Performance Evaluation of Mutual Funds in Egypt

Heba E. Ahmed\textsuperscript{a}, Rehab A. Osman\textsuperscript{b}, Asuil Alaagam\textsuperscript{c}

\textsuperscript{a}Assistant Professor  Qassim University ,SA

\textsuperscript{b} Research Assistant, Economic and Social Research Bureau, Sudan

\textsuperscript{c} Lecturer, Qassim University, SA

*Corresponding author: Heba Elsayed Ahmed Assistant Professor, College of Business and Economics, Qassim University, SA. Email: Ha.ahmad@qu.edu.sa

Abstract

This paper the evaluate the performance of the Mutual funds in Egypt by assessing their ability to attract investors savings and generate profitable returns to increase the volume of investment and achieve economic benefit, using annual dataset and employing a sharp and Treynor Indexes , our results show that the return rates on the listed funds were relatively low in Egypt, but some of the funds had higher returns than government treasury bills, which averaged 9.9213. The highest rate was 21.21% and 5.5% the lower rate of return. However, a number of funds achieved negative values as their rate return was lower than the rate of return on treasury bills, and the risk indicator in the Fund was higher as Faisal Bank mutual fund, which had – 3.47% rate of return.

Keywords: Mutual Funds, Investment Return, Risk, Sharp Model, Treynor Model, Egypt
1- Introduction:

Mutual Fund is an existing portfolio of assets into which someone may invest directly, it can be consider as a popular investment vehicles for both small and large investors as many of them make choice to enter the world of real money through investing via a mutual funds.

The paper aims to assess to what extent the Mutual funds in Egypt have been able to attract investors' savings and generate profitable returns to increase the volume of investment and achieve economic benefit, by evaluating its performance, sharp and Treynor Indexes for these purpose.

The reason of choosing Egypt is because of a relatively recent experience in the field of mutual funds, which began in the mid-1990s, in addition to economic problems faced Egypt as the Egyptian revolution carries many economic challenges such as low foreign direct investments (FDI), a high budget deficit, and a high debt. Double-digit inflation has been one of the most visible features of the Egyptian economy in recent years which resulted in the declining of the purchasing power, it was necessary to have an organized and active market for securities to catch up with development by exploiting marginal and foreign resources and reinvesting them.

Egyptian mutual funds established in 1994 with the first mutual fund in the industry field. Faisal Islamic Bank of Egypt was the first to break into the field of establishing Islamic investment funds in the year 2004.

The importance of study comes from the significance role that mutual funds play as a financial vessel owned by thousands of investors, and the capital of the Fund is supported
by millions, and managed by experts who invest on the best companies to ensure the best return possible. Investment funds are a more appropriate means for small investors, since the fund contains many stocks and bonds. Consequently, the investor has the advantage of diversification and relatively less risk than direct investment in the stock exchange.

The rest of the paper is organized as follow, section 2 reviews the literature. Section 3 provides a brief background of mutual funds. Section 4 Egypt experience in mutual funds. Section 5 presents the dataset and the econometric model. Section 6 concludes and discusses the policy implications.

The Methodology

Evaluating the performance of mutual funds in general, mainly related to the determination of the success of the portfolio manager to achieve balance between the different rates of return and acceptable levels of risk. Thus measuring the levels of risk associated with those returns during a certain time is also important. There are many methodologies to measure the performance of mutual funds. Since 1965 Treynor, Sharpe were the first researchers whom evaluate fund performance (Treynor, 1965 and Sharpe, 1966).

In this section the performance of mutual funds will be evaluated in Egypt, using sharp and Treynor Indexes, as follow:

a. **Treynor index:**

Treynor (1965) developed a method for measuring performance and evaluating the fund by using Treynor's ratio. This ratio estimates return generated by the fund over and above risk free rate of return (generally taken to be the return on securities backed by the
government, as there is no credit risk associated), during a given period and systematic risk associated with it (Beta). The equation form is shown as follow:

\[ (1) \quad TR = \frac{(RP - RF)}{\beta P} \]

Where:

TR: Treynor ratio
RP: Average fund return
RF: Average risk free rate
βP: Beta of the fund.

b. **Sharpe Index:**

The second method is Sharp index to evaluate performance of mutual fund, which is a an index of returns generated by the portfolio over and above risk free rate of return (\( \sigma \)) and the total risk associated with it. According to Sharpe (1966), it is the total risk of the portfolio that the investors are concerned about. So, the model evaluates portfolios on the basis of reward per unit of total risk, as shown in the following equation:

\[ (2) \quad SR = \frac{(RP - RF)}{\sigma P} \]

Where:

SR: Sharpe ratio,
RP: Average fund return,
RF: Average risk free rate (3– month T–Bill)
\( \sigma P \): Standard deviation of returns of the fund

The Data Sources:
The Egyptian data collected from The Egyptian Investment Management Association (EIMA) and Central Bank of Egypt.

2: Literature Review:

Rafay, Gilani and Izhar (2017) studied the performance of Islamic mutual funds and compared their volatility with KSE-30 index of Pakistan Stock Exchange. They used ARCH/GARCH models for empirical analysis and to test the volatility behavior of KMI-30 index and KSE-30 indexed mutual funds. They consider factors to compare performance include Return, Volatility, Net Asset Value (NAV), KMI-30 Index and KSE-30 Index. Five Islamic mutual funds were selected to test their performance and volatility, and its volatility compared with KMI-30 Index and KSE-30 Index by using ARCH/GARCH. Returns distributed to mutual fund were calculated for the period 2008 – 2013. The returns on the KMI -30 Index and KSE -30 Index has been used as factors for the returns on the market portfolio. The results show that returns and volatility of Islamic mutual funds are consistent with the performance of conventional mutual funds.

Baliyan and Rathi (2017) evaluate the performance of the emerging mutual funds in India, using risk–adjusted returns for the period 2013–2014. Data has collected for one financial year for 6 mutual funds. They found that HDFC Mutual Fund and ICICI Prudential Mutual Fund are less risky, while Reliance Mutual Fund is high risky. HDFC Mutual Fund has high return. The result of all study is that emerging mutual funds have not outperformed the market.

While Choudhary and Chawla (2014) in their study on Performance Evaluation of Mutual Funds: A Study of Selected Diversified Equity Mutual Funds in India, to analyze the
The performance of the growth-oriented equity diversified schemes on the basis of return and risk evaluation, by assessing various financial tests like Average Return, Sharpe Ratio, Treynor Ratio, Standard Deviation, and Coefficient of Determination (R²). The analysis depicts that majority of funds selected for study have outperformed under Sharpe Ratio as well as Treynor Ratio.

The main objective of Malaz (2013) was to find out the role of mutual funds case of the financial investment bank in activating Khartoum Stock Exchange, Has it been able to attract private sector savings? Investment funds that created by the bank for small investors are a real addition to activating Khartoum Stock Exchange. It was also found that the intensive promotion led to the emergence of foreign contributions in the funds, which is evidenced by the Sudatel Dollar second Fund.

The study of Stefea & Wadi and Abbas (2013) aimed to analyze the relationship between risk and return of Egyptian mutual funds, and the effect of mutual funds objectives on this relationship. It concludes that, when analyzing the relationship between risk and return Egyptian mutual funds have an effect on fund return, total risk and systemic. The study also found that there is an influencing between mutual fund’s objectives on Sharpe and Treynor Rations.

It has been noted from previous studies that there are many researchers have measured the performance of mutual fund in different countries using different metrics to evaluate the mutual funds such as, the survey method, Risk-Adjusted Returns, Average Return, Sharpe Ratio, Treynor Ratio. Each scale has acceptable results, for example in Sudan, the intensive promotion of funds led to the emergence of foreign contributions in the
funds, which is evidenced by the Sudatel Dollar second Fund. While in Egypt when analysis the relationship between risk and return they found the Egyptian mutual funds have an effect on fund return, total risk and systemic, an influence between mutual fund’s objectives on Sharpe and Treynor Rations is found. When the performance of Islamic mutual funds compared with the returns and volatility of conventional mutual funds it is found that there is a consistent. The resulting estimates generally vary less than standard estimates across alternative benchmark specifications. Regarding risk assessment it is found that HDFC Mutual Fund and ICICI Prudential Mutual Fund are less risky, while Reliance Mutual Fund is high risky, HDFC Mutual Fund has high return.

. A brief background of the mutual funds

3.1 Mutual Funds History

Historians are unsure of the origins of mutual funds and it can be traced back to more the one and half century ago. The mutual funds were born from the financial crisis that stunned Europe in the early 1770s. The British East India Company has borrowed heavily during the previous boom years to support its colonial interests. With the increase in expenses and decline of colonial revenues, the company sought to make a plan to save in1772 from the British treasury (IFIC, 2018)

The first mutual fund in the world was in 1774. Some mention the closed-end investment companies launched in the Netherland in 1822 by King William was the first mutual funds. It purposes to facilitate small investment in international government loans. The mutual
funds were originated in Belgium and thrived when transplanted in UK and USA (IFIC, 2018).

The Foreign and Colonial Government Trust of London is formed in 1868, which promised to manage the finances of the privileged classes in Scotland (Tripathy, 2007). Robert Fleming established Scottish American Trust in 1873 at Dundee.

In nineteenth century, there were many British investment trusts invested in American stocks. The closed end Boston Personal Property Trust was created in 1893. Massachusetts Investor’s Trust was the first open –ended mutual fund launched in Boston in March 1924 (Tripathy, 2007). The collapse of the stock market in 1929 led to a decline in the growth of the mutual funds. After stock market crash, these closed – end investment trusts were described as the “evil trusts” that manipulated the stock market and caused the Great Crash in 1929. In 1940, the Investment Companies Act has provided rules and regulations for set up and manage of mutual funds. In the 1950s and 1960s the popularity of mutual fund industry in U.S has increased because of innovations in products and services, and the first money market mutual funds were formed in 1979. Table 1 shows the positive of mutual funds growth during the last 50 years from 1940 to 1990. The mutual funds numbers grew from 68 funds in 1940 to more than 3000 funds in 1990 (Tripathy, 2007).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>68</td>
<td>73</td>
<td>103</td>
<td>161</td>
<td>361</td>
<td>426</td>
<td>564</td>
<td>665</td>
<td>857</td>
<td>1026</td>
<td>1247</td>
<td>1531</td>
<td>1843</td>
<td>2323</td>
<td>2618</td>
<td>2918</td>
<td>3000</td>
</tr>
</tbody>
</table>

Table 1: Number of Mutual Funds

Source: Mutual Funds In India: Emerging Issues (Tripathy, 2007)
3.2 Mutual fund Characterization and Classification

According to Leeuwen (2011) mutual fund is a pool of money and it is set up in the form of a trust. This money used to invest in different securities such as stocks, bonds, money market and other assets. Mutual fund is open-end investment companies and investors can invest in different companies and able to adjust their investment criteria and funds size over the time. Its policy set up by the Board of Directors and they oversee all activities of the fund, however, managing the fund does not belong to the Board’s tasks: the Board should only appoint a manager. Professional managers are responsible to operating tasks of mutual funds (Leeuwen, 2011).

**Figure 1: Broad Mutual Funds Types**

Source: (Leeuwen, 2011)

1.3.2 Growth Funds – Equity Funds
Equity fund is a high-risk fund and its return linked to stock markets. It is suited for investors who are seeking long-term growth. This fund includes Aggressive Growth Funds, Growth Funds, and Equity Income, Diversified Equity, Equity Index Funds, Value Funds, and Specialty Funds. (Rathi, 2017).

2.3.2 Money Market Funds – Liquid Funds

When investing in a money market fund, investors earn income by receiving interest on the money the fund lends to government and corporations. Since this loan is very short term, the interest rate fluctuates daily. Investing in a money market is less risky, highly liquid and saves for investment. Taxable and tax-free money market funds are invested in Certificates of Deposit and very short-term government, corporate, and municipal debt, such as Treasury Bills, commercial paper, and bankers’ acceptances, RBC Wealth Management (2017).

3.3.2 Hybrid Funds

These funds include a blend of equities, debts, and money market security. It has an equal proportion of debts and equity in its portfolio. It includes Balance Funds, Growth and Income Funds, Asset Allocation Funds, RBC Wealth Management (2017).

4.3.2 Debt–Income Funds

The money that is invested in medium to long-term debt instruments, issued by private companies, banks, financial institutions, and governments. When an investor purchases
income money, the current income is received in the form of an interest payment. The value of this fund may fluctuate based on changes in market interest rates, the credit rating of the institutions issuing the bonds or prepayments made by the institutions issuing the bonds, RBC Wealth Management (2017). This debt fund is low risk portfolio funds that seek to generate fixed current income to investors. It includes Diversified Debt Funds, Focused Debt Funds, High Yield Debt Funds, Assured Return Funds and Fixed Term Plan Series.

5.3.2 Concept of mutual Funds

With the growth of the economy and the capital market over the world, the size of investors in mutual funds has increased. After the stock market crumbled, investors began looking for a good opportunity, mutual fund in this situation was the best choice, they are designed to mobilize the saving of people money and invest in a mix of corporate and Government Securities (Tripathy, 2007).

The mutual fund is the trust registered with the Securities and Exchange Board, which collects funds from individual and corporate investors and invests on behalf of them. Income earned through these investments and the capital estimate realized by its unit holder in proportion to the number of units owned by them. This income is managed professionally on behalf the unit’s holders, so that each investor holds a percentage of the portfolio, Hall (2010).
4. Egypt economy and experience in mutual funds

The Egyptian mutual funds established in 1994 with the first mutual fund in the industry field. In 2012 another seven mutual funds established, so the total number of funds became 90 by 2013. These mutual funds working under the supervision of the Egyptian Financial Services Authority (EFSA), which always care to develop and modernize this industry. There are specialized funds in a number of different asset classes, including 26 equity, 14 sharia-compliant, 8-fixed income, 26 money market, 10 balanced and even a US dollar and euro-denominated money market fund. The executive regulations of Law No. 95 of 1992 regarding Egyptian mutual funds completely modified twice in 2007 and in 2014. Moreover, there are a lot of measures and supervisors on Egyptian mutual funds, which gives it a good standing.

So far, commercial banks are still responsible for issuing Egyptian funds. EFSA gives license to 35 fund managers, with only 22 actually managing funds, with approximately total amount of LE40bn (2.1bn US$) by June 2016. Fund size is linked to the issuing bank’s capital and local deposits by CBE (Central bank of Egypt). Moreover, CBE reduced the cap in a gradual manner. Furthermore, the dominant fund is “Money market funds”, this due to unique service it present to the public through providing them more easy way to participate in the Treasury market, with daily liquidity under professional management.

EFSA is preparing changes in some procedures that will allow brokers to implement subscriptions, redemptions and trading orders instead of commercial bank, which would
facilitate, support and strengthen the industry. Once such law has passed, the market will be ready to issue newer types of funds, such as Islamic bond (sukuk). This will encourage new investors who seek for Islamic finance, which has low risk level.

In 2016, capital protected funds is the newest funds launched. As, The EFSA has set rules that charity funds, this will provide a new source for charities financing. Where, these funds may utilized to solve problems facing fund raising, such as financing and trust. Another major development, Real estate funds open the market for all investors rather than wealthy individuals and specialized corporations, which would maximize the role of fund management industry in the economy. Figure 1 shows the structure of the Egyptian mutual funds which had three currencies (Eg pound, Dollar, Euro).

**Figure 1: The structure of the Egyptian mutual funds.**

The investment funds aim to accumulate savings and invest in a safe way that yields returns with the lowest risks. However, there are many economic indicators that may pose risks that limit the ability of mutual funds to achieve their objectives such as inflation and
interest rate, In Egypt consumer prices went up 17.1 percent year-on-year in January of 2018, compared to a 21.9 percent rise in the previous month. It was the lowest inflation rate since October 2016. Annual core inflation fell to 14.35 percent from 19.86 percent in December. Inflation surged until July 2017 after the government cut fuel and energy subsidies. The central bank has raised key interest rate by 700 basis points since pound float in November of 2016.

While the interest rate, increased during the few last month’s, when the central bank of Egypt cut its benchmark overnight deposit rate by 100bps to 17.75 percent on February 15th 2018, in line with market expectations, saying tight monetary conditions have contained inflationary pressures. The overnight lending rate and the discount rate were also cut by 100bps to 18.75 percent and 18.25 percent respectively. Interest Rate in Egypt averaged 11.67 percent from 1991 until 2018, reaching an all-time high of 21.40 percent in October of 1991 and a record low of 8.25 percent in September of 2009.

5. Egyptian Mutual funds’ performance analysis using return – risk models

The sample and data sources

The Mutual fund industry in Egypt had started in 1994, it has many economic problems such as the high volatility in exchange rate, high inflation rate and also low foreign investment flow, especially after 2011 revaluation in Egypt. The focus will be on those funds whose reflect the best possibility to investment for investor with all respect of Risk–
Return characteristics. The data collected from The Egyptian Investment Management Association (ElMA) and Central Bank of Egypt.

**The Methodology and empirical results**

Evaluating the performance of mutual funds in general, mainly related to the determination of the success of the portfolio manager to achieve balance between the different rates of return and acceptable levels of risk. Thus, evaluating the performance of mutual funds does not mean only measure return on these funds, but also means measuring the levels of risk associated with those returns during a certain time. There are many methodologies to measure the performance of mutual funds1, Since 1965 Treynor, Sharpe were the first researchers whom evaluate fund performance (Treynor, 1965 and Sharpe, 1966). In this section we will evaluate the performance of mutual funds in Egypt and Sudan, actually there are a lot of methods to measure the performance of the mutual funds but we choose sharp and Treynor Indexes, which there main formula as follow:

**The Methodology and empirical results**

Evaluating the performance of mutual funds in general, mainly related to the determination of the success of the portfolio manager to achieve balance between the different rates of return and acceptable levels of risk. Thus, evaluating the performance of mutual funds does not mean only measure return on these funds, but also means measuring the levels of risk associated with those returns during a certain time. There are many methodologies to measure the performance of mutual funds1, Since 1965 Treynor, Sharpe were the first researchers whom evaluate fund performance (Treynor, 1965 and Sharpe, 1966). In this
section we will evaluate the performance of mutual funds in Egypt and Sudan, actually there are a lot of methods to measure the performance of the mutual funds but we choose sharp and Treynor Indexes, which there main formula as follow:

**a. Sharpe Index:**

The First method to evaluate performance of mutual fund, is Sharp index, which is a an index of returns generated by the portfolio over and above risk free rate of return ($\sigma$) and the total risk associated with it. According to Sharpe (1966), it is the total risk of the portfolio that the investors are concerned about. So, the model evaluates portfolios on the basis of reward per unit of total risk, as shown in the following equation:

$$SR = \frac{RP - RF}{\sigma P}$$  \hspace{1cm} (1)

Where:

SR: Sharpe ratio,

RP: Average fund return,

RF: Average risk free rate (3-month T-Bill)

$\sigma P$: Standard deviation of returns of the fund

**b. Treynor index:**

Treynor (1965) developed a method for measuring performance and evaluating the fund by using Treynor's ratio. This ratio estimates return generated by the fund over and above risk free rate of return (generally taken to be the return on securities backed by the government, as there is no credit risk associated), during a given period and systematic risk associated with it (Beta). The equation form is shown as follow:
\[ TR = \frac{RP - RF}{\beta P} \] 

(2)

Where:

TR: Treynor ratio

RP: Average fund return

RF: Average risk free rate

\(\beta P\): Beta of the fund.

**The Egyptian Results**

With the beginning of 2018 Egypt has 192 mutual funds, in our research we evaluated the performance of the biggest 10 investment funds according to the fund size, as shown in the following figure.

**Figure 3: Mutual fund size in Egypt**

The analysis of the Egyptian data was divided into two parts. The first part evaluates the performance of the largest ten funds according to the capital size of the fund during the period 2013–2017. The second evaluates the performance of the investment funds with
the highest returns in the Egyptian economy during the period starting from the
commencement of the fund activity up to the year 2012 which marked the beginning of
the Egyptian revolution and the subsequent political events which influenced the Egyptian
Economy as well as the indicator of investors’ confidence in securities’ investments or in
investing in mutual funds due to the uncertainties which marked this period. The results
were as follows:

Table (1): the Results of the Egyptian Mutual Funds Performance Evaluation for the
biggest funds according to the capital size (12 months) during (2013–2017)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Sharp Ratio</th>
<th>Treynor Ratio</th>
<th>R/ R Rate</th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beltone Banque Misr</td>
<td>2.7</td>
<td>0.48</td>
<td>7.08</td>
<td>0.07</td>
<td>0.89</td>
</tr>
<tr>
<td>Al Ahly National Bank</td>
<td>3.07</td>
<td>0.61</td>
<td>7.51</td>
<td>0.16</td>
<td>0.76</td>
</tr>
<tr>
<td>EFG Qatar National Bank</td>
<td>3.09</td>
<td>0.54</td>
<td>7.82</td>
<td>0.12</td>
<td>0.79</td>
</tr>
<tr>
<td>Beltone Banque du Caire II Money Market</td>
<td>2.98</td>
<td>0.52</td>
<td>7.47</td>
<td>0.1</td>
<td>0.87</td>
</tr>
<tr>
<td>CIB Money Market Fund</td>
<td>1.1</td>
<td>0.5</td>
<td>4.23</td>
<td>0.05</td>
<td>0.53</td>
</tr>
<tr>
<td>EFG Bank of Alexandria</td>
<td>2.39</td>
<td>0.42</td>
<td>6.27</td>
<td>0.03</td>
<td>0.99</td>
</tr>
<tr>
<td>EFG Credit Agricole</td>
<td>2.7</td>
<td>0.48</td>
<td>7.06</td>
<td>0.07</td>
<td>0.86</td>
</tr>
<tr>
<td>NBK Al Watany Bank</td>
<td>3.38</td>
<td>0.61</td>
<td>9.44</td>
<td>0.12</td>
<td>0.59</td>
</tr>
<tr>
<td>EFG Arab Investment Bank</td>
<td>2.56</td>
<td>0.45</td>
<td>6.62</td>
<td>0.05</td>
<td>0.94</td>
</tr>
<tr>
<td>Ahli United Bank</td>
<td>3.03</td>
<td>0.55</td>
<td>7.68</td>
<td>0.12</td>
<td>0.78</td>
</tr>
</tbody>
</table>
Table (2): the Results of the Egyptian Mutual Funds Performance Evaluation for the biggest funs according to the capital size (60 months) during (2013–2017)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Sharp Ratio</th>
<th>Treynor Ratio</th>
<th>R/ R Rate</th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beltone Banque Misr</td>
<td>0.27</td>
<td>0.09</td>
<td>3.92</td>
<td>0.05</td>
<td>0.63</td>
</tr>
<tr>
<td>Al Ahly National Bank</td>
<td>0.26</td>
<td>0.09</td>
<td>3.56</td>
<td>0.06</td>
<td>0.67</td>
</tr>
<tr>
<td>EFG Qatar National Bank</td>
<td>0.26</td>
<td>0.09</td>
<td>3.93</td>
<td>0.05</td>
<td>0.64</td>
</tr>
<tr>
<td>Beltone Banque du Caire II Money Market</td>
<td>0.29</td>
<td>0.1</td>
<td>3.82</td>
<td>0.06</td>
<td>0.66</td>
</tr>
<tr>
<td>CIB Money Market Fund</td>
<td>0.12</td>
<td>0.05</td>
<td>4.56</td>
<td>0.02</td>
<td>0.41</td>
</tr>
<tr>
<td>EFG Bank of Alexandria</td>
<td>0.24</td>
<td>0.08</td>
<td>3.9</td>
<td>0.05</td>
<td>0.64</td>
</tr>
<tr>
<td>EFG Credit Agricole</td>
<td>0.31</td>
<td>0.1</td>
<td>4.15</td>
<td>0.06</td>
<td>0.6</td>
</tr>
<tr>
<td>NBK Al Watany Bank</td>
<td>0.17</td>
<td>0.06</td>
<td>4.4</td>
<td>0.03</td>
<td>0.55</td>
</tr>
<tr>
<td>EFG Arab Investment Bank</td>
<td>0.3</td>
<td>0.1</td>
<td>3.87</td>
<td>0.06</td>
<td>0.64</td>
</tr>
<tr>
<td>Ahli United Bank</td>
<td>0.25</td>
<td>0.09</td>
<td>3.83</td>
<td>0.05</td>
<td>0.63</td>
</tr>
</tbody>
</table>

shows a decline in the Sharp indicator for funds which have been in business for about twelve months with the NCB fund realizing the highest percentage, approximately 3.38 and a risk of about 0.05 which is reasonable compared to the other funds. Qatar National Bank came in second place with a percentage of 3.09 and a risk of 0.12, whereas the TRENOR indicator for the same fund was about 0.61.
Table 2 in turn illustrates the performance evaluation for investment funds, which have been in business for about sixty months. In this case the highest percentage for the Sharp indicator did not exceed 0.3, which is very low. The percentage for the Treynor indicator was about 0.1, whereas the risk percentages for systematic and unsystematic risk were relatively high, reaching about 0.6 for each one of them.

**Figure 4**: The top 10 mutual funds in performance form activity begging in fund to 2012

(Table 3) shows that the funds have realized a high average return since the beginning of their activities and up to 2012 with Egypt future Bank Fund achieving the highest rate of return of about 21.67. This is higher than the rate of return on treasury bills which represents the risk-free rate of return which was 9.9213 percent on average during the period. The Sharp indicator reached 16.67 which is very high compared to the rest of funds included in the sample. Next came the Egypt–Iran fund whose rate of return since the beginning of its activities in 2012 reached 20.61, while the Sharp indicator reached 16.19 with a standard deviation of 0.61. (the systematic risk of investing in the
Faisal Islamic Bank had the lowest rate of return in the sample which was 4.88, while the Sharp indicator coefficient reached -3.47 with a standard deviation of 1.49.

Table (3): The top 10 mutual funds in performance form the begging of activity in fund to 2019

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Start Date</th>
<th>Return Average</th>
<th>Free of Risk return average</th>
<th>Sharp Ratio</th>
<th>Treynor Ratio</th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricol Misr</td>
<td>1994</td>
<td>17.56</td>
<td>9.9213</td>
<td>21.21</td>
<td>5.289</td>
<td>0.36</td>
<td>1.58</td>
</tr>
<tr>
<td>Alexandria Bank</td>
<td>1994</td>
<td>19</td>
<td></td>
<td>14.41</td>
<td>6.930</td>
<td>0.63</td>
<td>1.31</td>
</tr>
<tr>
<td>Faisal Islamic (Al Aman)</td>
<td>2004</td>
<td>4.88</td>
<td>-3.47</td>
<td>-8.54</td>
<td>1.45</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>Egypt – Iran Bank Fund</td>
<td>1998</td>
<td>20.61</td>
<td></td>
<td>7.976</td>
<td>0.66</td>
<td>1.34</td>
<td></td>
</tr>
<tr>
<td>Banque du Caire Fund</td>
<td>1995</td>
<td>16.60</td>
<td></td>
<td>5.659</td>
<td>0.71</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>Egypt – Future Bank Fund</td>
<td>2001</td>
<td>21.67</td>
<td></td>
<td>16.78</td>
<td>1.71</td>
<td>0.71</td>
<td>1.25</td>
</tr>
<tr>
<td>Egyptian exports</td>
<td>1996</td>
<td>7.17</td>
<td>-3.16</td>
<td>-2.45</td>
<td>0.87</td>
<td>1.12</td>
<td></td>
</tr>
</tbody>
</table>
6. Discusses the policy implications

10 funds were selected on the basis of the size of the capital from Egypt, the performance indicators were relatively low under the risk index. Therefore, the best 10 funds were selected based on the Sharp and Treynor indicators, which take into consideration the rates of return and risk, and the period was divided into two periods, before the revolution from 1994 to 2012, and after the revolution from 2013 to 2017, the results were as follows:

The return rates on the listed funds were relatively low, but some of the funds had higher returns than government treasury bills, which averaged 9.9213. The Agricole was the highest with 21.21%, according to sharp indicator followed by Egypt which reached 16.78% according to sharp indicator, which is higher than the risk-free rate of return, while Egypt Iran fund had lower rate of return 5.51%.

However, a number of funds achieved negative values according to the Sharpe and Treynor indicators, because their rate return was lower than the rate of return on treasury bills, and the risk indicator in the Fund was higher as Faisal Bank mutual fund, which had −3.47% rate of return.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Year</th>
<th>Return</th>
<th>Sharp</th>
<th>Treynor</th>
<th>Beta</th>
<th>Alpha</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab insurance Group Fund</td>
<td>1995</td>
<td>5.52</td>
<td>−3.86</td>
<td>−14.67</td>
<td>1.14</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>HSBC Bank Fund</td>
<td>2011</td>
<td>7.88</td>
<td>5.51</td>
<td>−1.822</td>
<td>−0.37</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>Misr Bank Fund</td>
<td>1997</td>
<td>18.77</td>
<td>13.01</td>
<td>13.407</td>
<td>0.67</td>
<td>0.66</td>
<td></td>
</tr>
</tbody>
</table>
References:


8. RBC, W. M. (2017). Types of mutual funds. RBC Capital Markets, LLC, Member NYSE/FINRA/SIPC.


15. Gary Clyde Hufbauer, Peterson Institute for International Economics


17. Kimberly Ann Elliott, Peterson Institute for International Economics

18. Julia Muir, Peterson Institute for International Economics


**Suggested References:**


