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Factors Affecting Fund Flows in Islamic and Conventional Mutual Funds of Pakistan

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Abstract:

This paper aims to provide an empirical evidence on the fund flows in conventional and Islamic equity and fixed income funds by considering the relationship of it with management expense ratio, fund return, fund size, fund age, inflation, interest rate and GDP in comparison for conventional and Islamic investors. By using panel data, the sample of Pakistan's locally managed equity and fixed income funds are considered comprised of 21 individual conventional and Islamic funds from equity and fixed income category respectively from 2009 to 2018. The results provide evidence that Islamic investors have different factors when choosing funds in comparison with conventional investors. The study finds that the key factor influencing the fund flows is the management expense ratio, return and fund size. This study also shows that all the conventional and Islamic fund characteristics of equity and fixed income funds are positively related to the fund flows except management expense ratio and fund age, which have negative relationship with fund flows. The empirical findings of this paper clearly call for fund managers and investors to review their investment policy as this paper help fund managers to maintain a balanced amongst the factors so as to ensure maximization of its return, benefiting both; Mutual Fund managers and investors. The results could also provide better information and guidance for

investors as well policy-makers on the factors that affect the fund flow for Pakistan Islamic and conventional equity and fixed income funds.

Key words: Conventional and Islamic Equity Funds; fund flows; past return performance; management expense ratio; portfolio turnover; fund size; fund age.

1. INTRODUCTION

1.1 Background of the study

A mutual fund is one of the professionally well-managed investment that generally pools money from a number of investors to purchase various securities. Mutual Funds channelize the savings of small investor and households and make it available in the economy in the shape of investment in profitable business avenues, i.e. stock, bonds and other financial instruments. Mutual funds are very important for every business activity. Because risk management is also most important that is why it is important to investigate various factors which influence investors (Hameed, 2017). Mutual Fund makes easy for the small investors, who don't have enough information and skills and low tolerance in risk, to invest their savings in profitable portfolios through the more professional fund managers. These skillful professional managers target profitable and outperforming financial instruments to generate return for investors (Baloch, 2017). Today the global Islamic fund and wealth management sector is on the rise, which is supported by strong demand from Muslim and non-Muslim investors. The funds by definition can be limited by certain asset classes such as equities, real estate, commodities, or leasing and this restriction is due to the Sharia's principles as well as market condition. Among these types of asset class, equity funds are found to dominate the market. It is found that equities constituted 34% of the total asset under management of Islamic funds, followed by money market instruments at 19% and then commodities at 15% as the second and third largest Islamic funds' assets by asset class.

The first Mutual Fund was introduced in Netherlands in 1774, when the country experienced huge decline in its banking sector, followed by North America in 1924 and since 1980 Mutual Fund has become a vital pool of investment around the world. With

the first initiation of Mutual Fund in Pakistan in 1962 by Investment Corporation (Baloch, 2017). Mutual Funds Association of Pakistan defines mutual funds using holistic approach by terming mutual funds as to be a collective investment scheme. This investment scheme is for those individuals who wanted to invest in securities such as bonds, stocks, money market instruments and similar assets. Mutual funds are found to be increasingly preferred mode of investment, especially in recent past years; it is evident from the growing number funds of AMC's (Minhas, 2014). The total Asset Management Companies (AMC) stand at 20 in 2018 with total 248 no of funds under management with average percentage change of 40% for the year. Another trend highlighting the boom in mutual funds industry is the number of newly introduced Funds, open funds are facing rapid growth. As per latest data release by Mutual fund association of Pakistan the current volume of funds under management is Rs 584 Billion as of Dec 2018 compared to Rs 408 Billion in 2014, showing a substantial growth of 43% in 5 years. The huge number of investors of Mutual Fund around the worlds specifically in developing countries is the indication of as an investment choice (MUFAP, 2019). With the above highlighted importance of mutual funds and growth potential, mutual funds are becoming the center of attention especially for researchers. Researchers are studying different aspects of mutual fund like advertisement impact, like passively and actively managed funds, investing in international funds and many more (Jaizah Othman M. A., 2018).

1.2 Problem Statement

In a mutual fund the flow of fund is depend upon various factors that motivate people to invest in mutual funds. Thus, this indicates the importance of fund flow and any investigation on important factors valued by investors while investing in mutual fund is crucial. Identifying the factors, which change the perception of investors towards mutual funds and motivate them to invest in mutual funds are significant contribution in investment. In theory, when measuring an individual fund manager's skill, investors should examine all factors that clarify cross-sectional distinction in fund performance, regardless of whether the factors are priced or unpriced (Grinblatt & Titman 1989; Pastor & Stambaugh, 2002).

1.3 Gap Analysis

Previous research shows that reacting strongly and asymmetrically to historical returns has been the main behaviors of investors. Recent studies have evidenced an asymmetric relationship between fund flow and performance relationship. According to the research of Baoling (2008) which advocates that top performing funds have a great impact on the fund inflows. Using a sample of 2,065 funds in Singapore, from January 1975 up to December 2006, the study evidences an asymmetric relationship between fund flows and past return performance. However, this study lack in considering other factors which also affect fund flow, return is not only factor which affect fund flows (Baoling, 2008). In another work, Edelen and Warner (2001) employed a regression analysis and a sample of US equity mutual funds by using high frequency daily data for the period from 2 February 1998 to 30 June 1999. They found that aggregate mutual fund flow is correlated with concurrent market returns at a daily frequency, which proves that returns are affected by fund flows and institutional trading. Limitation to this research includes the use daily data which is more volatile, secondly past returns were the only variables researcher considered in the study (Edelen, 2001).Similarly, Oh and Parwada (2007) examined the stock market returns and mutual fund flows interaction in Korea. The period of study covered the eight years from 1996 to 2003. The mutual fund flow is measured as stock purchases, sales, and net (total purchase-total sales). This study found a significant positive correlation between stock market returns and mutual fund flows. Moreover, the correlation is found to be negative between stock market returns and net flows. (Baloch, 2017) and (Barber & Odean, 2005).found that 'fund age' is one of the fund attributes that could have an impact on flows from investors, which is found to have significantly positive impact on the fund flow performance relationship. In other words, the degree of convexity of the relationship between fund flows and past return performance increased with fund age. In contrast, according to Marzuki and Worthington (2011), a higher expense ratio attracts more money into a fund. Higher marketing expenses, as depicted by higher expenses ratio, have been allocated for the marketing of the funds to increase the visibility of the funds and flows. By separating front end loads and expense ratios, it is found that investors treat these two things differently, as they showed a negative relation between fund flows

and front-end load fees (Marzuki, 2011). During the past few decades, several studies have emphasized that fund flows respond to return of fund. Furthermore, the relationship between flow of funds and returns tends to be convex; positive returns garner more new flows than those lost to negative returns (Sirri, 1998).

Even though fund performance is considered as the main determinant in facilitating money flow into funds, there are other factors to consider in terms of their impact on fund flows. These factors were not considered in previous studies. Morever, even fewer studies were done on Pakistan. Pakistan is an important case from the Islamic fund point of view. Here you have established conventional funds as well as newly formed Islamic funds. Islamic fund has seen a phenomenon growth and have come at par with the conventional funds in terms of market capitalization. Furthermore, most to the funds are open ended. These factors present Pakistan as a unique case. Therefore, the prime objective of current study is to investigate different internal and external factors i.e. fund internal characteristics and macroeconomics factors that affect investment flow in mutual funds of Pakistan. In addition, this study aims to comparatively highlight the determining factors between Islamic funds and conventional funds in two major categories of funds. These funds include conventional and Islamic equity and fixed income fund.

1.4 Research Objectives

During the past few decades, several studies have emphasized that fund flows respond to return of fund. Furthermore, the relationship between flow of funds and returns tends to be convex; positive returns garner more new flows than those lost to negative returns (Sirri, 1998). The study argued that mutual funds respond to these implicit incentives by altering the riskiness of their funds to secure a favorable year-end ranking. However, various other factors affect investment in mutual funds and patrons of funds flow. These factors generally include, risk and returns, liquidity of assets, demographic factors, convenience, reduction in transaction costs, tax benefits and transparency. However, the other political factors, which affect stock return, are not considered in this study (Maqbool, 2018). Therefore, the prime objective of current study is to investigate different internal and external factors i.e. fund internal characteristics and macroeconomics factors that affect investment flow in mutual funds of

Pakistan. In addition, this study aims to comparatively highlight the determining factors between Islamic funds and conventional funds in two major categories of funds. These funds include conventional and Islamic equity and fixed income fund. Finally, this study also aims to determine whether the Islamic and Conventional investors show the same investment behavior in all the category of funds or there are some different factors that investors in terms of investing in the same funds.

1.5 Research Questions

How mutual fund internal characteristics and macroeconomics condition could affect flow of fund in conventional and Islamic mutual funds of Pakistan?

1.6 Research Significance

In Pakistan Mutual Funds have recently attained the attention of researchers and hence a limited literature is available for the mutual fund industry of Pakistan and this study will be a significant contribution for Mutual funds in Pakistan. The data set used for this study is of special consideration as it comprises of two different phases of business cycle, the study result will be depicting the impact of factors affecting the fund flow of Mutual funds with reference to the economic conditions. The result of this study is expected to reveal the determinant of the fund flow in mutual funds hence this study is of equal importance to investors and Fund Managers.

Moreover this study is significant in a sense that it aims to fill gap in literature by not only identify the internal determining factors that can impact the fund flows in Pakistan's Islamic and conventional funds, but also external macroeconomics factors that could be most important of fund characteristics that investors consider when putting money into these funds. In addition, this study aims to comparatively highlights the determining factors between Islamic funds and conventional funds in two major categories of funds. These funds include conventional and Islamic equity and fixed income fund. Finally, this study also aims to determine whether the Islamic and Conventional investors show the same investment behavior in all the category of funds or there are some different factors that investors in terms of investing in the same funds.

2. LITERATURE REVIEW

Previous research shows that reacting strongly and asymmetrically to historical returns has been the main behaviors of investors. The bulk of these investigations mainly concentrate on the US market (Edelen, 2001). However, studies devoted to Islamic mutual fund flows are rather scarce, such as (Nathie, 2009). Recent studies have evidenced an asymmetric relationship between fund flow and performance relationship. This advocates that top performing funds have a great impact on the fund inflows. Using a sample of 2,065 funds in Singapore, from January 1975 up to December 2006, the study evidences an asymmetric relationship between fund flows and past return performance (Baoling, 2008).

In another work, (Edelen, 2001) employed a regression analysis and a sample of US equity mutual funds by using high frequency daily data for the period from 2 February 1998 to 30 June 1999. They found that aggregate mutual fund flow is correlated with concurrent market returns at a daily frequency, which proves that returns are affected by fund flows and institutional trading. Second, this study also finds a robust relationship between fund flows and the previous day's return. The relationship indicates that the fund flow reacts to the information returns with one day lag; however, eventually the investors' reaction to such situations usually need an overnight period. Similarly, (Oh, 2007) examined the stock market returns and mutual fund flows interaction in Korea. The period of study covered the eight years from 1996 to 2003. The mutual fund flow is measured as stock purchases, sales, and net (total purchase-total sales). In the empirical analysis, the standard causality test is used to determine the direction of the impact as to whether the market index determines the mutual fund flow or vice versa. This study found a significant positive correlation between stock market returns and mutual fund flows. However, the correlation is found to be negative between stock market returns and the case of net flows.

Burucu and Contuk (2011) used the Phillips-Berron, the Johansen-Juselius, and the Granger causality tests to examine the relationships between investment fund flows and stock market returns in Turkey from 2001 to 2011. The first and second techniques are used to specify the stability of the time series and to identify the presence of a long relation among the variables, respectively. Then,

the Granger causality test was performed after the results of the Johansen-Juselius, showing that the variances are integrated. The study indicates that even though there is a long term relationship between the investment fund flows and the stock returns, there is no causality between investment fund flows and stock returns in Turkey (Burucu, 2011).

(Alexakis, Niarchos, & Patra, 2005) investigated the interaction between mutual fund flows and stock returns by specifically examining the possibility of a causality mechanism in which mutual fund flows may affect stock returns and vice versa in the Greek market. The period of investigations covered ten years, the period from 1994 up to 2003. Besides this, the study employed daily closing prices in the Athens stock exchange, which includes 2,396 observations for each series. The results indicate that there is bidirectional causality between mutual fund flows and stock returns in the Greek market, which means the lagged stock returns cause the mutual fund flows and vice versa. The results of the study are dissimilar to those of the study by Oh and Parwada (2007), which show that returns drive flows. The study also explained that the investor's psychology is one of the factors influencing investment behavior in emerging stock markets. For example, the extrapolating trends in stock price changes by the investors may cause stock price increase and then the investors will purchase the shares. It should be noted that there are micro and macro approaches used in examining the mutual fund flows and stock returns nexus (Alexakis, Niarchos, & Patra, 2005). The first approach is that the mutual fund flows are analyzed on an individual basis, while the second approach considers the aggregate money inflows and outflows of the mutual funds industry. As an example, Sirri and Tufano (1998) used annual data from December 1971 until December 1990 to investigate the fund flow and past performance nexus, which found a strong relationship between them. Studies by (Ippolito, 1992) and (Chevalier, 1997) also reported that the performance flow relationship is positive and convex. Furthermore, (Alexakis, Niarchos, & Patra, 2005) found that during good performance quintile, money flows were stronger as compared to the poor performance quintile. The result of the study is explained by using the price pressure theory and the information revelation approach. For instance, there is a larger demand by the individual investors to hold stock when there are increased inflows

into equity mutual funds, which will cause an increase in share prices. On the other hand, for the information revelation approach, the increase in stocks purchased by the mutual fund investors who are well informed, may act as a signal to the other individual investors who are less well informed, which will cause the stock price to increase.

Furthermore, among others, the study by (Geczy & Stambaugh, 2003) examined the perspective of an investor who seeks to create a portfolio of US domestic equity mutual funds, which assumed that investors are very certain about the historical returns information, the potential stock-picking possessed by fund managers, and the asset pricing model in selecting their portfolio of US domestic equity mutual funds. Additionally, they also found the performance of socially responsible and conventional funds to be comparable. In general, the study indicates that the performance of socially responsible mutual funds is not significantly different from the performance of conventional funds. Moreover, Geczy (2003) also proposed that socially responsible investors are more loyal, since they withdrew the capital at a slower rate than conventional fund investors in the years 1999 up to 2001. Similarly, (Bauer & Koedijk, 2005) conducted a comparison of the risk-adjusted returns of ethical mutual funds versus matched conventional funds. Based on an international sample of 103 US, UK and German ethical mutual funds and also 4,384 conventional mutual funds for the period of 1990-2001. Their results show that there is no significant difference between these two types of funds. The study also suggests that ethical mutual funds were in a learning phase during the period 1990 to 1993, during which period the ethical mutual funds underperformed their conventional counterparts. In examining the behavior of ethical investors in the US, Bollen (2006) studied flow performance relation and fund flow volatility for mutual funds using annual data from 1980 to 2002. The results show that the past good performance seems to be an important determining factor to SRI investors, which also shows that in comparison to the unscreened investors, they are less sensitive to past poor performance. They located a few reasons underlying this issue. Firstly, conventional funds may have many types of funds compared to ethical funds. Therefore, conventional investors have more choices when switching to other funds than SRI investors. In addition, it is found that SRI investors are more loyal compared to

conventional investors. In addition, to examine the fund flow volatility, the study has used monthly observations of fund flow. The results of this analysis show that the movement of money in and out of mutual funds of SRI investors is significantly at slower rate as compared to the conventional investors in other funds (Bollen, 2006).

(Renneboog & Ter Horst, 2011) also analyzed money flows into and out of SRIs, shows that ethical and social issues play a more determinative role in investors' decision than the fund performance. When comparing with conventional fund flows, the study found that when ethical screening used primarily for SRI funds, past negative returns is less important for ethical investors than conventional fund flows. The social attributes of such funds seem to have resulted in weaker money inflow-past performance relationship. Furthermore, they established that funds with environmental screens are more sensitive to past positive returns in terms of money flows as compared to conventional fund flows. funds were in a learning phase during the period 1990 to 1993, during which period the ethical mutual funds underperformed their conventional counterparts. In examining the behavior of ethical investors in the US, Bollen (2006) studied flow performance relation and fund flow volatility for mutual funds using annual data from 1980 to 2002. The results show that the past good performance seems to be an important determining factor to SRI investors, which also shows that in comparison to the unscreened investors, they are less sensitive to past poor performance. They located a few reasons underlying this issue. Firstly, conventional funds may have many types of funds compared to ethical funds. Therefore, conventional investors have more choices when switching to other funds than SRI investors. In addition, Bollen (2006) found that SRI investors are more loyal compared to conventional investors. In addition, to examine the fund flow volatility, the study has used monthly observations of fund flow. The results of this analysis show that the movement of money in and out of mutual funds of SRI investors is significantly at slower rate as compared to the conventional investors in other funds. It also analyzed money flows into and out of SRIs, shows that ethical and social issues play a more determinative role in investors' decision than the fund performance. When comparing with conventional fund flows, the study found that when ethical screening used primarily for SRI funds, past negative returns is less important for ethical investors than conventional fund

flows. The social attributes of such funds seem to have resulted in weaker money inflow-past performance relationship.

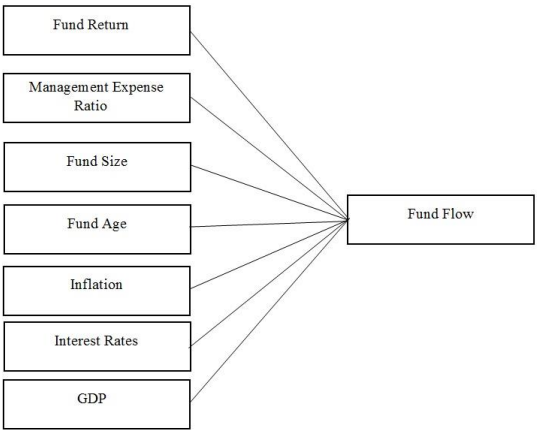
Furthermore, they established that funds with environmental screens are more sensitive to past positive returns in terms of money flows as compared to conventional fund flows. Further study also examined the mutual fund characteristics in terms of fund age. Both studies found that fund age and future fund flows have a positive relationship. Other than fund age, the other fund attribute that could influence the fund flows of mutual funds is 'fund size'. Generally, investors' asset allocation decision is based on higher visibility of funds. Most of the visible funds are those that have a large market tenure and an established reputation. This is because it is believed that funds of a larger size have a greater ability to advertise themselves; as they can attract more media attention which leads to better market exposure. It investigated and compared the determinants of fund flows for SRI funds and conventional funds, who also examined fund size as one of the fund characteristics that is considered by investors when making investment decisions (Marzuki, 2011).

However, (Barber & Odean, 2005). could not locate any evidence for an association between flows and conventional funds implying that investors do not focus on this factor in their fund choices. The coefficients on fund size also show that there is no difference between SRI and conventional funds On the other hand, some studies, among others, (Ferreira, Keswani, & Miguel, 2012) found that fund size does impact fund flow. The 'expense ratio' may also influence fund flows, as evidenced by several previous studies. According to Baoling (2008), in terms of the expense ratio, the total fees are used as a measure of marketing expenses. It is found that money flows are sensitive to the level of fees implying that lower fees may result in higher flows. In contrast, according to Marzuki and Worthington (2011), a higher expense ratio attracts more money into a fund. Higher marketing expenses, as depicted by higher expenses ratio, have been allocated for the marketing of the funds to increase the visibility of the funds and flows. By separating front end loads and expense ratios, Barber (2005) found that investors treat these two things differently, as they showed a negative relation between fund flows and frontend load fees. However, there is no relation between operating expenses and fund flows. On the other hand, Sirri and

Tufano (1998) estimated the total fees as an expense ratio; and they showed a negative relationship between flows to funds and the total costs they charged (expense ratio plus load fees). The study also showed that funds, which charge higher fees grow at a slower pace compared to funds that charge lower fees.

Lastly, Marzuki and Worthington (2011) conducted a study on the relationship between the fund characteristics (such as portfolio turnover) and the fund flows of equity funds. The study has shown that the 'portfolio turnover' has a positive relationship between the fund flows of IEFs and CEFs. This indicates that Muslim and non-Muslim investors put more money into funds that have greater turnover. The study by Baoling (2008) also shows a positive nexus between turnover and fund flows of equity funds.

3. CONCEPTUAL FRAMEWORK



3.1 Definition of Variables

3.1.1 Fund Flows

Dependent variable in this study is fund flows, whose definition follows the standard procedure based on the literature (Berk, 2007), according to which the net relative flows are defined as a net percentage growth of fund assets. Where TNA it is fund's total net assets in year t, and r it is the fund's return over the prior year (Baoling, 2011). According (S., 2011), Flows, t indicates the growth of the fund which is due to the new external money. In this, it is

assumed that all dividends directly reinvested in the fund, for which flows occur at the end of the period.

$$Flows_{i,t} = \frac{TNA_{i,t} - TNA_{i,t}(1+r_{i,t})}{TNA_{i,t-1}(1+r_{i,t})}$$

3.1.2. Fund Return

Previous research shows that reacting strongly and asymmetrically to historical returns has been the main behaviors of investors. This advocates that top return earning funds have a great impact on the fund inflows. Using a sample of 2,065 funds in Singapore, from January 1975 up to December 2006, (Baoling M. , 2008) study evidences an asymmetric relationship between fund flows and past return performance. The study found that aggregate fund flow is correlated with concurrent returns, which proves that returns are affected by fund flows. According to (Sirri, 1998), historical raw return is used by individual fund investors in making fund selection decisions and as the performance measure. The raw returns data is obtained from the monthly fund managers' report published on the website of each mutual fund company.

3.1.3 Management Expense ratio

The 'expense ratio' may also influence fund flows, as evidenced by previous researches (Alexakis, Niarchos, & Patra, 2005), (Baoling M. , 2008) and (Bollen, 2006). According to Baoling (2008), in terms of the expense ratio, the total fees are used as a measure of marketing expenses. It is found that money flows are sensitive to the level of fees implying that lower fees may result in higher flows. In contrast, according to (Marzuki, 2011), a higher expense ratio attracts more money into a fund. Higher marketing expenses, as depicted by higher expenses ratio, have been allocated for the marketing of the funds to increase the visibility of the funds and flows. (Hyen, 2017) estimated the total fees as an expense ratio; and they showed a negative relationship between flows to funds and the total costs they charged (expense ratio plus load fees). The study also showed that funds, which charge higher fees grow at a slower pace compared to funds that charge lower fees. It can be defined as the annual expenses incurred in the course of managing the fund in the year divided by the fund net asset value. This has been studied in previous research, which among others include, (Baoling, 2011), (Marzuki, 2011) and

(Sirri, 1998). Whereas, every fund management company published each fund management expense ratio in their fund management monthly report from where the ratio can easily be collected.

3.1.4 Fund size

Another fund attribute that could influence the fund flows of mutual funds is 'fund size'. Generally, investors' asset allocation decision is based on higher visibility of funds (Marzuki, 2011). Most of the visible funds are those that have a large market tenure and an established reputation. This is because it is believed that funds of a larger size have a greater ability to advertise themselves; as they can attract more media attention which leads to better market exposure. Fund size is the amount of fund assets, the total value of the fund. It is the size of the fund of the asset under management at year and has been used in past studies, such as (Jaizah Othman M. A., 2018)

3.1.5. Fund age

Studies has found that 'fund age' is one of the fund attributes that could have an impact on flows of funds from investors, which is found to have significantly positive impact on the fund flow performance relationship. In other words, the degree of convexity of the relationship between fund flows and past return performance increased with fund age. The study concludes that younger funds attract more fund flows compared to older funds, which is supported by the study of Barber (2005). The greater attraction of younger funds for fund flows can be explained by the higher marketing expenses of the younger funds which can be explained by the fact that recent fund performance would provide more efficient information on younger funds in order to gain market recognition and build the fund's reputation. Fund age is estimated natural logarithms of the years since the fund is in existence, which has also been used in past studies, among others, by (Jaizah Othman M. A., 2018).

3.1.6 Interest Rate

Interest rate is a macroeconomic variable which also has a relationship with mutual fund flow. High interest rate indicates that the fixed income mutual funds will generate higher return and equity-based funds will may incur loss or risks to investor are large enough in equity, and due to high interest rate there will transfer of

investment from equity to fixed income and money market funds (Burucu, 2011). The term "interest rate" is widely used to refer to the specific rate set by the Central Bank. In this study the interest rates are the policy rate that State Bank of Pakistan set which is the main driver of lending and borrowing rates in the economy (Gusni, 2018).

3.1.7 Inflation

Inflation is a macroeconomic variable which also has a relationship with mutual fund flow. High inflation rate indicates that the risks to invest are large enough, and due to high inflation will reduce investor rate of return (Adrangi, Chatrath, & Sanvicente, 1998). This theory supported by a number of researchers like Singh, Mehta, and Varsha (2011), Hermawan and Wiagustini (2016) showed that there is a negative relationship between inflation and mutual fund performance. This research is contradictory with research by Monjazeb and Ramazanpour (2013) who found that inflation has a positive effect on mutual fund performance. Meanwhile, Pasaribu and Kowanda (2014) found that there is no effect of inflation on the mutual fund performance. Inflation is a macroeconomic variable which indicate price appreciation of commodities and services in a country. Inflation can affect mutual fund performance; high inflation means investors' return will be reduced. Inflation is measured through CPI by Pakistan Bureau of Statics on monthly basis, which is easily available on State Bank of Pakistan website (Gusni, 2018).

3.1.8 GDP

Gross domestic product (GDP) is important for investors because it can affect how the financial markets behave, both positively and negatively. In most cases, strong GDP growth translates into higher corporate earnings, which bodes well for the stock market so as for flow of funds in mutual funds. Conversely, falling GDP means economic growth is weakening, which is negative for earnings and therefore stock prices. According to the classic definition, a recession occurs when there are two consecutive quarters of negative GDP growth. It is defined as the total value of all goods and services produced in a country. It's considered the measurement of the size of a country's economy, and one of the primary indicators of economy that can affect the financial market (Baloch, 2017).

4. METHODOLOGY

Sample and data

The population of the study comprises of all the asset management companies' funds under the equity and income categories of open ended conventional and Islamic mutual funds. These categories are, equity fund and fixed income funds. In addition, ten-year monthly time frame data (2009-2018) was selected because it comprises of two phases of business cycle, which will help in more empirical conclusions of impact on dependent variable.

Since the present study is for the period 2009 to 2018 therefore from the mentioned population the funds incepted before 2009 are relevant for our study, this results to sample our population to be eight in terms of mutual fund companies. The approach that had been used in order to generate a more appropriate representative of population of two hundred and forty eight open ended mutual funds is derived from the work of (Emory, 1989) (Dessel, 2013) and (Smith, 2013). Hence the sample used for the calculation is the total observations are 2620 observations. Data of other macroeconomic variables i.e. GDP, inflation and interest rates were collected from the State Bank of Pakistan website, and funds data were collected from the monthly fund manager's report available on the official websites of each Asset Management company

Descriptive Statistics

Table 1 illustrates the summary data of fund wise analysis of the variables gathered from the mutual funds operating in Pakistan which are mainly of two type; Income and equity funds in Islamic and conventional mode respectively. The table shows the monthly average, min and max of each variable fund wide. Throughout 10-year period under study and among the selected funds, in term of expense ratio, conventional equity funds have the highest average expense ratio of 0.028, followed by Islamic equity funds 0.024, Islamic fixed income funds 0.015, and conventional fixed income funds 0.014. In addition to this among the returns, conventional fixed income funds have the highest average return of 8.1%, followed by Islamic fixed income funds 6.9%, conventional equity funds 3.5%, and Islamic equity funds 2%. Though, it is noticed that among the Net asset value the maximum average size of Islamic fixed income funds is reported as the highest

190.842, followed by Islamic equity funds 154.514, conventional fixed income funds 132.617, and conventional equity funds 123.791. In addition to this in term of fund size Islamic equity funds' have the highest average value of 6013, followed by conventional fixed income funds 2518.597, Islamic Fixed income funds 2038.713, and conventional equity funds 1420.373. Furthermore, among the fund flow conventional fixed income funds have the highest average value of 0.049, followed by Islamic fixed income funds 0.036, conventional equity funds 0.029 and Islamic equity funds 0.024.

Table 1: Descriptive Statistics Funds wise

Variable	Statistics	Conventional Funds		Islamic Funds	
		Fixed income funds	Equity Funds	Fixed income funds	Equity Funds
Expense ratio	Average	0.014	0.028	0.015	0.024
	Min	0.010	0.020	0.003	0.020
	Max	0.015	0.330	0.030	0.030
Return	Average	0.081	0.035	0.069	0.020
	Min	(0.822)	(0.188)	(0.533)	(0.113)
	Max	0.490	0.590	0.550	0.258
NAV	Average	132.617	123.791	190.842	154.514
	Min	9.993	9.570	13.030	9.570
	Max	546.440	719.210	535.400	661.750
Fund Size	Average	2,518.597	1,420.373	2,038.713	6,013.030
	Min	0.976	1.010	0.860	0.900
	Max	17,080.000	9,234.100	99,667.000	57,933.000
Fund Age	Average	98.454	94.613	90.556	98.306
	Min	18.968	0.986	3.024	24.030
	Max	201.151	201.151	201.151	201.151
Fund Flow	Average	0.049	0.029	0.036	0.024
	Min	(0.999)	(0.675)	(0.901)	(0.639)
	Max	9.888	2.642	9.568	1.134
Interest Rate	Average	0.098	0.098	0.098	0.098
	Min	0.063	0.063	0.063	0.063
	Max	0.150	0.150	0.150	0.150
Inflation	Average	0.080	0.080	0.080	0.080
	Min	0.013	0.013	0.013	0.013
	Max	0.211	0.211	0.211	0.211
GDP	Average	0.038	0.038	0.038	0.038
	Min	0.004	0.004	0.004	0.004
	Max	0.058	0.058	0.058	0.058

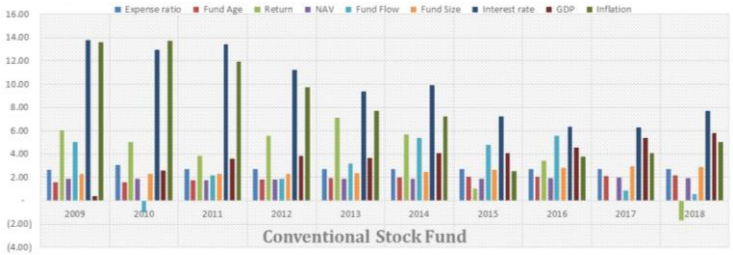
Table 2 shows the summary of data company wise with related variables of the study. The table shows the average of each variable under each company over the period of 10-year monthly data under study.

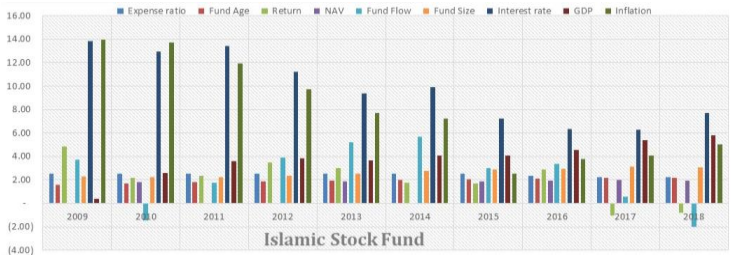
Table 2: Descriptive Statistics Company wise

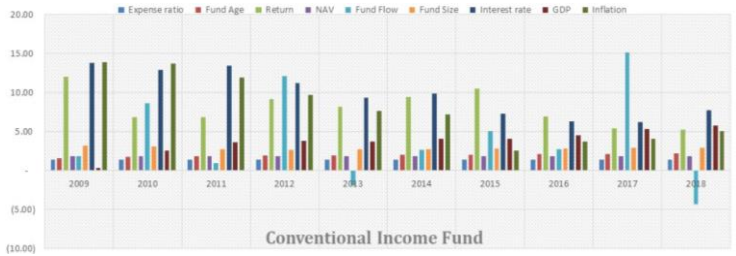
Company	Variable	Conventional Funds		Islamic Funds	
		Fixed income funds	Equity Funds	Fixed income funds	Equity Funds
ABL Asset Management	Expense ratio	0.015	0.033		
AKD Asset Management		0.013	0.030		
Faysal Asset Management		0.015	0.020		
Habib Asset Management		0.015	0.033		
UBL Asset Management		0.015	0.030	0.013	0.030
MCB Asset Management		0.015	0.020	0.030	0.020
Atlas Asset Management		0.010	0.030	0.003	0.027
Meezan Asset Management				0.015	0.020
ABL Asset Management	Fund Age	78.467	57.537		
AKD Asset Management		80.900	93.589		
Faysal Asset Management		98.552	109.532		
Habib Asset Management		78.467	56.232		
UBL Asset Management		93.589	88.559	74.555	84.549
MCB Asset Management		141.616	141.616	141.616	141.616
Atlas Asset Management		117.586	109.532	62.524	83.529
Meezan Asset Management				83.529	83.529
ABL Asset Management	Return	0.094	0.108		
AKD Asset Management		0.080	0.021		
Faysal Asset Management		0.080	0.012		
Habib Asset Management		0.086	0.051		
UBL Asset Management		0.074	0.019	0.067	0.018
MCB Asset Management		0.068	0.018	0.057	0.019
Atlas Asset Management		0.083	0.025	0.072	0.022
Meezan Asset Management				0.082	0.022
ABL Asset Management	NAV	10.233	13.369		
AKD Asset Management		49.884	60.235		
Faysal Asset Management		106.503	70.192		
Habib Asset Management		103.373	104.890		
UBL Asset Management		87.299	61.029	98.164	108.175
MCB Asset Management		53.521	81.180	101.884	11.200
Atlas Asset Management		517.509	468.233	512.206	443.971
Meezan Asset Management				51.115	54.712
ABL Asset Management	Fund Flow	0.120	0.039		
AKD Asset Management		0.000	0.014		
Faysal Asset Management		0.001	0.029		
Habib Asset Management		0.226	0.018		
UBL Asset Management		(0.003)	0.043	0.002	0.041
MCB Asset Management		(0.015)	0.030	0.014	0.009
Atlas Asset Management		0.012	0.027	0.036	0.022
Meezan Asset Management				0.092	0.024
ABL Asset Management	Fund Size	4,165.697	2,427.87		
AKD Asset Management		613.079	1,219.05		
Faysal Asset Management		679.939	238.652		
Habib Asset Management		3,145.501	152.306		
UBL Asset Management		4,616.525	3,536.83	865.067	3,700.9
MCB Asset Management		40.928	4.949	1.719	1.854
Atlas Asset Management		4,368.508	2,286.50	657.742	1,050.6
Meezan Asset Management				6,630.32	19,298
ABL Asset Management	Interest rate	0.098	0.098		
AKD Asset Management		0.098	0.098		
Faysal Asset Management		0.098	0.098		
Habib Asset Management		0.098	0.098		
UBL Asset Management		0.098	0.098	0.098	0.098
MCB Asset Management		0.098	0.098	0.098	0.098
Atlas Asset Management		0.098	0.098	0.098	0.098
Meezan Asset Management				0.098	0.098
ABL Asset Management	GDP	0.038	0.038		
AKD Asset Management		0.038	0.038		
Faysal Asset Management		0.038	0.038		
Habib Asset Management		0.038	0.038		
UBL Asset Management		0.038	0.038	0.038	0.038
MCB Asset Management		0.038	0.038	0.038	0.038
Atlas Asset Management		0.038	0.038	0.038	0.038
Meezan Asset Management				0.038	0.038
ABL Asset Management	Inflation	0.080	0.080		
AKD Asset Management		0.080	0.080		
Faysal Asset Management		0.080	0.080		
Habib Asset Management		0.080	0.080		
UBL Asset Management		0.080	0.080	0.080	0.080
MCB Asset Management		0.080	0.080	0.080	0.080
Atlas Asset Management		0.080	0.080	0.080	0.080
Meezan Asset Management				0.080	0.080

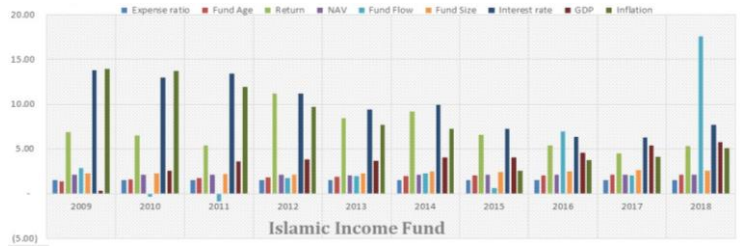
Comparative and trend analysis of Mutual Fund Figures below show the graphical trend analysis of the study variables fund wise. The variables figure under each year is average of all mutual funds under the category of fund. The chart illustrates all the variables i.e. dividend yield, net income, nav, size, interest rates, inflation and stock index. inflation and interest rates. During the 10-year period under study and among different types of funds, in term of conventional equity funds, the fund flows in these funds showing a decreasing trend over the last 2 years, due to decreasing return trend in conventional equity funds. The NAV of equity funds in the last 10 years remain stable, along with the fund size. In terms of interest rates and inflation, both were lower during the last 4 years 2015-2018, but were at higher side before these years, as the inflation and interest rates reach to the highest level in 2009 and 2010 respectively. Since then inflation is decreasing and interest rate also indicating decreasing trend. In term of conventional income funds, the NAV is showing stable trend over the periods, despite increasing and decreasing trend in fund returns. The fund returns in the last 10 years were higher in 2009 and 2015 but the fund flow was record highest in 2017, alongside with election of new government. In terms of interest rates and inflation both were lower during the last 4 years 2015-2018, but were at higher side before these years, as the inflation and interest rates reach to the highest level in 2009 and 2010 respectively. Since then inflation is decreasing and interest rate also indicating decreasing trend. In addition to this Islamic equity funds have volatile NAV as shown in the graph, despite increasing trend in returns. The fund flows in the last 10 years is increasing but decrease in 2017 and 2018 at the same time the stock market is also decreasing. In terms of interest rates and inflation, both were lower during the last 4 years 2015-2018, but were at higher side before these years, as the inflation and interest rates reach to the highest level in 2009 and 2010 respectively. Since then inflation is decreasing and interest rate also indicating decreasing trend. In terms of Islamic income funds which recorded highest ever investment flow in 2018 despite stable returns over the last 10 years. The fund size in the last 10 years is showing an increasing trend during last 10 years. In terms of interest rates and inflation, both were lower during the last 4 years 2015-2018, but were at higher side before these years, as the inflation and interest rates reach to the highest level in 2009 and 2010

respectively. Since then inflation is decreasing and interest rate also indicating decreasing trend.









Research Model & Statistical Test

In order to examine the impact of internal and external variables on fund flow, a general estimation model is developed based on the fund category selected i.e. conventional equity and fixed income fund,

Islamic equity and fixed income fund respectively. The data used in this study which is a combination of cross-sectional observations and time series, therefore panel regression analysis is undertaken. The study model developed is expressed in Equations below which are the hypotheses of the study. The model is a panel regression function that link fund flow with fund return, management expense ratio, fund size, fund age, inflation, interest rate and GDP (Jaizah Othman, 2018).

The empirical model for each country is defined as under

$$\textbf{Fund flow}_{\text{fund type i}} = \alpha + \beta 1\text{MER} + \beta 2\text{FR} + \beta 3\text{FS} + \beta 4\text{FA} + \beta 5\text{Int} + \beta 6\text{Inf} + \beta 6\text{gqp} + \varepsilon i$$

Where fund types are 1. Conventional equity funds, 2. Conventional fixed income funds, 3. Islamic equity funds, 4. Islamic fixed income funds. Fund flow is the growth of fund value that is used as a proxy of fund flow, MER is identifies as management expense ratio of a fund whereas FR represent fund past returns that exist in monthly fund manager reports. FS and FA is the symbol for fund size used to be indicated by fund amount in a year and age is easy observed by opening date of fund, α is the constant. Int and Inf is used for interest rates and inflation respectively, moreover GDP is measured the value of the economy and lastly ε is the error term.

The relation between the variables has been examined by making use of regression analysis to examine the developed research model. Before this study proceed with the regression analysis, this study will have to measure the seriousness of multicollinearity for the data set by using the Variance Inflation Factors (VIF). Thus, significant multicollinearity issues may exist, the variance inflation factor will be very large for the variables involved. If values of VIF that exceed 10 are often regarded as indicating multicollinearity. The panel regression analysis is used to predict dependent variable value through several independent variables. It also explained the change in dependent variable can be occurring due to independent variables. The co-efficient of determination (R^2) shows the degree of prediction which your regression equation can find. The co-efficient of determination can take any value between ± 0.01 to ± 1.00 (Sauders, 2009). Moreover to determine if there is a significant relationship between the independent variables and the dependent variables. The

null hypothesis is rejected when the p-value is less than the level of significance (Hyen, 2017).

3.4 Result

In this section the results of the study are presents and discussed based on the model described in the methodology section.

Before regression analysis the research requires measuring the seriousness of multicollinearity for the investigation. Therefore, this study will perform the VIF test and finds out that there is a low level of multicollinearity was available for the model since all the VIF esteem for all factors the test tried is under 10 which is summarized in Table 3, Even though there is no formal VIF value, however, values of VIF that exceed 10 are often regarded as indicating multicollinearity (Hyen, 2017)

Table 3: VIF of the Variables

	Variables	Conventional Funds		Islamic Funds	
		Fixed income funds	Equity Funds	Fixed income funds	Equity Funds
VIF	Expense Ratio	1.29712	1.67625	5.72625	2.67625
	Return	2.10292	4.30932	2.49200	2.34022
	NAV	3.12478	4.32487	3.50811	3.10990
	Fund Size	3.45722	1.65722	4.57011	3.23932
	Fund Age	2.34510	2.52210	2.98711	2.00021
	Fund Flow	4.21341	4.78210	4.45710	3.56222
	Interest Rate	3.45722	1.65722	4.57011	3.23932
	Inflation	2.34510	2.52210	2.98711	2.00021
	GDP	4.21341	4.78210	4.45710	3.56222

In the empirical estimation, panel regression analysis method is used to examine the impact of internal and external factors affecting fund flow. The results of the fixed effect regression analysis are illustrated in tables below fund wide, the results in tables show the details of the estimated coefficients and significance level of all the independent variables and the degree of goodness fit of regression model (R^2) with its F statistics and the significant level. Based on the R-square of each fund model developed to explain the fund flow based on selected variables, the results of conventional equity funds model show an explanatory power (60.38%) followed by conventional fixed income funds (50.21%), Islamic equity funds (61.62%), and Islamic fixed income funds (56.02%).

Table 3: Results of Regression Analysis-Fund Wise

		Model 1	Model 2	Model 3	Model 4
		Conventional Funds		Islamic Funds	
		Equity Funds	Fixed income funds	Equity Funds	Fixed income funds
(Constant)	Coefficient	0.488	0.548	0.546	0.587
	T	1.864	4.864	2.364	2.064
	Sig.	0.064	0.092	0.05	0.04
Expense Ratio	Coefficient	-0.661	-0.642	-0.603	-0.617
	T	2.77	3.14	1.37	2.79
	Sig.	0.000	0.000	0.000	0.000
Return	Coefficient	0.755	0.787	0.600	0.539
	T	5.351	5.899	2.565	5.119
	Sig.	0.000	0.000	0.000	0.000
Fund Size	Coefficient	0.567	0.500	0.503	0.520
	T	2.345	5.015	5.475	3.445
	Sig.	0.000	0.000	0.000	0.000
Fund Age	Coefficient	0.335	0.419	-0.658	-0.687
	T	1.115	1.395	4.875	3.515
	Sig.	0.000	0.000	0.000	0.000
Inflation	Coefficient	0.483	0.454	0.554	0.515
	T	1.215	3.565	3.154	4.265
	Sig.	0.000	0.000	0.000	0.000
Interest Rate	Coefficient	0.461	0.442	0.463	0.467
	T	2.345	5.725	5.91	3.245
	Sig.	0.000	0.000	0.000	0.000
GDP	Coefficient	0.444	0.467	0.443	0.458
	T	2.345	5.725	5.91	3.245
	Sig.	0.000	0.000	0.000	0.000
R Square		60.38%	50.21%	61.62%	56.01%
F		36.962	47.562	58.162	69.762
Sig.(F-stat)		0.000	0.000	0.000	0.000

3.5.1 Conventional equity funds

The result of conventional equity funds model provided confirmation for the research hypothesis 1. The F statistics is substantiated at the 5% significant level with value of (36.962), implying the alternative hypothesis is accepted at 5% level of significant. The r square indicates 60.38% variation in fund flow can be explained by the independent variables. Though, the adjusted R square statistically shows moderate high relationship and the estimated regressions is efficient for predictions, and the hypothesis can be accepted implying that there are an association between selected factors for fund flow in conventional equity funds. In detail analysis firstly, looking at the internal variables i.e. management expense ratio, return, fund size and fund age which shows the coefficient value (-0.661), (0.755), (0.567) and (0.335) respectively. In conjunction to this if we analyze the significance values p=0.000, p=0.000 and p=0.000 of management expense ratio, return, fund size and fund age respectively, the result yield that there is a significant and positive impact of return, fund

size and fund age on fund flow, whereas management expense ratio impact negatively. Secondly while analyzing the external variable impact on fund flow i.e. inflation, interest rate and GDP, these shows the coefficient and p value (0.483) **(**p=0.000), (0.461) (p=0.000) and (0.444) **(**p=0.000) respectively. The result provide evidence that there is also a significant and positive impact of inflation, interest rate and GDP on fund flow in conventional equity funds.

3.5.2 Conventional fixed income funds

The result of conventional fixed income funds model provided confirmation for the research hypothesis 2. The F statistics is substantiated at the 5% significant level with value of (47.562), implying the alternative hypothesis is accepted at 5% level of significant. The r square indicates 50.21% variation in fund flow can be explained by the independent variables. Though, the adjusted R square statistically shows moderate relationship and the estimated regressions is efficient for predictions, and the hypothesis can be accepted implying that there are an association between selected factors for fund flow in conventional fixed income funds. In detail analysis firstly, looking at the internal variables i.e. management expense ratio, return, fund size and fund age which shows the coefficient value (-0.642), (0.787), (0.500) and (0.419) respectively. In conjunction to this if we analyze the significance values p=0.000, p=0.000 and p=0.000 of management expense ratio, return, fund size and fund age respectively, the result yield that there is a significant and positive impact of return, fund size and fund age on fund flow, whereas management expense ratio impact negatively. Secondly while analyzing the external variable impact on fund flow i.e. inflation, interest rate and GDP, these shows the coefficient and p value (0.454) **(**p=0.000), (0.442) (p=0.000) and (0.467) **(**p=0.000) respectively. The result provide evidence that there is also a significant and positive impact of inflation, interest rate and GDP on fund flow in conventional fixed income funds.

3.5.3 Islamic equity funds

The result of Islamic equity funds provided confirmation for the research hypothesis 3. The F statistics is substantiated at the 5% significant level with value of (58.162), implying the alternative hypothesis is accepted at 5% level of significant. The r square

indicates 61.62% variation in fund flow can be explained by the independent variables. Though, the adjusted R square statistically shows moderate high relationship and the estimated regressions is efficient for predictions, and the hypothesis can be accepted implying that there are an association between selected factors for fund flow in Islamic equity funds. In detail analysis firstly, looking at the internal variables i.e. management expense ratio, return, fund size and fund age which shows the coefficient value (-0.603), (0.600), (0.503) and (-0.658) respectively. In conjunction to this if we analyze the significance values p=0.000, p=0.000 and p=0.000 of management expense ratio, return, fund size and fund age respectively, the result yield that there is a significant and positive impact of return, and fund size on fund flow, whereas management expense ratio and fund age have impact negatively. Secondly while analyzing the external variable impact on fund flow i.e. inflation, interest rate and GDP, these shows the coefficient and p value (0.554) **(**p=0.000), (0.442) (p=0.000) and (0.467) **(**p=0.000) respectively. The result provide evidence that there is also a significant and positive impact of inflation, interest rate and GDP on fund flow in Islamic equity funds.

3.5.4 Islamic fixed income funds

The result of Islamic fixed income funds provided confirmation for the research hypothesis 4. The F statistics is substantiated at the 5% significant level with value of (69.762), implying the alternative hypothesis is accepted at 5% level of significant. The r square indicates 56.01% variation in fund flow can be explained by the independent variables. Though, the adjusted R square statistically shows moderate relationship and the estimated regressions is efficient for predictions, and the hypothesis can be accepted implying that there are an association between selected factors for fund flow in Islamic equity funds. In detail analysis firstly, looking at the internal variables i.e. management expense ratio, return, fund size and fund age which shows the coefficient value (-0.603), (0.539), (0.503) and (-0.687) respectively. In conjunction to this if we analyze the significance values p=0.000, p=0.000 and p=0.000 of management expense ratio, return, fund size and fund age respectively, the result yield that there is a significant and positive impact of return and fund size on fund flow, whereas management expense ratio and fund age impact negatively. Secondly while analyzing the external variable

impact on fund flow i.e. inflation, interest rate and GDP, these shows the coefficient and p value (0.515) **(**p=0.000), (0.467) (p=0.000) and (0.458) **(**p=0.000) respectively. The result provide evidence that there is also a significant and positive impact of inflation, interest rate and GDP on fund flow in Islamic equity funds.

DISCUSSIONS

This study explored the factors those affect the fund flow in Mutual funds of Pakistan. The study has identified management expenses, fund return and fund size to be among the critical factors those may affect the fund flow in mutual funds in Pakistan.

The result of this study is consistent with Barber et al. (2005), Huang et al. (2007) and Marzuki and Worthington's (2011) results. One of the reasons for this is the greater marketing expenses, which indicate increased advertising, and this could attract investors to invest in the funds. Furthermore, higher management expense ratio shows that greater expense has been put into promoting the funds, thus affecting their visibility and fund flows (Marzuki and Worthington, 2011). In addition, according to Ivkovic and Weisbener (2009), the larger management expense could contribute towards better managerial talent. However, the management expense in the case of both conventional and Islamic funds, the result is same, significant and negative. Fund return is significant and the coefficient indicates a positive association with fund flows, which is consistent with the results established by Carhart (1997) and Wu (2014). Therefore, the result of the return of fund indicates that a positive relationship as identified by the coefficient and significance. On the other hand, the fund return of Islamic funds are significant with fund flow but at a lower level of coefficient compare to conventional funds. As regards to the size of funds, it is also significant and has a positive relationship with fund flows. Meanwhile, the funds size for conventional and Islamic funds is significant at the 1% level and the coefficient indicates that the fund size has a positive relationship to the fund flows. This shows that a greater fund size could attract more media attention to advertise the funds and at the same time it could attract investors to put more money into the funds. The results are in line with Huang et al. (2007), Ferreira et al. (2012) and Marzuki and Worthington (2011). In

supporting the finding, the latter study indicates that investors' decision on asset allocation generally make based on the visibility of the funds. Furthermore, most of the funds are those with an established reputation and large market tenure.

The results of the regression model in show that there is an insignificant negative relationship between fund age (AGE) and fund flows for Islamic funds. On the other hand, the results for fund age for conventional funds is documented as significant positive relationship to fund flows, which is consistent with various other studies (Sirri and Tufano 1998; Barber et al., 2005; Baoling, 2008), showing that more recently created funds attract more funds compared to the older funds. This can be ascribed to higher marketing costs to make younger funds more visible as the younger funds does not necessarily have the required reputation to increase their performance and therefore recent fund performance is more informative for them.

CONCLUSION AND IMPLICATIONS

Since the aim of the paper is to examine the impact and relationship among the factors affecting the fund flows of conventional and Islamic equity and fixed income funds in Pakistan. The study fills the gap in literature through investigating both internal and external factors simultaneously at the same time that significantly affects fund flows of conventional and Islamic equity and fixed income funds in Pakistan. In order to accomplish the research objective, data has been gathered from the monthly fund manager reports from the period 2009 to 2018, a general estimation model is developed based on the fund categories selected i.e. conventional income fund, conventional stock fund, Islamic Income fund and Islamic stock fund respectively. The data used in this study which is a combination of cross-sectional observations and time series.

In evidence, the findings in this study indicate that the identified factors i.e. internal and external including the fund return, fund size, fund age, inflation, interest rate and GDP have a positive relationship with the fund flows of conventional and Islamic equity and fixed income funds. Based on the findings of the study and firstly looking at the conventional side, it was found that fund flows in conventional equity and fixed income funds have positively influenced by return, fund size, fund age, interest rate, inflation and GDP

respectively, whereas management expense ratio negatively affects fund flows of these funds. Besides, this the most key factor that can influence the fund flows of conventional equity and fixed income funds is the return and management expense ratio due to the greater percentage of coefficient as compared to the other variables. Thus, secondly analyzing Islamic funds through the econometric analysis, the results of Islamic equity and fixed income funds, which demonstrates that except of management expense ratio and fund age, all the other factors have a positive relationship with the fund flows. From the results, it is shown that fund age and management expense ratios have a significantly negative relationship to the fund flows, which indicates that Islamic investors place much emphasis on these attributes compared to the other factors when putting money into the funds. However, fund age is also the factors that negatively influence the fund flows of Islamic equity and fixed income funds because the fund age has a negative coefficient as compared to the other variables. In conclusion, the comparative fund flows analysis shows that conventional and Islamic funds are impacted by different internal and external factors. The results of the study show that the key factors that can influence the fund flows of conventional equity and fixed income funds are the management expense ratio and return respectively. Whereas in case of Islamic funds, the key factors that can influence the fund flows are fund age and management expense ratio respectively

The reason for the different factors that can influence the fund flows of conventional and Islamic equity and fixed income funds is due to the different behavior of the Islamic and conventional investors. For the Islamic investors, the reason they don't consider fund age as a key factor is may be because of that in Pakistan Islamic mutual fund industry is on introductory stage where every month new funds are introduced with attractive high rates greater than previous. Furthermore, as also identified by (Baloch, 2017), the findings shown that the larger management expense ratio could contribute towards better managerial talent. In addition, the greater management expense ratio shows that there are greater marketing expenses in marketing or promoting the funds, thus affecting the visibility of the fund and the fund flows (Marzuki, 2011).

This study found common factor which is fund size that is also the key factor that can influence the fund flows of conventional and

Islamic equity and fixed income funds. This is because the larger size of the fund could attract more media attention to advertise the funds and at the same time it could attract investors to put more money into the funds. This is in line with the finding by (Marzuki, 2011) where large market tenure, an established reputation as well as more visible funds do generally influenced investors in making asset allocation decisions.

On the basis of the empirical results, few implications of the study are given as follows: Firstly, at acceptable significance level analysis of data of management expense and fund flow has endorsed the negative relationship between fund's flow and expenses. Results support the argument of inherent nature of expenses to decrease the funds flow. Therefore, fund managers must take a great care while operating the funds with respect to incurred expenses. Fund managers of both conventional and Islamic Mutual funds can increase the fund flow while primarily focusing the expenses. Moreover, in term of Islamic funds, fund age is also negatively associated with fund flow which indicate that launching new and attractive funds can help in increasing the fund flow as more investors willing to invest in new Islamic funds, secondly govt of Pakistan and competent authority is also promoting Islamic funds so it remain the key factor.

Finally, it is also suggested that future researchers can consider other fund categories, such as the money market fund, the balanced fund, and can also be done on broader country level in order to extend the studies on the fund flows.

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