Mutual Funds: Determinants of Selection and Performance Measurement: The Case of Egyptian Mutual Fund

Supervised by:

Prof. Dr. Ashraf El- Sharkawy

By

Reem Osman

This dissertation is presented to the Arab Academy for Science and Technology Graduate School of Business in partial fulfillment of the requirements for the Degree of Doctorate in Business Administration – January 2014
“Mutual Funds: Determinants of Selection and Performance Measurement: The Case of Egyptian Mutual Fund”

By

Reem Osman

Signature of Dissertation Supervisor:

Supervisor Signature: Date: 21 / 2 / 2014

Name: Prof. Dr. Ashraf El-sharkawy
Abstract

In emerging markets investing in the stock market represents good opportunity for achieving high & rapid return to some people. Investing in the stock market require knowledge and experience, many investors followed the herding policy witch sometimes lead to huge unexpected loses, being unable to explain the stock market actions will lead to dramatic situations. Mutual funds provide the experience management and the required diversification for unexperienced investors. Many studies have developed models for performance evaluation and have examined whether fund managers provide value added for investors or not.

This dissertation specifically investigates mutual funds in one of the emerging economies, the Egyptian market, using a three years weekly dataset. Policy and differences in characteristics of mutual funds in Egypt encourage The researcher to examine how fund managers perform and what strategy they use in managing their portfolios; then ask what are the factors that influence the investors selection process for a certain fund, finally examine the impact of fund size on performance and performance measures. The results showed that mutual fund managers better evaluate the Egyptian funds using sharpe model witch adjust return base on the total risk, as with no formally stated betas in Egypt, using systematic risk in Treynor model will not be accurate or even reliable in the Egyptian market, same applied to Jensen Alpha model.

Using the informational ratio during the period of the study to compare the fund performance to the Eg30 market index helped in avoiding the negative results, which caused by the effect of the high risk free rate during this period, due to the effect of the financial crisis followed by the Egyptian revolution.

There is persistence in performance in general mutual funds. This evidence is statistically and economically significant although it derives mainly from poorly performing funds which continue to perform badly. The regression analysis showed that Size do not significantly affect the performance of the Egyptian funds.

Egyptian investors base their selection mainly on the fund past performance and the manager image, while ignoring the effect of transaction cost while selecting the fund.
Table of Contents

Abstract
Chapter 1: Introduction
  1.1 Background and Motivation of the Study
  1.2 Mutual Funds in Egypt
  1.3 Aim of the Study
  1.4 Hypotheses
  1.5 Contribution of the Study
  1.6 Methodology of the Study
  1.7 Organisation of the Study
Chapter 2: Literature Review
  2.1 Introduction
  2.2 Performance Measures
    2.2.1 The early stage of performance measurement
    2.2.2 Risk-adjusted non-regression approaches
    2.2.3 Regression-based approaches
    2.2.4 Empirical studies in mutual fund performance
  2.3 Persistence in Performance
  2.4 Flow - Related Performance
  2.5 Mutual Fund Diversification
  2.6 Determinants of Selection
    2.6.1 Studies related to factors effect upon the selection of funds
    2.6.2 Effects of demographic factors on selection of mutual funds
    2.6.3 Studies related to investor behaviour
  2.7 Empirical Studies on Emerging Markets
  2.8 Summary and Suggestions for Further Research
Chapter 3: Mutual Funds Industry in Egypt
  3.1 Introduction
  3.2 The Capital Market
  3.3 History Development
  3.4 Mutual Funds in Egypt
  3.5 Summary
Chapter 4: Portfolio Performance Measurements
  4.1 Introduction
  4.3 Sharpe Ratio
  4.4 Jensen Measure
  4.5 The Bottom Line
  4.6 Three Years Comparative Analysis
  4.7 Summary
Chapter 5: Questionnaire Results and Analysis
  5.1 Measuring Factors that Determine Preferences of Investors toward one Fund over others

2
List of Abbreviation:

CAPM  Capital Asset Pricing Model
CBE  The Central Bank of Egypt
CMA  Capital Market Authority
CML  Capital Market Line
EFSA  Egyptian Financial Supervisory Authority.
EIMA  The Egyptian Investment Management Association.
EMH  Efficient Market Hypothesis
GIPS  Global investment performance standards.
IFC  The International Finance Corp.'s Emerging Markets Data Base which tracks over 2,200 stocks in 54 markets.
IR  Informational Ratio
MPT  Modern Portfolio Theory
NBE  National Bank of Egypt
SML  Security Market Line
SR  Sharp ratio

List of Figures:

1.1 Percentage of US mutual funds’ assets
1.2 Research methodology
3.1 Performance of asset types in Egypt
3.2 MUTUAL fund asset mix 2011
3.3 Mutual fund asset mix 2013
List of tables:

3-1 The list of mutual funds available in the Egyptian market represented in million pounds
4-1 Performance evaluation by Treynor for three years.
4-2 Performance evaluation by Sharpe for three years.
4-3 Performance evaluation by Jensen alpha for three years.
4-4 Performance evaluation by Treynor for the first year.
4-5 Performance evaluation by Treynor for the second year.
4-6 Performance evaluation by Treynor for the third year.
4-7 Performance evaluation by Sharpe for the first year.
4-8 Performance evaluation by Sharpe for the second year.
4-9 Performance evaluation by Sharpe for the third year.
4-10 Performance evaluation by Jensen alpha for the first year.
4-11 Performance evaluation by Jensen alpha for the second year.
4-12 Performance evaluation by Jensen alpha for the third year.
4-13 The performance evaluation by the information ratio for the first year.
4-14 The performance evaluation by the information ratio for the second year.
4-15 The performance evaluation by the information ratio for the third year.
4-16 The five top performing funds.
4-17 The five top performing funds based on the information ratio.
5-1 Allocation of the sample according to Qualification.
5-2 Allocation of the sample according to Occupation.
5-3 Allocation of the sample according to Annual Income.
5-4 The kind of investment options, the investor prefer.
5-5 Reasons for preferring a kind of invest options.
5-6 The investor current investment portfolio majority.
5-7 how would you like your investment to grow.
5-8 What percentage of your income do you invest?
5-9 Are you an investor in mutual fund?
5-10 Reasons for preferring or not mutual fund.
5-11 What kind of mutual fund you prefer.
5-12 Relation between mutual fund investment and kind of mutual fund preferred.
5-13 Type of scheme:
5-14 Preferred Management Company:
5-15 What is your average investment period
5-16 How do you normally get information about mutual fund?
5-17 What factors affect your decision for investment in Mutual Fund?
5-18 While buying a Mutual Fund scheme do you look the Bank name?
5-19 How would you react if the Stock Market immediately dips?
5-20 Relation between type of Scheme and factors affect investor's decision.
5-21 Relation between type of Scheme and Preferred Management Company
5-22 Relation between current investment portfolio and knowing how investment is growing?
5-23 Relation between annual income and reaction if the Stock Market immediately dips.
5-24 Relation between Level of education and reaction if the Stock Market immediately dips
5-25 Relation between Level of education and factors affect your decision for investment in Mutual Fund
5-26 Relation between kind of investment options and factors affect your decision for investment in Mutual Fund
5-27 Relation between how you would like investment to grow and factors affect your decision for investment in Mutual Funds.

List of Appendixes

Appendix 1 The regression analysis between size and performance of the fund by sharpe
Appendix 2 The regression analysis between size and performance of the fund by sharpe
Appendix 3 The regression analysis between size and performance of the fund by sharpe
Appendix 4 The Survey
Appendix 5 The Global Investment Performance Standards 2013 (GIPS)
Bibliography


MUTUAL FUNDS: DETERMINANTS
OF SELECTION AND PERFORMANCE
MEASUREMENT: THE CASE OF