskier security or portfolio as an investor will only be willing to invest in securities or funds if he or she is well compensated with the risk involved in it. Jensen Alpha (Michael Jensen, 1968) measures risk adjusted performance of a security or portfolio comparing the return with the expected return on the basis of Capital Asset Pricing Model (CAPM).

Jensen alpha formula is given below:

$$\alpha = R_p - [R_f + \beta_p (R_m - R_f)]$$

- R_p : Expected portfolio return
 R_f : Risk free return
 β_p : Beta value of the portfolio or fund.
 R_m : Average return of the market

The higher value of the alpha indicates that the fund has earned more than what was predicted by applying CAPM.

In Table 5, the difference between average return and expected return using CAPM generates Jensen alpha. It is also evident from the table that the first four funds' Jensen alpha values are significantly large taking into account of their expected returns using CAPM. These show very noticeable achievements of the funds especially when the funds have had negative expected returns, higher values of beta with lower values of R^2 . All this signify that the funds were managed very efficiently.

Funds	Ave Ret	Ex Ret (CAPM)	Jenson alpha	Beta β	R^2
Vision Emerging GCC Fund	2.27%	-1.11%	0.034	1.252	0.501
Oryx Fund	2.29%	-1.05%	0.033	1.218	0.675
Vision Real Economy Fund	1.66%	-0.78%	0.024	1.075	0.553
United GCC Fund	1.52%	-0.88%	0.024	1.13	0.742
First Mazoon Fund	0.19%	-0.81%	0.01	1.093	0.635
Vision Emerging Oman Fund	0.15%	-0.44%	0.006	0.893	0.855
Oman Al Arabi Fund	-0.04%	-0.56%	0.005	0.96	0.697

Majan Capital Fund	-0.45%	-0.97%	0.005	1.176	0.676
Investment Stabilizer Fund	-1.21%	-0.69%	-0.005	1.026	0.898
Muscat Fund	-1.23%	-0.63%	-0.006	0.994	0.99
Al Amal Fund	-2.28%	-0.99%	-0.013	1.186	0.678

Table 5: Ave. Ret., Exp Ret., Jensen Alpha, Beta, and R²

Table 5 above shows the ranks of the funds according to Jensen alpha values. The first five ranked funds based on their values of Jensen alpha are the same funds that maintained the first five positions when they were ranked according to Sharpe and Treynor ratios, refer to Table 3 and Table 4.

6. Conclusion

Based on the analysis of the mutual funds in Oman with respect to their performance the researchers are able to conclude that MFs in Oman still are one of the most viable options for the Omani residents and for the international investor who wish to park their funds in these avenues.

This analysis shows that Vision Emerging GCC Fund, Oryx Fund, Vision Real Economy Fund, and United GCC Fund have been very efficiently managed by their fund managers who are experts and understand Oman and other GCC markets very well. Both the aspects, i.e. risk and return, have been fairly handled with high level of consistency over the period 2011 to 2015.

Majority of mutual funds in Oman have a positive Jansen Alpha ratio indicating the very good performance even in the uncertain environment leading to higher risk scenario. With the changing scenario of the global economy due to oil price crash, it remained to be seen and analyzed whether these mutual funds will be able to maintain and sustain the good performance they have achieved in the last five years. The researchers are of the opinion that mutual funds still remain a safe bet for most of the retail investors in the Oman and it is one option worth looking into for future investment portfolio diversification and formulation.

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