Risk Shifting Behavior in Malaysian Managed Funds – A Panel Data Analysis of Conventional and Islamic Funds

Terrence Hallahan, Vikash Ramiah and Amalia Di Iorio,

School of Economics, Finance and Marketing, RMIT, GPO Box 2476V, Melbourne,
3001, Australia.

Abstract

The seminal paper of Brown, Harlow and Starks (1996) initiated research into risk-taking behavior in the mutual fund industry. Taylor's (2003) extension of the tournament model of Brown et al. (1996) proposes that using an exogenous (endogenous) benchmark induces losing (winning) managers to gamble. This presents two competing testable hypotheses that are investigated in the current study. We examine data for a sample of Malaysian unit trusts covering the period 1985 to 2007. We apply panel data regression analysis to investigate whether there is empirical evidence of tournament behavior in the funds as a whole. We then separate the funds into two categories (conventional and Islamic) to examinewhether fund type is an influencing factor in behavior of the funds as a whole. Overall, we support Taylor's (2003) theory using an endogenous benchmark for conventional and combined funds but not Islamic funds. We also found that Taylor's (2003) theory did not hold when using an exogenous benchmark.

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The corresponding author:
Dr Terrence Hallahan
School of Economics, Finance and Marketing
RMIT University
Level 12, 239 Bourke Street
Melbourne, Australia, 3000.
Tel: +61 3 9925 5828
Fax: +61 3 9925 5986
Email: terry.hallahan@rmit.edu.au

1. INTRODUCTION

In a tournament, players compete for prizes where their effort and their share of the prizes depends upon their ranking, which means that relative performance matters. Tournament contracts can be viewed as attempts to address the principal-agent problem that exists when the principal does not have full information about the ability of the agent(s).[1] Initial empirical testing of tournament models focused on sporting tournaments in golf and tennis (for example, Ehrenberg and Bognanno, 1990; Orszag, 1994). While these studies attempt to find out if tournament compensation schemes actually elicit effort responses, other researchers examine the incentive effects of tournaments on risk-taking as well as effort responses in the sporting, corporate management and fund management fields.

Three basic observations are helpful in understanding the funds application of the tournament model. First, investment funds usually receive compensation in the form of a fee that is a fixed percentage of funds under management. Therefore, an incentive exists to pursue strategies that maximize funds under management. Second, findings by Ippolito (1992), Capon, Fitzsimons and Prince (1996) and others give support to the widely held view that the crucial factor influencing the choice of fund by retail investors is past investment performance. This finding gives strong support to the interpretation of the funds flow-investment performance relationship as an implicit incentive contract. Third, researchers such as Sirri and Tufano (1992, 1998) found that while funds that recorded the highest performance during a period attracted the largest increases in funds under management, funds that performed poorly were not penalized by proportionate outflows of funds under management, indicating an asymmetric structure of the investment performance-funds flow relationship.[2]

In light of the finding of an asymmetric structure to the investment performance-funds flow relationship, Brown, Harlow and Starks (1996) [hereafter BHS] place portfolio management within the framework of a multi-period, multi-game tournament, focusing on the possible strategic responses of funds identified at interim ranking stages as likely to be ultimate "winners" or "losers". BHS hypothesize that fund managers who are interim losers

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[1] Early work in this area appeared in the labour economics literature and focused on the normative aspects of tournament models (for example, Lazear and Rosen, 1981; Green and Stokey, 1983; Nalebuff and Stiglitz, 1983). Theoretical analysis indicates that under certain circumstances (for example, when participants are risk averse and output disturbances are caused by a common shock), the incentive effects of rank-order compensation schemes are considered to induce optimal levels of effort among participants.

[2] Berkowitz and Kotowitz (2000) found that fund flows were positively related to a distributed lag of past performance, with a strong degree of inertia and exhibiting a significant nonlinear effect at the extreme levels of performance. Consistent with Sirri and Tufano (1992, 1998), and later confirmed by the results of Goriaev, Nijman and Werker (2002), they found the strongest nonlinearity to be associated with extremely good performance.

(in the sense of being below the median performance for the first part of the assessment period) are likely to increase fund volatility in the latter part of the assessment period to a greater extent than interim winners. This strategy of increasing volatility is based on the expectation that higher volatility gives the losing manager a better chance of a major performance reversal that would redeem their ranking and, hence, secure a major tournament prize at year end. While greater volatility also increases the risk of experiencing an even more disastrous full year performance, the losing manager would take the view that because of the tournament nature of the fund industry (coupled with the asymmetric response of news flows to performance), they have nothing much to lose. BHS found that losers do indeed appear to gamble: in a sample of growth-oriented mutual funds, mid-year losers tend to increase fund volatility in the second half-year to a greater extent than mid-year winners. Similar results have been produced by Koski and Pontiff (1999), Acker and Duck (2001), Goriaev, Palomino and Prat (2001) and Basak, Pavlova and Shapiro (2002). , Chen and Pennacchi (2001) show that funds with poor performance relative to an exogenous benchmark have an incentive to increase the tracking error of the fund. Interestingly, they show that an increase in tracking error does not necessarily equate to an increase in the fund's volatility, as measured by BHS. However, other studies document contradictory evidence, suggesting that it is winners rather than losers who gamble (Chevalier and Ellison, 1997; Qiu, 2003; Elton, Gruber, Krasny and Ozelge, 2007). However, Busse (2001), using higher frequency data, was unable to find evidence indicating that intra-year winners or losers actively alter the risk of their portfolios in response to past performance.

While the empirical results are mixed, recent theoretical developments by Taylor (2003) suggest that the choice of the tournament benchmark for deciding winners and losers influences strategic responses by participants. Specifically, he argues that using an exogenous benchmark (such as a market index) induces losing managers to gamble while winning managers tend to index to lock in their lead. In contrast, using an endogenous benchmark (such as the median fund performance) induces winning managers to gamble. In this case the argument is that the winner expects the loser to gamble, and so the winner gambles in order to maintain his or her lead. As the loser recognizes that the winner has a higher probability of success (and given the asymmetric nature of the funds flow-investment performance relationship), the optimal strategy for the loser is not to gamble but to index. While this result is contrary to the predictions and empirical findings of BHS, it is consistent with the results of Chevalier and Ellison (1997) and also the findings of Palomino and Prat (2003) who examine the impact of contract design on fund managers' decisions regarding effort and risk taking.

Against this background, the current study uses a panel data regression approach to look for evidence of tournament (gaming) behaviour in the performance of fund managers in Malaysia. In doing so, we extend the tournaments literature by examining the performance of three data sets pertaining to the performance and evidence of tournament behaviour in (i) all managed funds in Malaysia, (ii) Islamic funds, and (iii) conventional funds. The analysis is based on calendar years over the period 1982 to 2007, using a range of within-year assessment periods against both exogenous (KLCI) and endogenous (median return) benchmarks. Utilizing panel data helps overcome the continuity problem associated with the mismatched life cycles present in the ever expanding funds management industry.

A major motivation for choosing the Malaysian data of unit trusts is to investigate and examine the behaviour of funds operating in an economy with the following three characteristics: (i) an emerging market in the rapidly expanding Asian economy, (ii) a market that has a reporting period in line with the calendar year, and (iii) an economy with a strong presence of Islamic funds (Shariah) and Muslim population.

The Islamic sector is singled out in particular due to the fact that Islamic economics proceeds in accordance with Islamic law and therefore influences and restricts fund managers' investment decisions. As the Qur'an speaks against usury (interest) in the context of early Muslim society, it generally calls for the removal of interest rates from financial transactions, with the ultimate objective of producing more of an 'Islamic society'. However, there are liberal movements within Islam that deny the need for this tendency, since they generally see Islam as compatible with modern secular institutions and law.

Today, there are over 250 Islamic financial institutions globally with approximately $230 billion in assets. However, the vast wealth of Islamic funds under management is not well diversified, as Saudi Arabia controls 70% of all assets under management. The primary fund management companies that cater to these investors are Citibank (Saudi American Bank), HSBC (Saudi British Bank/Al Amanah), Al Rajhi and Al Ahli. Outside the Muslim world, London is the world's hub of Islamic banking activity although its banks offer few retail products to the Muslim community. In Southeast Asia, Malaysia is an aggressive force, holding 9% of Muslim finances. Reciprocally, Islamic banking comprises 10% of Malaysian finances. With Saudi Arabia being a market leader, Malaysia's goal of being the number one player in the Islamic fund industry remains a challenge.

The basic thrust of our findings can be summarized as follows. Generally, our results suggest that winning managers are likely to decrease risk and losing managers are likely to increase risk regardless of the

benchmark used. Therefore, our findings support the Brown et al. (1996) model, as the use of an endogenous benchmark contradicts Taylor's (2003) claim. Furthermore, our results produce no strong evidence of tournament behaviour within Malaysian Islamic funds. The Islamic behaviour can be attributed to their attitude to investment, which is in accordance with strict Shariah laws.

The remainder of this paper is structured as follows. Section 2 presents information on the data used in this study, Section 3 describes the methodology and hypothesis development. The research findings are presented in Section 4, and Section 5 presents some concluding remarks.

2. Data and Methodology

2.1 Malaysian Unit Trusts

The unit trust industry in Malaysiawas established in 1959. The following two decades were characterised by slow growth in the sales of units and a lack of public interest in the new investment product. Only five new unit trust management companies were established, with a total of 18 funds introduced over that period. The 1980s also witnessed the emergence of unit trust management companies, which were subsidiaries of financial institutions. Their participation facilitated the marketing and distribution of unit trusts through the banks branch network, which widened investor reach.

Although the pace of growth of unit trust funds has moderated since the financial crisis of 1997-98, it has nevertheless maintained its upward trend in terms of the number of units in circulation and unit holders. The period also saw Shariah funds continue to gain popularity in terms of the increasing number of funds offered by a host of unit trust providers. The rise in Islamic funds could be attributed to Islam being the official religion of Malaysia (according to the 2000 census figures, approximately 60% of the population practiced Islam). The modern Islamic fund management industry was born in the 1970s, when a new class of oil-rich Arab investors, celebrating the 15th century of the Islamic calendar (Hijra) in 1976, sought a culturally-aware alternative to the "profit at all costs" mentality of western investing, particularly in interest-dealings.

Islamic banking is active in 75 countries and is growing at 15% globally, with an estimated $1 trillion worth of assets under management. Islamic mutual funds or Islamic unit trust funds are managed in compliance with the Shariah principles. Islamic mutual funds typically engage a Shariah board to advise and ensure that its investment operations and portfolios are managed in compliance with Shariah principles. There are different categories of Islamic funds in Malaysia and the typical products these funds invest in are Shariah-compliant equities, Islamic bonds and Mudharabah deposits. With today's pace of development in the Islamic financial

systems, and together with an estimated 1.2 billion Muslims globally, the management of liquidity is a challenge due to the relative scarcity of Islamic capital market instruments. The challenge for Malaysia and the Islamic capital markets globally is to step up its efforts in term of product development, harmonisation of Shariah's views and establishment of a global Islamic financial system framework.

Today there are a variety of Islamic capital market products and services to meet the needs of those who seek to invest in compliance with Shariah principles. The Islamic capital market has grown in sophistication and Islamic forms of product structuring, project financing, stockbroking, asset management and venture capital services are becoming increasingly available in Malaysia. Table 1 displays the Malaysian unit trust sector performance for the year ending September 2006.

2.2 Data and Sampling

The data were supplied by Standard & Poor's, an independent research house that, among other things, monitors the managed funds industry. The data set consists of monthly index series return data for the period 1985 to 2007 for managed funds in existence over this period. A fund is included in our analysis for each full year in which it was present in the data set, thereby largely avoiding the major survivorship bias problem arising when funds that do not survive for the full sample period are absent from the database.[3]

For each fund in the sample, data are available from either 1985 or the first entire year of operation, if inception is later than this date. The index series reflects changes in the value of an investment in a fund over time, and is based on a notional $10,000 investment in the fund. Monthly index values are calculated by reference to the month-end exit price of the fund, which is net of management fees, assuming reinvestment of all cash and bonus unit distributions. The index series, therefore, gives representative returns that an actual investor may have achieved and measures the monthly performance of the fund.

Consistent with the theoretical insights of Goriaev, Palomino and Prat (2001) and Taylor (2003), we define fund winners/losers in relation to two alternative types of benchmark: (a) an endogenous benchmark – the 'median' manager (that is, being above/below the median performance of similar funds for the first part of the

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[3] A number of studies such as Grinblatt and Titman (1989), Brown, Goetzman, Ibbotson and Ross (1992), Carpenter and Lynch (1999) and Carhart, Carpenter, Lynch and Musto (2002) document the economic significance of survivorship bias in studies of equity mutual fund performance, particularly in relation to the issue of persistence in performance. However, and as noted by Del Guercio and Tkac (2002), studies by Sirri and Tufano (1998), Chevalier and Ellison (1997) and Goetzmann and Peles (1997) found that survivorship bias does not affect inferences about the funds flow-performance relationship and, therefore, is not a major issue in studies involving annual tournaments.

assessment period), and (b) an exogenous benchmark- the Kuala Lumpur Composite Index (that is, being above/below this market index return for the first part of the assessment period).

Islamic fund performance receives substantial coverage in the Malaysian financial and popular press. Due to the rapid pace of growth in the Islamic fund sector, investors and media commentators are keen to get an operational understanding of the industry. However, a vast majority of assets are held by conventional funds, which implies a strong interest from the public in relation to the strategic attitudes of conventional fund managers. It is interesting to gain an overall perspective of whether tournament behaviour exists in the Malaysian managed fund industry, and if so, to what extent the different sectors affect the overall industry. Accordingly, we suggest three annual tournament scenarios: (a) Islamic funds, (b) conventional funds, and (c) the overall Malaysian managed fund industry.

3 Methodology and Hypothesis Development

3.1 Panel-data analysis

We choose to apply a parametric regression analysis as the basis of our empirical analysis. Panel data typically refer to data containing time series observations of a number of individuals and therefore have at least two dimensions; a cross-section dimension and a time series dimension (Hsiao 2006). Hence, there are several advantages founded on using this analysis. First, Panel data usually contain more degrees of freedom and more sample variability than cross-sectional data which indicates more accurate inference of model parameters. Second, we can generate more accurate predictions for individual outcomes by pooling the data rather than generating predictions of individual outcomes using the data on the individual in question (e.g. Hsiao, Appelbe and Dineen (1993), Hsiao, Chan, Mountain and Tsui (1989). Third, Panel data contain information on both the intertemporal dynamics and the individuality of the entities may allow one to control the effects of missing or unobserved variables. Accordingly, we now explain the methodology.

3.2 Definition of Core Variable

We estimate a number of models analyzing intra-period changes in fund risk in relation to a range of fund characteristics. The original BHS hypothesis was that fund managers who are interim losers are likely to increase fund volatility in the latter part of the assessment period to a greater extent that interim winners. This hypothesis implies a negative relationship between interim period fund performance and latter period fund risk.

For each performance year we establish two classifications: In the first classification we identify interim winners and losers on the basis of the fund's relative return between the commencement of the year and month

M, where *M* ranges from the third month to the ninth month of the relevant year. In the second we calculate the same returns as above but now we rank them against the KLCI index. This is done so we can calculate how winners and losers react for both an endogenous and exogenous type of benchmark which implies that endogenous benchmark uses a median-manager like analysis where an exogenous benchmark uses the KLCI Index as the performance benchmark. This means that for each performance year tournament we calculate seven interim ranking periods ranging from three months to nine months for both endogenous and exogenous benchmarks. Discrete monthly return data was provided by Standard & Poor's for each fund and the KLCI index. Following BHS, we calculate the *M*-month compound return of each fund *j*, in tournament year *y* (denoted *RTN*

$_{jMy}$) as:

$$RTN_{jMy} = [(1+r_{j1y})(1+r_{j2y})\dots(1+r_{jMy})] - 1 \qquad (1)$$

where r_{jMy} is the monthly change in the fund's index series value.

As noted earlier, our calculation of returns is done on an annual basis. To maximize the effective sample size and explore the longer period dynamics of the tournament hypothesis.

3.3 Model and Hypothesis Development

To explore the basic relationship between interim period performance and subsequent period risk we estimate the equation:

$$RAR = \beta_0 + \beta_1 RTN + \beta_2(W * RTN) + \beta_3(L * RTN) \qquad (2)$$

Where RAR (risk adjusted-return/ratio) represent the change in risk, and the dependent variables affecting the equation. β_0 represents the intercept, β_1 represents the gradient of the equation respectively, and the subscripts β_2 *(W*RTN)* and β_3 *(L*RTN)* denote winners and losers dummy variables.

Stated formally, our null hypothesis is that subsequent period fund risk is independent of ranking period performance. In the context or equation (2), we would fail to reject the null hypothesis when the estimated coefficient is equal to zero, H0: *b* = 0.

If the null hypothesis of independence between fund performance and subsequent changes in fund risk can be rejected, our alternative hypotheses focus on examining the central prediction of the tournament hypothesis: funds with below benchmark returns in the first part of the year (losers) increase their total risk in the remaining part of the year, relative to better performing funds (winners). If this is the case we would expect to

find an inverse relationship between ranking period returns and subsequent period Risk Adjustment Ratio. Evidence supporting this alternative hypothesis would be provided by a slope coefficient less than zero, H1: $b < 0$.

To explore temporal dynamics in the tournament hypothesis we divide the sample period into two sub-periods. These sub-periods are: 1985-1996 and 1997-2005 for Calendar year tournaments. This analysis is motivated by our contention that the level of competition increased dramatically across this sector of the funds management industry, during these two periods, as the numbers of firms increased year by year. As such, this suggests that a much different competitive dynamic might have an influence on mangers' risk taking behaviour. To explore for temporal dynamics we employ a dummy variable enhanced version of Eq. (2):

$$
\begin{aligned}
RAR = C \ + \ &\beta_1 RTN \ + \beta_2 (W * RTN) + \beta_3 (L * RTN) + \\
&\beta_4 (RTN * W * D1) + \beta_5 (RTN * L * D1)
\end{aligned}
\tag{3}
$$

where $D1 = 1$ if in second half of sample period. In this specification, b1 represents the base case gaming coefficient – for the first half of the full sample period. The second to fifth coefficients, b2 – b5 represents the effect that the inter-temporal change will have on winners and losers returns.

The basic model specified in Eq. (3) posits a linear relationship between prior period performance and subsequent period risk shifts. However, it is plausible that the relationship has a non-linear functional form, for example, because of the likely accelerated incentives for risk shifting behaviour at the extremes of interim performance. Evidence as to the potential nonlinear relationship between performance and risk shifting may be ascertained by using a quadratic model:

$$
RAR = \beta_0 + \beta_1 RTN + \beta_2 (W * RTN) + \beta_3 (L * RTN) + \beta_4 (RTN)^2
\tag{4}
$$

Apart from the tests of the linear term, we are interested in the sign and significance of the quadratic term in this model. Logically, the quadratic term could be negative, positive or zero. A zero coefficient provides support for the base case linear model of Eq. (3). Alternatively, $c > 0$ ($c < 0$) would indicate a departure from linearity and a convex (concave) relation. However, it's the relative magnitudes of the linear and quadratic terms that have a big bearing over whether the overall relation is a negative or positive one and whether its increasing or decreasing in strength. Equation (4) further explores strategic interaction by combining winners and losers returns with nonlinearity to see whether there is a change in these funds behaviour and if the change is a significant one.

Our final models explores whether a fund characteristic impacts upon tournament behaviour: Funds age. With regard to the age of a fund we hypothesize that newer/younger funds have a greater incentive, and greater freedom, to chase returns than more established funds. It is likely that investors would be more strongly influenced by poor short-term performance for a fund with a short performance history than for a fund that has been around for some time. To test this hypothesis we partition fund age into two categories: We classify funds as "Young" if they were in existence less than two years at the beginning of each annual tournament and as "Old" if they were in existence for more than four years at the beginning of each annual tournament. We use the following dummy variable augmented version of Eq. (2) to test this hypothesis:

$$RAR = C + \beta_1 RTN + \beta_2(W*RTN) + \beta_3(L*RTN) + \beta o(RTN*W*OLD) + \beta y(RTN*W*YOUNG) + \beta o(RTN*L*OLD) + \beta y(RTN*L*YOUNG) \qquad (5)$$

In this specification, the coefficient by represents the base case gaming coefficient applicable to the 'young' funds in the sample. The second coefficient, bo, is the incremental gaming impact for the old' funds group relative to the 'young' funds.

4. RESULTS

4.1 Analysis Relative to an Exogenous Benchmark

The first theory is that assessment against an exogenous benchmark (such as the Malaysian KLCI stock market index) induces losing managers to gamble and take on more risk in the subsequent period, while winning managers index to lock in their lead, and in doing so reduce their portfolio risk. Evidence supporting this would be provided by a t-statistic greater or less then two shown in the tables.

4.1.1 Malaysian Islamic Funds – Exogenous Benchmark

Tables 6 and 7 present an indication of tournament behaviour being present in the Malaysian Islamic managed fund industry when measured against the index benchmark. We can see the evidence of winners increasing risk most apparent in the pooled and fixed cross-sectional tests in the first three months to the first five months. Evidence of losers decreasing risk is also shown to be most apparent in the fixed cross-sectional test in the first three months to the first five months. We therefore find these results to contradict Hallahan et al's (2006) model and therefore observe that there is tournament behaviour present in the Islamic funds Industry in Malaysia.

4.1.2 Malaysian Conventional Funds – Exogenous Benchmark

The results of the conventional funds returns when compared to the exogenous index benchmark demonstrate some tournament behaviour (as shown in Table 4 and 5). We observe in Table 4 that there are mixed results as winners increasing risk are indicated by the blue shading with a t-statistic greater then positive two and winners decreasing risk are indicated by the red shading with a t-statistic less then negative two.

On the other hand, losers appear to decrease their risk as show in table 5. We see t-statistics of less then negative two which show that with conventional funds, losers decrease their risk against an exogenous benchmark.

4.1.3 All Malaysian Funds – Exogenous Benchmark

As combined funds include that of Malaysian Islamic and Conventional funds where Conventional funds have a greater weighting, the combined result is not surprising as we see that winners will both increase or decrease risk, and where losers show evidence of decreasing their risk.

The all funds results for the exogenous benchmark produce extremely similar results to that of the conventional funds. Of the 13 significant results, 8 show positive figures greater then two which indicate that winning manager's increase risk. The 5 remaining negative figures greater then two indicate that winning manager's reduce risk. We also observe in table 9 that losers are likely to reduce risk and hence these results show some form of tournament behaviour, as mixed results are present for winners and losers are likely to reduce their risk in order to achieve a greater return for the assessment period.

Taken together, all of the analysis involving exogenous benchmarks does provide a degree of support that losers will increase risk and winners will index to lock in their lead. The results found under the conventional and all fund analysis produce almost identical results, suggesting that while Islamic funds are rapidly increasing in prominence and appeal, they still represent a relatively small section of the Malaysian managed fund industry and have little influence on strategic behaviour of the industry as a whole.

4.2 Analysis Relative to an Endogenous Benchmark

The second test is that assessment against an endogenous benchmark, such as a median performance, induces winning (losing) managers to take on more (less) risk in the subsequent period.

4.2.1 Malaysian Islamic Funds - Endogenous Benchmark

The Islamic fund analysis for the endogenous benchmark is shown in Table 2. The results produce little evidence for tournament behaviour, with only two t-statistic results showing a figure greater then 2 as highlighted in Table

2. This outcome can be attributed to the Islamic beliefs and hence investment styles made in accordance to the Shariah laws. We therefore see that there is no change in risk for both winners and losers in the Islamic Malaysian fund industry when comparing to an endogenous benchmark.

4.2.2 Malaysian Conventional Funds – Endogenous Benchmark

At a general level, the results for the endogenous (median manager) benchmark produce a smaller number of significant results compared to the exogenous benchmark. From the conventional fund analysis, 80 percent of the individual tournaments recorded (using an exogenous benchmark) produce significant results while the endogenous benchmark produce 40 percent. The all fund analysis produce significant results for 55 percent compared to 43 percent under the endogenous benchmark. More specific details are discussed below. Table 1 reports the conventional fund results for the endogenous benchmark. This analysis shows 17 significant t-statistic results from each of the four test types conducted. Of these cases, we see that a majority of losers are likely to decrease risk, i.e. 8 out of 9 results in negative figures as show in the red shading in Table 1. We can also observe the winners figures, where all significant results indicate that winners increase their risk. Thus, we draw similar results to Taylor's (2003) model that interim winners (losers) increase (decrease) risk.

4.2.3 All Malaysian Funds – Endogenous Benchmark

The analysis of all funds is revealed in Table 3. In broad terms, the results are quite similar to the conventional funds results. Of all results, we see that losers will decrease risk, which is represented by the negative greater then two t-statistic and winners will increase risk, which is represented by the positive greater than two t-statistic.

4.3 Non-linearity

In order to discover whether the relationship between risk and return are linear or non linear, Equation (3) was each repeated to Islamic, conventional and combined funds. Table 13 and 14 shows the results for the conventional funds against the exogenous index. The t-statistics indicate that there are winners will increase and decrease their risk and therefore show mixed results. Table 14 also shows that losers in conventional funds will also increase and decrease their risks which ultimately reveal mixed results, and thus tournament behaviour is not so apparent. As we have also tested for the possibility of non-linearity, the figures shaded in the b3 T-stat column reveal that there is evidence of a non-linear relationship between interim period rankings.

Islamic winners and losers also revealed no strong evidence of tournament behaviour as seen in tables 15 and 16. As with the combined Malaysian funds, we can deduce from tables 17 and 18 that mixed results will also be apparent and no tournament behaviour is significantly present.

Incorporating a quadratic term however produced different results when comparing to the endogenous benchmark. Table 10 for conventional funds demonstrates that winners will increase risk and losers will decrease risk. Islamic funds however shown in table 11 did not reveal any form of tournament behaviour as there was only one figure that showed winners increasing risk. By observing the conventional and Islamic funds against the endogenous benchmark, we can therefore infer that combined funds will have significant tournament behaviour, where winners will increase their risk and losers will decrease their risk (Table 12). Overall, our finding shows that for both endogenous and exogenous benchmarks, there is strong evidence of a non linear relationship.

4.4 – Inter temporal Analysis

Intertemporal analysis was undertaken to investigate whether increased competition post 1996 had any effect on the returns of winning and losing managers, Equation (3) was estimated for all three types of funds; Combined, Conventional and Islamic.

The results for conventional funds returns showed that winners and losers exhibit differential behaviour. We observe in Table 20 that there are mixed results for winners as there are random increases and decreases in risk for the period tested. On the other hand, losers appear to increase their risk as show in table 20. Overall, the results for Islamic funds show that there is no change in risk behaviour for winning funds and that losing funds decrease their risk level. We observe in Table 21 that there are next to no convincing results for winners as there is only one time frame with statistically significant results. On the other hand, losers appear to decrease their risk as show in table 21.

The results for all Malaysian funds mirror the results of the conventional funds. This is mainly due to the fact that conventional funds drive all of the Malaysian funds.

In summary, all winning Malaysian funds face a set of mixed results as shown in table 19, and also in table 19, we can see that losing Malaysian funds increase risk. These sets of results happen for the same reason conventional funds are affected in this way.

4.5 Fund Age

Equation (5) was estimated to investigate whether there was a relationship between fund age and risk shifting behaviour. Funds were classified as 'Young' for funds with only up to 2 years of existence and 'Old' for funds with more than 4 years of existence.

The results for conventional funds returns showed that Young winners and losers exhibited behaviour different from Old winners and losers. This is true for Conventional and Combined funds, but not Islamic as their results are not affected by age.

We observe in Table 23 that for young funds, both winners and losers show the same behaviour. Both winning and losing young funds tend to increase their risk. Statistically significant coefficient changes under table 23 backs these results. On the other hand, old firms have a total different result from young as neither winners nor losers change their risk. Table 23 show that results for old firms all failto show significance.

Table 24 shows results for old and young Islamic funds. The Islamic funds were the only type of funds which had the same result for all different variables; Both winning young funds and losing young funds had no change in risk. Winning old firms and losing old firms also showed no change in risk after an age analysis was performed. These results are backed by a lack of significant coefficient changes as the vast majority of tests done for Islamic funds failed to show statistical significance.

Under the age test for all Malaysian funds we had differing results from expected. As shown in table 22, results differed from conventional funds. Although conventional funds drive the results for all Malaysian funds, in the age scenario, Malaysian funds had just enough strength to affect the end-result.

We observe in Table 22 that for young funds, winners had an increase in risk thus differing from the 'no change in risk' result achieved by conventional funds. Losing young firms show the same behaviour as their conventional counter-parts by having no change in risk.

On the other hand, old firms have the expected result of no change in risk as conventional firms drive their results. Under old firms, Islamic funds also backed this same outcome. Table 23 show that results for old firms all fail the t-statistics test.

4. SUMMARY AND CONCLUSIONS

The funds management industry has proven to be a fertile ground for theoretical and empirical research over the past forty years. Since the performance and risk-shifting behaviour of fund managers was initially put under the spotlight by Treynor and Mazuy (1966) and Jensen (1968), it is possible to identify an evolving strand of research where performance assessment is examined within the framework of the principal-agent literature. One focus that has emerged in this literature is the tournament model developed by Brown, Harlow and Starks (1996). Specifically, they argue that fund managers who are interim losers are likely to increase fund volatility in

the latter part of the assessment period to a greater extent than interim winners. While the empirical results are mixed, recent theoretical developments by Taylor (2003) point to the proposition that using an exogenous (endogenous) benchmark induces losing (winning) managers to gamble. This proposition presents two competing testable hypotheses.

Using a sample covering the period 1985 to 2007, we investigated the tournament induced risk-shifting behaviour of Malaysian managed funds. Following Taylor (2003), we tested the ability of the two competing hypotheses to predict risk-shifting behaviour in our sample. To this end, we applied the parametric cross-product ratio methodology to examine tournaments based on conventional funds, Islamic funds and all funds, using a range of within-year assessment periods, against both an exogenous and an endogenous benchmark.

Our results produced no strong evidence of tournament behaviour within Malaysian Islamic funds using an endogenous benchmark. On the other hand, we see evidence of tournament behaviour using an exogenous benchmark which supports the findings by Chevalier & Ellision (1997) and Qiu (2003).

Using an exogenous benchmark for non linear relationship, the winners and losers in all funds exhibit evidence of mixed results, representing a random increase and decrease in risk for the period tested. Regardless of the benchmark used, the results for winners and losers in conventional and combined funds are the same. This could be due to the large percentage of conventional funds in the combined funds which caused the results to bias towards conventional funds.

We also found that funds' maturity in terms of year of establishment affects the tournament behaviour. "Young" funds showed a greater inclination to increase risk than "old" funds.

Our research, therefore, extends the empirical literature on fund manager behaviour by seeking empirical evidence of tournament effects in a dataset. While our study is primarily concerned with evidence on risk-taking behaviour on the part of fund managers, it can also be viewed as providing, albeit indirectly, empirical evidence on the question of whether benchmark choice may affect such behaviour.

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Table 1 - Equation 1: Endogenous Conventional Funds

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 * RTN (winners)	b2 T-Stat	b3 * RTN (losers)	b3 T-Stat
Pooled	1st 3 months	0.140115	8.635331	0.315603	1.694212	0.143192	0.624109	-0.313048	-0.798554
	1st 4 months	0.968887	40.49643	0.543084	2.243367	0.485085	1.561398	-1.086664	-2.342046
	1st 5 months	1.015074	41.59512	1.642551	6.767044	0.882926	2.791463	-1.383752	-3.158465
	1st 6 months	1.169131	45.33736	1.574051	6.155071	0.349153	1.072265	-1.2851	-2.826498
	1st 7 months	1.171478	45.24916	1.359059	5.659532	0.289593	0.935349	-0.498139	-1.159417
	1st 8 months	1.490413	25.63651	-0.177734	-0.328384	0.555365	0.81865	0.953946	1.021116
	1st 9 months	1.98293	17.68922	-0.626245	-0.692909	-0.163325	-0.133617	1.976503	1.303785
Fixed Period	1st 3 months	0.155769	10.53529	0.067907	0.301141	0.133332	0.733093	0.024482	0.083966
	1st 4 months	0.987589	42.08053	0.226424	0.655625	0.504448	1.745716	-0.740729	-1.835894
	1st 5 months	1.049585	46.51492	0.959326	2.954928	1.038643	3.735145	-0.946959	2.600599
	1st 6 months	1.190519	53.78633	0.893005	2.752814	0.861239	3.07408	-0.682828	-1.850477
	1st 7 months	1.218776	52.58233	0.24262	0.769231	0.778815	2.877314	0.028568	0.079656
	1st 8 months	1.539621	24.98237	-1.262904	-1.603315	1.12216	1.654812	1.076668	1.205433
	1st 9 months	2.012306	17.19079	-1.696629	-1.196441	0.49161	0.389123	1.76435	1.175992
Fixed Cross Sec	1st 3 months	0.141111	8.225147	0.301439	1.469584	0.136292	0.529481	-0.420063	-0.960602
	1st 4 months	0.96058	41.15578	0.700742	2.87799	0.435314	1.365154	-1.30709	-2.693236
	1st 5 months	1.012927	41.61526	1.635753	6.568589	0.967929	2.926823	-1.331262	-2.824477
	1st 6 months	1.17191	44.15183	1.585708	5.875025	0.32882	0.937785	-1.060446	-2.117655
	1st 7 months	1.171718	44.70741	1.414407	5.623355	0.274488	0.822924	-0.236336	-0.511382
	1st 8 months	1.476075	24.4396	0.128623	0.220778	0.437605	0.580966	1.083064	1.056084
	1st 9 months	1.953707	17.62311	-0.512626	-0.559276	0.450888	0.34755	2.138296	1.347978
Fixed Both	1st 3 months	0.145474	8.868835	0.292664	1.111257	0.016849	0.080748	-0.141373	-0.430583
	1st 4 months	0.975517	44.0041	0.491342	1.437325	0.379663	1.324655	-1.029533	-2.547315
	1st 5 months	1.051587	48.45028	0.878855	2.693073	1.102501	3.967436	-0.96374	-2.585749
	1st 6 months	1.200334	54.87904	0.735887	2.173521	0.872549	2.999732	-0.476145	-1.242488
	1st 7 months	1.221306	53.14443	0.266174	0.791106	0.719104	2.52221	0.186896	0.505399
	1st 8 months	1.518735	23.21797	-0.804943	-0.901154	0.857017	1.123299	0.872422	0.89647
	1st 9 months	2.009327	17.27047	-2.149186	-1.429246	1.042076	0.772821	1.355138	0.873042

Table 2 - Equation 1: Endogenous Islamic Funds

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 * RTN (winners)	b2 T-Stat	b3 * RTN (losers)	b3 T-Stat
Pooled	1st 3 months	0.095946	4.342652	-0.299409	-1.094254	0.318316	0.861661	-0.159677	-0.276323
	1st 4 months	0.932678	16.98274	0.153124	0.247719	0.066137	0.081166	0.241147	0.20147
	1st 5 months	0.996399	17.0043	2.493736	3.56766	0.229691	0.261777	-0.694714	-0.503836
	1st 6 months	1.178293	19.49646	2.85513	3.89557	-0.421736	-0.414335	-1.664961	-1.279147
	1st 7 months	1.153077	20.14218	2.46077	3.624009	-0.06627	-0.071845	-1.155083	-0.95555
	1st 8 months	1.478002	15.42545	0.734177	0.638072	0.601518	0.398339	-0.88164	-0.434097
	1st 9 months	1.951873	13.04543	-2.145661	-1.480301	1.406663	0.674052	2.5596	1.018499
Fixed Period	1st 3 months	0.134688	4.243043	-1.107463	-1.789309	0.409573	1.100818	-0.557617	-1.00709
	1st 4 months	1.048406	17.61058	-3.40503	-2.904491	1.412734	1.724874	0.563798	0.520717
	1st 5 months	1.136923	19.53726	-2.240009	-2.009574	1.913557	2.310862	-0.128545	-0.104709
	1st 6 months	1.257556	22.05298	-0.469771	-0.404288	0.912281	0.966364	-0.905814	-0.791666
	1st 7 months	1.206645	21.20087	0.377264	0.331476	0.892238	0.982335	-0.790281	-0.727191
	1st 8 months	1.556575	15.35762	-1.9147	-1.033024	2.120574	1.385612	-0.810297	-0.431658
	1st 9 months	1.983581	13.12178	-4.047846	-1.573233	2.697209	1.237899	2.679564	1.111808
Fixed Cross Sec	1st 3 months	0.101247	4.979949	-0.533497	-2.031976	0.59998	1.665144	-0.246277	-0.434976
	1st 4 months	0.929064	15.86263	0.126524	0.186909	0.15374	0.170801	-0.107837	-0.07938
	1st 5 months	0.998738	15.95413	2.401643	3.07843	0.234978	0.24141	-0.894223	-0.562636
	1st 6 months	1.174726	18.3262	2.933175	3.560782	-0.488329	-0.433718	-2.039766	-1.40539
	1st 7 months	1.14894	19.55464	2.470937	3.410004	0.045112	0.04526	-1.269001	-0.978858
	1st 8 months	1.453351	14.44282	1.194383	0.963775	0.591345	0.354873	-1.687427	-0.76002
	1st 9 months	1.941006	12.2463	-1.20812	-0.73959	0.087599	0.036387	0.557415	0.19228
Fixed Both	1st 3 months	0.139877	4.542212	-1.349337	-2.171772	0.708606	1.917752	-0.59389	-1.090742
	1st 4 months	1.054381	16.40366	-3.717083	-2.813094	1.533568	1.704364	-0.089924	-0.072943
	1st 5 months	1.137407	18.3612	-2.321833	-1.846828	1.882081	2.056907	-0.78008	-0.561231
	1st 6 months	1.257847	20.8428	-0.707675	-0.5215	1.013804	0.959864	-1.574156	-1.264821
	1st 7 months	1.213336	20.94274	0.01976	0.01555	1.054416	1.072877	-1.154363	-1.028296
	1st 8 months	1.547691	14.39827	-1.695987	-0.814571	1.954016	1.147167	-1.691787	-0.844403
	1st 9 months	1.990815	12.34312	-3.030535	-0.991525	0.766687	0.299463	0.923647	0.334244

Table 3 – Equation 1: Endogenous Combined Funds

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 * RTN (winners)	b2 T-Stat	b3 * RTN(losers)	b3 T-Stat
Pooled	1st 3 months	0.137919	9.939787	0.063396	0.394723	0.375555	1.868709	-0.114105	-0.325572
	1st 4 months	0.957788	43.79984	0.492718	2.211085	0.435968	1.510198	-1.042989	-2.362036
	1st 5 months	1.010459	44.70425	1.673418	7.295777	0.8285	2.75364	-1.226214	-2.867766
	1st 6 months	1.173901	49.87905	1.425365	5.988986	0.652373	2.102026	-0.814896	-1.91432
	1st 7 months	1.166622	49.51313	1.417706	6.256813	0.319245	1.09041	-0.561425	-1.38005
	1st 8 months	1.490939	29.59399	-0.154405	-0.319556	0.574168	0.943524	0.988271	1.161461
	1st 9 months	1.976806	20.74291	-0.949367	-1.20841	0.27003	0.25235	2.30304	1.720664
Fixed Period	1st 3 months	0.158024	11.4297	-0.299812	-1.362272	0.421816	2.435525	0.222517	0.794768
	1st 4 months	0.989473	45.31963	-0.145898	-0.435606	0.562483	2.054962	-0.62946	-1.621547
	1st 5 months	1.065453	49.99332	0.432513	1.328616	1.192245	4.369429	-0.661831	-1.832121
	1st 6 months	1.209363	58.99935	0.440351	1.407648	1.080399	4.043051	-0.452507	-1.313543
	1st 7 months	1.214947	56.60229	0.185157	0.59705	0.853594	3.236678	-0.070824	-0.206058
	1st 8 months	1.540559	29.05179	-1.34129	-1.876751	1.195911	1.954305	1.007391	1.255886
	1st 9 months	2.009445	20.34505	-2.209717	-1.754402	1.014911	0.910989	2.056782	1.566982
Fixed Cross Sec	1st 3 months	0.140436	9.675809	-0.014656	-0.084064	0.444911	2.000451	-0.130138	-0.33723
	1st 4 months	0.951332	43.83808	0.620259	2.721646	0.380143	1.266942	-1.289688	-2.738493
	1st 5 months	1.008989	44.20364	1.691191	7.081807	0.832642	2.612765	-1.282768	-2.758875
	1st 6 months	1.175671	48.40982	1.451505	5.741404	0.602745	1.798648	-0.679796	-1.443834
	1st 7 months	1.166956	48.80183	1.432408	5.999321	0.363912	1.143523	-0.291703	-0.662474
	1st 8 months	1.474747	28.06379	0.189224	0.362438	0.435217	0.640532	0.951542	1.009245
	1st 9 months	1.951293	20.49702	-0.682238	-0.840661	0.522284	0.454163	2.168813	1.51129
Fixed Both	1st 3 months	0.15046	9.887169	-0.155186	-0.611177	0.389261	1.986198	0.126938	0.40775
	1st 4 months	0.978889	46.23446	0.081377	0.238926	0.462963	1.670541	-0.932289	-2.335709
	1st 5 months	1.065435	50.95719	0.412674	1.224455	1.186231	4.242002	-0.819728	-2.186263
	1st 6 months	1.216392	59.47694	0.30803	0.924068	1.078757	3.849463	-0.372761	-1.03087
	1st 7 months	1.217944	57.22277	0.154185	0.464421	0.858545	3.066225	0.092332	0.260206
	1st 8 months	1.51822	26.92863	-0.841727	-1.03486	0.905008	1.309571	0.657121	0.748188
	1st 9 months	2.007406	20.26147	-2.484474	-1.829601	1.240469	1.031694	1.488464	1.073717

Table 4 – Equation 1: Exogenous Conventional Funds Winners

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 * RTN (winners)	b2 T-Stat
Pooled	1st 3 months	0.148807	8.65226	0.684329	1.735779	-0.390711	-0.901765
	1st 4 months	0.903435	31.6462	-1.473534	-3.416152	2.614919	5.053941
	1st 5 months	0.948376	30.27484	-0.02189	-0.056624	2.441725	4.904545
	1st 6 months	1.211078	36.44158	1.552937	3.967102	-0.151361	-0.297858
	1st 7 months	1.215283	36.63978	1.841672	4.771737	-0.63893	-1.301277
	1st 8 months	1.63228	22.90789	2.817669	3.467228	-3.552002	-3.421206
	1st 9 months	2.273577	15.98632	3.287073	2.951925	-5.739624	-3.599787
Fixed Period	1st 3 months	0.131826	8.577744	-1.06014	-2.655633	1.420908	3.394025
	1st 4 months	0.930305	31.1618	-0.911982	-1.821042	1.857248	3.22728
	1st 5 months	0.948185	29.82823	-0.337652	-0.770755	2.654396	4.925483
	1st 6 months	1.138131	36.40803	0.254476	0.644292	1.566437	3.126487
	1st 7 months	1.194891	36.66571	0.476093	1.170954	0.468372	0.928261
	1st 8 months	1.539342	18.64206	0.192952	0.192245	-0.64081	-0.506703
	1st 9 months	2.243888	12.93685	1.881811	1.137208	-4.597611	-2.073486
Fixed Cross Sec	1st 3 months	0.158665	8.625246	1.031786	2.382404	-0.846592	-1.750835
	1st 4 months	0.851518	29.70241	-2.393794	-5.304159	3.961073	7.148235
	1st 5 months	0.90724	27.53941	-0.582341	-1.390642	3.326775	5.981556
	1st 6 months	1.216206	33.64942	1.734937	3.922887	-0.328754	-0.560122
	1st 7 months	1.219145	34.41262	2.089331	4.862518	-0.841677	-1.511997
	1st 8 months	1.621703	20.97541	3.189848	3.468579	-3.703273	-3.103075
	1st 9 months	2.221204	15.13578	3.312224	2.780999	-5.196157	-2.995599
Fixed Both	1st 3 months	0.121779	7.054719	0.510326	2.61256	-1.550714	-3.077915
	1st 4 months	0.845726	27.78244	-2.455509	-4.498873	4.081978	6.298246
	1st 5 months	0.873429	26.09697	-1.593775	-3.251568	4.421034	7.150152
	1st 6 months	1.131471	33.7025	0.023442	0.050727	1.793499	3.066345
	1st 7 months	1.199941	34.88063	0.616893	1.323082	0.319346	0.55755
	1st 8 months	1.490597	16.28672	-0.043569	-0.03632	0.06598	0.044074
	1st 9 months	2.162859	11.66093	0.765007	0.40501	-3.077809	-1.225805

Table 5 – Equation 1: Exogenous Conventional Funds Losers

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b3 * RTN (losers)	b3 T-Stat
Pooled	1st 3 months	0.148807	8.65226	0.293618	2.165135	0.390711	0.901765
	1st 4 months	0.903435	31.6462	1.141385	5.983863	-2.614919	-5.053941
	1st 5 months	0.948376	30.27484	2.419835	11.49221	-2.441725	-4.904545
	1st 6 months	1.211078	36.44158	1.401577	6.496995	0.151361	0.297858
	1st 7 months	1.215283	36.63978	1.202742	6.000798	0.63893	1.301277
	1st 8 months	1.63228	22.90789	-0.734333	-1.650145	3.552002	3.421206
	1st 9 months	2.273577	15.98632	-2.45255	-2.898103	5.739624	3.599787
Fixed Period	1st 3 months	0.131826	8.577744	0.360768	2.149278	-1.420908	-3.394025
	1st 4 months	0.930305	31.1618	0.945266	3.409822	-1.857248	-3.22728
	1st 5 months	0.948185	29.82823	2.316744	8.17288	-2.654396	-4.925483
	1st 6 months	1.138131	36.40803	1.820913	6.720477	-1.566437	-3.126487
	1st 7 months	1.194891	36.66571	0.944465	3.535902	-0.468372	-0.928261
	1st 8 months	1.539342	18.64206	-0.447858	-0.6698	0.64081	0.506703
	1st 9 months	2.243888	12.93685	-2.715801	-2.0637	4.597611	2.073486
Fixed Cross Sec	1st 3 months	0.158665	8.625246	0.185194	1.231456	0.846592	1.750835
	1st 4 months	0.851518	29.70241	1.567279	7.980578	-3.961073	-7.148235
	1st 5 months	0.90724	27.53941	2.744434	12.05231	-3.326775	-5.981556
	1st 6 months	1.216206	33.64942	1.406183	5.845605	0.328754	0.560122
	1st 7 months	1.219145	34.41262	1.247654	5.698607	0.841677	1.511997
	1st 8 months	1.621703	20.97541	-0.513425	-1.036907	3.703273	3.103075
	1st 9 months	2.221204	15.13578	-1.883932	-2.103669	5.196157	2.995599
Fixed Both	1st 3 months	0.121779	7.054719	0.510326	2.61256	-1.550714	-3.077915
	1st 4 months	0.845726	27.78244	1.626469	5.811041	-4.081978	-6.298246
	1st 5 months	0.873429	26.09697	2.82726	9.580701	-4.421034	-7.150152
	1st 6 months	1.131471	33.7025	1.816941	6.290397	-1.793499	-3.066345
	1st 7 months	1.199941	34.88063	0.936239	3.296687	-0.319346	-0.55755
	1st 8 months	1.490597	16.28672	0.022411	0.029742	-0.06598	-0.044074
	1st 9 months	2.162859	11.66093	-2.312801	-1.620427	3.077809	1.225805

Table 6 – Equation 1: Exogenous Islamic Funds Winners

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 * RTN (winners)	b2 T-Stat
Pooled	1st 3 months	0.081067	3.535551	-3.921465	-6.433787	3.960875	5.999795
	1st 4 months	0.823759	13.17435	-2.999141	-2.593362	3.847777	2.858867
	1st 5 months	0.879224	12.42105	-0.840408	-0.785593	4.072992	3.00913
	1st 6 months	1.155133	14.9273	1.220236	1.137354	1.122897	0.799867
	1st 7 months	1.157499	15.43607	1.524933	1.560076	0.44699	0.344756
	1st 8 months	1.624038	13.8112	2.682431	1.825764	-3.282365	-1.663158
	1st 9 months	2.259015	11.87889	2.710618	1.660863	-6.542822	-2.644811
Fixed Period	1st 3 months	0.095809	3.221396	-3.994858	-3.395787	3.752052	3.189849
	1st 4 months	1.027661	12.10583	-1.858354	-0.986758	-0.239331	-0.110865
	1st 5 months	1.108656	12.53339	-0.950483	-0.524676	0.355345	0.168004
	1st 6 months	1.28872	13.49709	0.407571	0.275976	-0.697803	-0.355894
	1st 7 months	1.199293	12.15602	0.842612	0.574282	0.194989	0.100019
	1st 8 months	1.563506	10.10277	0.003329	0.001386	-0.626137	-0.204295
	1st 9 months	2.0644	8.01073	-0.035326	-0.011004	-2.53776	-0.606319
Fixed Cross Sec	1st 3 months	0.095381	4.502575	-3.025748	-5.26061	2.888541	4.580817
	1st 4 months	0.784149	11.54713	-4.178325	-3.196797	5.29605	3.417663
	1st 5 months	0.842161	10.62885	-1.715558	-1.394661	5.225799	3.234239
	1st 6 months	1.117852	12.67422	0.458923	0.362773	2.15593	1.25604
	1st 7 months	1.105291	13.03564	0.653023	0.564403	1.74199	1.090919
	1st 8 months	1.571612	11.8615	2.119061	1.218787	-2.159798	-0.894217
	1st 9 months	2.243808	10.45834	2.554188	1.326035	-6.258765	-2.077607
Fixed Both	1st 3 months	0.096759	3.345995	-3.170368	-2.607411	2.992901	2.449091
	1st 4 months	0.930106	9.384335	-4.890184	-2.037726	3.414813	1.238964
	1st 5 months	1.000873	10.08975	-3.737757	-1.725989	3.857651	1.534616
	1st 6 months	1.227951	11.65757	-0.789502	-0.43287	0.962737	0.419628
	1st 7 months	1.106263	10.3888	-0.911952	-0.52855	2.616771	1.175849
	1st 8 months	1.480515	8.529271	-1.373774	-0.490886	1.476264	0.412771
	1st 9 months	2.064255	6.904367	-0.977432	-0.250971	-2.067541	-0.406608

Table 7 – Equation 1: Exogenous Islamic Funds Losers

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b3 * RTN (losers)	b3 T-Stat
Pooled	1st 3 months	0.081067	3.535551	0.03941	0.193416	-3.960875	-5.999795
	1st 4 months	0.823759	13.17435	0.848635	1.873183	-3.847777	-2.858867
	1st 5 months	0.879224	12.42105	3.232584	5.637119	-4.072992	-3.00913
	1st 6 months	1.155133	14.9273	2.343133	3.770105	-1.122897	-0.799867
	1st 7 months	1.157499	15.43607	1.971923	3.39241	-0.44699	-0.344756
	1st 8 months	1.624038	13.8112	-0.599934	-0.633355	3.282365	1.663158
	1st 9 months	2.259015	11.87889	-3.832204	-2.718341	6.542822	2.644811
Fixed Period	1st 3 months	0.095809	3.221396	-0.242805	-0.527978	-3.752052	-3.189849
	1st 4 months	1.027661	12.10583	-2.097685	-2.100859	0.239331	0.110865
	1st 5 months	1.108656	12.53339	-0.595139	-0.596904	-0.355345	-0.168004
	1st 6 months	1.28872	13.49709	-0.290232	-0.25234	0.697803	0.355894
	1st 7 months	1.199293	12.15602	1.0376	0.950103	-0.194989	-0.100019
	1st 8 months	1.563506	10.10277	-0.622807	-0.375504	0.626137	0.204295
	1st 9 months	2.0644	8.01073	-2.573086	-1.051936	2.53776	0.606319
Fixed Cross Sec	1st 3 months	0.095381	4.502575	-0.137207	-0.704546	-2.888541	-4.580817
	1st 4 months	0.784149	11.54713	1.117725	2.217219	-5.29605	-3.417663
	1st 5 months	0.842161	10.62885	3.510241	5.255289	-5.225799	-3.234239
	1st 6 months	1.117852	12.67422	2.614852	3.547238	-2.15593	-1.25604
	1st 7 months	1.105291	13.03564	2.395013	3.531174	-1.74199	-1.090919
	1st 8 months	1.571612	11.8615	-0.040737	-0.037009	2.159798	0.894217
	1st 9 months	2.243808	10.45834	-3.704577	-2.255682	6.258765	2.077607
Fixed Both	1st 3 months	0.096759	3.345995	-0.177467	-0.389403	-2.992901	-2.449091
	1st 4 months	0.930106	9.384335	-1.475372	-1.303104	-3.414813	-1.238964
	1st 5 months	1.000873	10.08975	0.119894	0.108305	-3.857651	-1.534616
	1st 6 months	1.227951	11.65757	0.173236	0.137611	-0.962737	-0.419628
	1st 7 months	1.106263	10.3888	1.704819	1.457245	-2.616771	-1.175849
	1st 8 months	1.480515	8.529271	0.10249	0.05423	-1.476264	-0.412771
	1st 9 months	2.064255	6.904367	-3.044973	-1.060773	2.067541	0.406608

Table 8 – Equation 1: Exogenous Combined Funds Winners

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 * RTN (winners)	b2 T-Stat
Pooled	1st 3 months	0.134447	9.153782	-0.041426	-0.119617	0.317166	0.835953
	1st 4 months	0.887195	34.33435	-1.710172	-4.240566	2.825769	5.87628
	1st 5 months	0.979795	17.76862	1.725499	2.327992	1.455481	1.710996
	1st 6 months	1.198558	39.33928	1.486514	4.010388	0.050608	0.105433
	1st 7 months	1.205231	39.81375	1.791708	4.978672	-0.490122	-1.066409
	1st 8 months	1.62648	26.31846	2.772995	3.861358	-3.471421	-3.766119
	1st 9 months	2.264024	18.68377	3.169926	3.283607	-5.762715	-4.143595
Fixed Period	1st 3 months	0.121892	8.521709	-1.607418	-4.104705	1.912995	4.687837
	1st 4 months	0.933993	33.74863	-1.166145	-2.4049	1.794581	3.252756
	1st 5 months	1.095518	18.8176	-0.586713	-0.599011	1.276696	1.575725
	1st 6 months	1.153455	39.23051	0.118578	0.304154	1.479354	3.022373
	1st 7 months	1.189401	38.86318	0.408727	1.034324	0.569543	1.157934
	1st 8 months	1.536041	21.46842	0.092037	0.101419	-0.522718	-0.458334
	1st 9 months	2.213769	14.95378	1.603	1.090609	-4.305909	-2.197013
Fixed Cross Sec	1st 3 months	0.145708	9.365679	0.38161	1.014519	-0.234619	-0.560605
	1st 4 months	0.840379	31.85619	-2.632628	-6.128132	4.126543	7.869319
	1st 5 months	1.012322	17.07095	1.118002	1.155908	1.334857	1.188315
	1st 6 months	1.196791	35.79026	1.527955	3.617728	0.04837	0.086189
	1st 7 months	1.201018	36.8145	1.883791	4.658903	-0.49566	-0.939245
	1st 8 months	1.609405	23.8121	2.999477	3.660709	-3.436557	-3.206584
	1st 9 months	2.219222	17.50204	3.167896	3.02256	-5.264603	-3.417655
Fixed Both	1st 3 months	0.112054	7.044636	-1.580621	-3.438926	2.039869	4.204279
	1st 4 months	0.853764	29.54313	-2.752895	-5.059702	4.027964	6.31752
	1st 5 months	1.165043	17.72368	-1.892108	-1.536227	1.030336	1.000934
	1st 6 months	1.141828	36.01253	-0.211335	-0.458754	1.833752	3.192938
	1st 7 months	1.184161	36.62343	0.383981	0.845574	0.64968	1.163144
	1st 8 months	1.484465	18.67919	-0.235565	-0.216853	0.303198	0.224257
	1st 9 months	2.14058	13.39785	0.454396	0.268047	-2.834819	-1.26557

Table 9 – Equation 1: Exogenous Combined Funds Losers

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b3 * RTN (losers)	b3 T-Stat
Pooled	1st 3 months	0.134447	9.153782	0.27574	2.32959	-0.317166	-0.835953
	1st 4 months	0.887195	34.33435	1.115598	6.351386	-2.825769	-5.87628
	1st 5 months	0.979795	17.76862	3.18098	6.696181	-1.455481	-1.710996
	1st 6 months	1.198558	39.33928	1.537122	7.517301	-0.050608	-0.105433
	1st 7 months	1.205231	39.81375	1.301586	6.85308	0.490122	1.066409
	1st 8 months	1.62648	26.31846	-0.698427	-1.741594	3.471421	3.766119
	1st 9 months	2.264024	18.68377	-2.592789	-3.479155	5.762715	4.143595
Fixed Period	1st 3 months	0.121892	8.521709	0.305577	1.863492	-1.912995	-4.687837
	1st 4 months	0.933993	33.74863	0.628436	2.343718	-1.794581	-3.252756
	1st 5 months	1.095518	18.8176	0.689984	0.921099	-1.276696	-1.575725
	1st 6 months	1.153455	39.23051	1.597932	5.965335	-1.479354	-3.022373
	1st 7 months	1.189401	38.86318	0.97827	3.748861	-0.569543	-1.157934
	1st 8 months	1.536041	21.46842	-0.430681	-0.715919	0.522718	0.458334
	1st 9 months	2.213769	14.95378	-2.702909	-2.330732	4.305909	2.197013
Fixed Cross Sec	1st 3 months	0.145708	9.365679	0.146991	1.129751	0.234619	0.560605
	1st 4 months	0.840379	31.85619	1.493915	8.116553	-4.126543	-7.869319
	1st 5 months	1.012322	17.07095	2.452858	4.103473	-1.334857	-1.188315
	1st 6 months	1.196791	35.79026	1.576326	6.821686	-0.04837	-0.086189
	1st 7 months	1.201018	36.8145	1.388131	6.615643	0.49566	0.939245
	1st 8 months	1.609405	23.8121	-0.43708	-0.969705	3.436557	3.206584
	1st 9 months	2.219222	17.50204	-2.096707	-2.615998	5.264603	3.417655
Fixed Both	1st 3 months	0.112054	7.044636	0.459248	2.429403	-2.039869	-4.204279
	1st 4 months	0.853764	29.54313	1.275069	4.599625	-4.027964	-6.31752
	1st 5 months	1.165043	17.72368	-0.861772	-0.894246	-1.030336	-1.000934
	1st 6 months	1.141828	36.01253	1.622418	5.657027	-1.833752	-3.192938
	1st 7 months	1.184161	36.62343	1.033661	3.727915	-0.64968	-1.163144
	1st 8 months	1.484465	18.67919	0.067633	0.099497	-0.303198	-0.224257
	1st 9 months	2.14058	13.39785	-2.380422	-1.874559	2.834819	1.26557

Table 10 - Equation 2: Endogenous Conventional Funds

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 (winners)	b2 T-Stat	b3 (losers)	b3 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.130218	7.929586	0.816761	3.419259	0.431905	1.767988	-0.85969	-2.03062	-1.77542	-3.32779
	1st 4 months	0.967695	40.57398	0.069435	0.237041	0.084972	0.249954	-0.41453	-0.79864	2.004086	2.851807
	1st 5 months	0.994269	39.552	1.219464	4.435421	0.353701	0.996189	-0.50802	-0.98893	3.004816	3.22751
	1st 6 months	1.175931	45.24053	1.8467	6.331982	0.682707	1.855132	-1.85451	-3.42806	-1.66176	-1.93642
	1st 7 months	1.1733	45.37863	1.73185	5.913388	0.584847	1.737712	-1.16349	-2.22222	-1.45054	-2.21541
	1st 8 months	1.493384	25.69244	0.357156	0.56054	0.954227	1.319914	-0.11217	-0.09755	-2.29174	-1.58802
	1st 9 months	2.039365	17.75827	-0.085396	-0.091283	1.192858	0.871469	-0.10474	-0.05858	-4.89786	-2.18649
Fixed Period	1st 3 months	0.15594	10.53301	0.037334	0.148592	0.104565	0.498847	0.063781	0.196555	0.154428	0.276431
	1st 4 months	0.987028	41.47108	0.20592	0.551102	0.477372	1.384642	-0.70564	-1.49693	0.126102	0.144144
	1st 5 months	1.020255	40.98573	0.696939	2.065566	0.487051	1.423644	-0.19651	-0.43278	2.993903	2.751249
	1st 6 months	1.194081	52.2908	0.959678	2.814755	0.985625	2.885813	-0.84428	-1.88572	-0.5649	-0.63712
	1st 7 months	1.226934	52.21186	0.516044	1.503929	1.086167	3.49678	-0.51453	-1.14649	-1.45827	-2.00798
	1st 8 months	1.533773	24.34322	-1.391754	-1.660053	0.961913	1.255531	1.404201	1.218508	0.85667	0.450054
	1st 9 months	2.037492	15.87293	-1.571664	-1.089641	0.892506	0.588792	1.181827	0.611808	-1.62591	-0.47901
Fixed Cross Sec	1st 3 months	0.129624	7.454089	0.869285	3.292618	0.449332	1.651439	-1.03205	-2.19213	-1.9696	-3.38635
	1st 4 months	0.958398	41.35265	0.082742	0.283174	-0.097257	-0.280502	-0.44606	-0.83638	2.654172	3.763841
	1st 5 months	0.984258	39.14039	1.105428	3.956156	0.286535	0.777651	-0.22082	-0.40765	3.912234	4.053106
	1st 6 months	1.17787	43.88602	1.799999	5.85927	0.593253	1.503438	-1.51626	-2.56936	-1.33938	-1.45747
	1st 7 months	1.173441	44.82463	1.767353	5.760081	0.558136	1.542289	-0.87831	-1.56312	-1.38334	-2.00161
	1st 8 months	1.47855	24.47304	0.566368	0.826341	0.777536	0.967559	0.194072	0.153931	-1.90175	-1.21161
	1st 9 months	2.005924	17.61678	-0.032239	-0.034023	1.767683	1.210696	0.181287	0.096748	-4.58517	-1.95426
Fixed Both	1st 3 months	0.145359	8.823901	0.304203	1.015946	0.025935	0.109472	-0.1539	-0.42398	-0.05199	-0.08115
	1st 4 months	0.971614	43.16402	0.342923	0.920133	0.191943	0.560185	-0.80022	-1.72196	0.885988	0.999746
	1st 5 months	1.008844	41.796	0.470744	1.384346	0.334008	0.987111	0.073984	0.162649	4.352189	3.915281
	1st 6 months	1.202737	53.149	0.784616	2.189514	0.953774	2.722928	-0.58234	-1.26489	-0.38329	-0.41666
	1st 7 months	1.22961	52.89428	0.590522	1.607713	1.044213	3.249898	-0.4185	-0.90574	-1.61149	-2.17711
	1st 8 months	1.506427	22.55271	-1.096711	-1.155804	0.514906	0.605605	1.589972	1.270475	1.867833	0.912067
	1st 9 months	2.014447	15.62727	-2.12615	-1.394139	1.122774	0.69877	1.237886	0.617427	-0.32536	-0.09248

Table 11 - Equation 2: Endogenous Islamic Funds

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 (winners)	b2 T-Stat	b3 (losers)	b3 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.104291	4.504011	-0.748962	-1.60885	0.219889	0.581428	-0.010164	-0.017204	1.231296	1.193049
	1st 4 months	0.938888	17.34123	-1.594778	-1.837115	-0.349462	-0.428259	1.380484	1.107842	5.098515	2.824958
	1st 5 months	0.969339	16.51047	0.946107	1.049531	-0.557702	-0.609604	0.775349	0.528111	7.966322	2.666743
	1st 6 months	1.165163	18.75092	2.30464	2.42952	-0.736774	-0.685426	-1.023073	-0.691644	2.91619	0.914583
	1st 7 months	1.151696	19.61774	2.409075	2.921179	-0.105864	-0.106838	-1.086587	-0.799165	0.303088	0.110961
	1st 8 months	1.512787	15.5522	1.713154	1.352285	1.714442	1.055591	-2.816506	-1.231241	-7.930497	-1.8055
	1st 9 months	2.081759	13.15084	-2.226557	-1.550552	4.145623	1.744042	0.446686	0.168647	-10.1611	-2.332904
Fixed Period	1st 3 months	0.128953	3.953349	-1.286091	-1.946283	0.19175	0.411356	-0.244652	-0.357089	1.469066	0.776949
	1st 4 months	1.033853	16.37242	-3.703614	-2.964614	0.923977	0.856846	1.143106	0.83725	2.62035	0.697941
	1st 5 months	1.17218	17.98988	-1.532719	-1.216101	2.608088	2.581914	-1.240956	-0.806742	-5.994311	-1.198058
	1st 6 months	1.27174	18.12511	-0.359042	-0.297474	1.169408	0.974618	-1.244172	-0.827987	-1.790073	-0.348363
	1st 7 months	1.189253	17.15102	0.276985	0.238214	0.546534	0.454955	-0.396966	-0.281999	2.079056	0.440825
	1st 8 months	1.620249	14.02948	-1.574786	-0.839588	3.365667	1.794828	-2.518994	-1.051731	-8.057002	-1.147347
	1st 9 months	2.024726	10.9329	-3.995174	-1.547506	3.374958	1.204789	2.057212	0.708562	-3.069357	-0.386132
Fixed Cross Sec	1st 3 months	0.106824	4.977604	-0.831732	-1.851436	0.535497	1.450541	-0.150355	-0.259803	0.81274	0.818556
	1st 4 months	0.933917	16.23027	-1.653882	-1.766882	-0.365761	-0.404351	0.957495	0.688314	5.412312	2.701563
	1st 5 months	0.964262	15.3274	0.754351	0.762361	-0.771235	-0.748622	0.535121	0.323567	9.130605	2.634382
	1st 6 months	1.154746	17.35289	2.17995	2.042365	-0.971601	-0.805206	-1.207828	-0.739616	4.19067	1.108612
	1st 7 months	1.141376	18.76658	2.216755	2.495912	-0.175521	-0.160573	-0.947652	-0.653012	1.577978	0.497138
	1st 8 months	1.484247	14.44942	2.042224	1.485133	1.717767	0.93115	-3.322858	-1.328579	-7.226286	-1.405496
	1st 9 months	2.0656	12.09938	-1.376599	-0.847694	2.858829	1.018178	-1.156316	-0.38307	-9.677919	-1.879882
Fixed Both	1st 3 months	0.140931	4.470545	-1.308028	-1.951681	0.756428	1.617193	-0.661228	-0.975238	-0.314863	-0.16762
	1st 4 months	1.039597	15.26264	-4.048656	-2.862638	1.00525	0.837046	0.527631	0.341601	2.797437	0.665745
	1st 5 months	1.15136	16.52526	-1.983267	-1.344533	2.18317	1.910466	-1.252368	-0.713102	-2.588497	-0.441879
	1st 6 months	1.266594	17.11321	-0.609464	-0.422445	1.180354	0.884763	-1.800951	-1.080632	-1.190928	-0.20542
	1st 7 months	1.172762	16.86333	-0.323255	-0.246515	0.199366	0.156467	-0.145295	-0.098492	5.225554	1.053836
	1st 8 months	1.589523	12.96584	-1.409472	-0.663698	2.823353	1.346692	-2.913801	-1.104415	-5.61279	-0.713429
	1st 9 months	2.019601	9.943998	-2.970601	-0.965616	1.217018	0.379499	0.500799	0.151439	-2.147909	-0.234445

Table 12 - Equation 2: Endogenous Combined Funds

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 (winners)	b2 T-Stat	b3 (losers)	b3 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.132418	9.414518	0.359508	1.73716	0.544955	2.544625	-0.41512	-1.10891	-1.05245	-2.26349
	1st 4 months	0.956643	43.96132	-0.085458	-0.316845	-0.047509	-0.150993	-0.25096	-0.51517	2.42695	3.765194
	1st 5 months	0.983257	42.57263	1.120535	4.408693	0.05334	0.157764	-0.04904	-0.1005	4.202602	4.871279
	1st 6 months	1.178584	49.2206	1.556704	5.801803	0.844193	2.349853	-1.08796	-2.18661	-0.88353	-1.05992
	1st 7 months	1.169293	49.61633	1.712107	6.420618	0.612283	1.887648	-1.10446	-2.28922	-1.31165	-2.08719
	1st 8 months	1.495896	29.6766	0.326992	0.595362	1.05043	1.589373	-0.06187	-0.0604	-2.42319	-1.83788
	1st 9 months	2.040982	20.83711	-0.520813	-0.651516	1.904539	1.554993	0.169214	0.109286	-5.46553	-2.72181
Fixed Period	1st 3 months	0.158245	11.44223	-0.386161	-1.587899	0.336689	1.675167	0.333605	1.07612	0.458586	0.835009
	1st 4 months	0.986748	44.50826	-0.242248	-0.670531	0.431782	1.310074	-0.46358	-1.0239	0.609109	0.712223
	1st 5 months	1.03869	44.30747	0.198623	0.591101	0.639489	1.879918	0.039694	0.089455	2.912856	2.709345
	1st 6 months	1.213071	55.70612	0.482614	1.490055	1.180641	3.54754	-0.57204	-1.36885	-0.45277	-0.50559
	1st 7 months	1.224485	55.84694	0.407659	1.243617	1.205705	3.846952	-0.57525	-1.36711	-1.50636	-2.07282
	1st 8 months	1.535816	28.09121	-1.412356	-1.903623	1.06059	1.47453	1.232538	1.209355	0.637359	0.358301
	1st 9 months	2.040875	18.57537	-2.126597	-1.679502	1.569039	1.120639	1.397552	0.84418	-2.02519	-0.65366
Fixed Cross Sec	1st 3 months	0.133199	9.041891	0.363261	1.612691	0.658654	2.789547	-0.50716	-1.23548	-1.32501	-2.63888
	1st 4 months	0.949341	44.14281	-0.086791	-0.31714	-0.224773	-0.690774	-0.33542	-0.65621	3.011609	4.572991
	1st 5 months	0.973985	41.66751	1.067034	4.090115	-0.113386	-0.317294	0.070832	0.136447	5.063941	5.56388
	1st 6 months	1.178169	47.47106	1.514088	5.349138	0.702206	1.794098	-0.8148	-1.49503	-0.44687	-0.49232
	1st 7 months	1.169248	48.86002	1.678406	5.997681	0.622141	1.761898	-0.75527	-1.45472	-1.12077	-1.68153
	1st 8 months	1.478545	28.10549	0.56821	0.956932	0.827871	1.118925	0.103635	0.091255	-1.93705	-1.33819
	1st 9 months	2.008694	20.4581	-0.303369	-0.36716	2.031351	1.539154	0.204123	0.122624	-4.9607	-2.31554
Fixed Both	1st 3 months	0.150894	9.887085	-0.209442	-0.728665	0.344638	1.530907	0.184901	0.539081	0.253233	0.403349
	1st 4 months	0.972654	45.26255	-0.163312	-0.43999	0.155402	0.465677	-0.55349	-1.20303	1.464844	1.651381
	1st 5 months	1.024746	44.23763	0.021788	0.062444	0.367952	1.063178	0.205354	0.452904	4.462839	3.96187
	1st 6 months	1.21798	55.89309	0.328508	0.946093	1.121733	3.241194	-0.4244	-0.97283	-0.19909	-0.2118
	1st 7 months	1.227034	56.5816	0.403128	1.145206	1.217156	3.715675	-0.43354	-0.99934	-1.55883	-2.10012
	1st 8 months	1.50694	25.96404	-1.026288	-1.215959	0.57159	0.712928	1.225738	1.095575	1.581713	0.820634
	1st 9 months	2.012954	18.08285	-2.470048	-1.809633	1.336386	0.898093	1.3695	0.777355	-0.35583	-0.10951

Table 13 - Equation 2: Exogenous Conventional Funds Winners

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 (winners)	b2 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.132608	6.941103	0.355135	0.828083	0.436869	0.718387	-1.195564	-1.936857
	1st 4 months	0.915323	28.26324	-1.252214	-2.423071	2.102878	2.511506	0.669897	0.777908
	1st 5 months	1.019591	27.84129	1.647719	2.778191	-0.997149	-0.946192	5.113911	3.696156
	1st 6 months	1.285035	31.9354	2.947077	5.067613	-3.114059	-2.972774	3.931502	3.230034
	1st 7 months	1.265642	29.96323	2.595824	4.718769	-2.274963	-2.315421	1.750993	1.921589
	1st 8 months	1.848381	20.02349	6.50221	5.030266	-10.98033	-4.81374	8.065319	3.651965
	1st 9 months	2.517269	13.79727	7.294503	3.334484	-13.84067	-3.352957	8.555052	2.127028
Fixed Period	1st 3 months	0.12114	7.273885	-1.195562	-2.936375	1.906271	3.733329	-0.839912	-1.657553
	1st 4 months	0.932353	27.75446	-0.882232	-1.608239	1.775408	2.108386	0.114117	0.133184
	1st 5 months	1.026009	27.25642	1.147516	1.961748	-0.636525	-0.625271	4.73292	3.801197
	1st 6 months	1.165551	29.21438	0.654652	1.222207	0.620918	0.62661	1.189196	1.105931
	1st 7 months	1.183091	27.6565	0.332078	0.627911	0.821119	0.846807	-0.379539	-0.426061
	1st 8 months	1.673127	15.16269	2.192929	1.476523	-4.905795	-1.84684	4.550655	1.825217
	1st 9 months	2.569415	11.22193	6.603651	2.419209	-14.51356	-2.861474	9.975579	2.172836
Fixed Cross Sec	1st 3 months	0.146669	6.981181	0.791233	1.653563	-0.250584	-0.358577	-0.828851	-1.181069
	1st 4 months	0.84004	25.14601	-2.605743	-4.726693	4.438563	4.915546	-0.593355	-0.669874
	1st 5 months	0.96264	24.11361	0.666958	1.010083	0.790763	0.671771	3.601379	2.442509
	1st 6 months	1.294003	28.75172	3.167242	4.767299	-3.324103	-2.785995	3.800977	2.879725
	1st 7 months	1.265054	26.7645	2.768443	4.382968	-2.278489	-2.021844	1.442621	1.466052
	1st 8 months	1.849509	17.77125	6.99894	4.706356	-11.29141	-4.309507	7.868147	3.248637
	1st 9 months	2.444902	12.66698	6.888184	2.951883	-12.40733	-2.817657	7.405222	1.78129
Fixed Both	1st 3 months	0.106501	5.555478	-1.178813	-2.46498	2.163833	3.574708	-1.073617	-1.821887
	1st 4 months	0.811142	23.15314	-2.937355	-4.923833	5.383278	5.843031	-1.701444	-1.984033
	1st 5 months	0.915223	22.11535	-0.835847	-1.266737	2.776113	2.4319	2.201024	1.713409
	1st 6 months	1.134536	25.55234	0.067293	0.108263	1.692399	1.507919	0.119375	0.105567
	1st 7 months	1.153976	24.39678	0.065611	0.108019	1.637998	1.497684	-1.325068	-1.41499
	1st 8 months	1.594595	12.45106	1.48128	0.832689	-3.130657	-0.998742	3.210344	1.16065
	1st 9 months	2.521427	9.914649	5.783261	1.875453	-13.50457	-2.387787	9.933407	2.056527

Table 14 - Equation 2: Exogenous Conventional Funds Losers

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b3 (losers)	b3 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.132608	6.941103	0.792003	2.72368	-0.436869	-0.718387	-1.195564	-1.936857
	1st 4 months	0.915323	28.26324	0.850665	2.027324	-2.102878	-2.511506	0.669897	0.777908
	1st 5 months	1.019591	27.84129	0.650571	1.24523	0.997149	0.946192	5.113911	3.696156
	1st 6 months	1.285035	31.9354	-0.166982	-0.314469	3.114059	2.972774	3.931502	3.230034
	1st 7 months	1.265642	29.96323	0.320861	0.640836	2.274963	2.315421	1.750993	1.921589
	1st 8 months	1.848381	20.02349	-4.478116	-4.010629	10.98033	4.81374	8.065319	3.651965
	1st 9 months	2.517269	13.79727	-6.54617	-3.114469	13.84067	3.352957	8.555052	2.127028
Fixed Period	1st 3 months	0.12114	7.273885	0.710709	2.63587	-1.906271	-3.733329	-0.839912	-1.657553
	1st 4 months	0.932353	27.75446	0.893176	1.862833	-1.775408	-2.108386	0.114117	0.133184
	1st 5 months	1.026009	27.25642	0.51099	0.925232	0.636525	0.625271	4.73292	3.801197
	1st 6 months	1.165551	29.21438	1.27557	2.267152	-0.620918	-0.62661	1.189196	1.105931
	1st 7 months	1.183091	27.6565	1.153197	2.066493	-0.821119	-0.846807	-0.379539	-0.426061
	1st 8 months	1.673127	15.16269	-2.712867	-1.925004	4.905795	1.84684	4.550655	1.825217
	1st 9 months	2.569415	11.22193	-7.909912	-2.89989	14.51356	2.861474	9.975579	2.172836
Fixed Cross Sec	1st 3 months	0.146669	6.981181	0.540649	1.607032	0.250584	0.358577	-0.828851	-1.181069
	1st 4 months	0.84004	25.14601	1.83282	4.142799	-4.438563	-4.915546	-0.593355	-0.669874
	1st 5 months	0.96264	24.11361	1.457721	2.541102	-0.790763	-0.671771	3.601379	2.442509
	1st 6 months	1.294003	28.75172	-0.156861	-0.264389	3.324103	2.785995	3.800977	2.879725
	1st 7 months	1.265054	26.7645	0.489954	0.872991	2.278489	2.021844	1.442621	1.466052
	1st 8 months	1.849509	17.77125	-4.292465	-3.397997	11.29141	4.309507	7.868147	3.248637
	1st 9 months	2.444902	12.66698	-5.519146	-2.476969	12.40733	2.817657	7.405222	1.78129
Fixed Both	1st 3 months	0.106501	5.555478	0.98502	3.02631	-2.163833	-3.574708	-1.073617	-1.821887
	1st 4 months	0.811142	23.15314	2.445923	4.904957	-5.383278	-5.843031	-1.701444	-1.984033
	1st 5 months	0.915223	22.11535	1.940266	3.25702	-2.776113	-2.4319	2.201024	1.713409
	1st 6 months	1.134536	25.55234	1.759693	2.863627	-1.692399	-1.507919	0.119375	0.105567
	1st 7 months	1.153976	24.39678	1.703609	2.783226	-1.637998	-1.497684	-1.325068	-1.41499
	1st 8 months	1.594595	12.45106	-1.649377	-1.014683	3.130657	0.998742	3.210344	1.16065
	1st 9 months	2.521427	9.914649	-7.721308	-2.581514	13.50457	2.387787	9.933407	2.056527

Table 15 - Equation 2: Exogenous Islamic Funds Winners

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 (winners)	b2 T-Stat	b4(RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.082877	3.230265	-3.878207	-5.797886	3.844118	3.884172	0.176457	0.158615
	1st 4 months	0.850307	11.64273	-2.463273	-1.779062	2.572264	1.140878	1.639807	0.705573
	1st 5 months	0.95314	11.34146	1.137118	0.70117	0.004976	0.001744	6.268156	1.618175
	1st 6 months	1.335043	14.13266	5.64317	3.248095	-8.150368	-2.539979	14.43297	3.199517
	1st 7 months	1.333515	13.95767	5.355953	3.278946	-7.715089	-2.498327	12.38791	2.90268
	1st 8 months	1.846331	12.26638	8.492574	2.943317	-14.43927	-2.793909	16.61504	2.332125
	1st 9 months	2.520667	9.914783	8.875825	2.059576	-18.18984	-2.29324	15.38453	1.544968
Fixed Period	1st 3 months	0.101684	3.33969	-4.104128	-3.469219	3.449464	2.820756	1.165699	0.909139
	1st 4 months	1.076612	12.01426	-1.219558	-0.636718	-2.783421	-1.051796	4.499641	1.649131
	1st 5 months	1.143922	12.07257	-0.109317	-0.055083	-1.993628	-0.643341	4.808427	1.037002
	1st 6 months	1.431324	13.12435	3.417413	1.835325	-8.335399	-2.367945	13.48327	2.597342
	1st 7 months	1.405677	11.50732	4.234628	2.241565	-8.530824	-2.322659	13.69987	2.786603
	1st 8 months	1.769505	9.032736	4.448308	1.256633	-10.19645	-1.594369	14.83406	1.702791
	1st 9 months	2.335673	6.645994	4.643412	0.888645	-12.76692	-1.284359	12.90995	1.134373
Fixed Cross Sec	1st 3 months	0.102792	4.272394	-2.8509	-4.48804	2.419882	2.532003	0.693271	0.653389
	1st 4 months	0.782891	9.552207	-4.204112	-2.61135	5.354819	2.030678	-0.071055	-0.027586
	1st 5 months	0.898033	9.232684	-0.291674	-0.154154	2.329369	0.697188	4.218616	0.990448
	1st 6 months	1.313399	11.61772	5.020744	2.390227	-7.240757	-1.869033	13.63898	2.694372
	1st 7 months	1.306047	11.28873	4.797994	2.390032	-6.874224	-1.819539	11.99953	2.508538
	1st 8 months	1.828381	10.20757	8.437553	2.439229	-14.19441	-2.291436	16.80554	2.10616
	1st 9 months	0.898033	9.232684	-0.291674	-0.154154	2.329369	0.697188	4.218616	0.990448
Fixed Both	1st 3 months	0.104372	3.505494	-3.387058	-2.748685	2.706903	2.164467	1.356183	1.06635
	1st 4 months	0.972647	9.122057	-4.330672	-1.764708	1.37186	0.410343	3.324735	1.078475
	1st 5 months	1.020504	9.538119	-3.338055	-1.441959	2.625853	0.74297	2.547912	0.497049
	1st 6 months	1.368045	11.07461	1.938136	0.873421	-6.152094	-1.514212	12.25696	2.111223
	1st 7 months	1.315298	9.208043	2.244247	1.000215	-5.553586	-1.271256	11.95994	2.164717
	1st 8 months	1.674331	7.20848	2.450306	0.592216	-6.908202	-0.910817	12.41877	1.252926
	1st 9 months	1.020504	9.538119	-3.338055	-1.441959	2.625853	0.74297	2.547912	0.497049

Table 16 - Equation 2: Exogenous Islamic Funds Losers

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b3 (losers)	b3 T-Stat	b4(RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.082877	3.230265	-0.034089	-0.067321	-3.844118	-3.884172	0.176457	0.158615
	1st 4 months	0.850307	11.64273	0.108991	0.095423	-2.572264	-1.140878	1.639807	0.705573
	1st 5 months	0.95314	11.34146	1.142094	0.808482	-0.004976	-0.001744	6.268156	1.618175
	1st 6 months	1.335043	14.13266	-2.507198	-1.534442	8.150368	2.539979	14.43297	3.199517
	1st 7 months	1.333515	13.95767	-2.359135	-1.47623	7.715089	2.498327	12.38791	2.90268
	1st 8 months	1.846331	12.26638	-5.946696	-2.4005	14.43927	2.793909	16.61504	2.332125
	1st 9 months	2.520667	9.914783	-9.314011	-2.440493	18.18984	2.29324	15.38453	1.544968
Fixed Period	1st 3 months	0.101684	3.33969	-0.654664	-1.013934	-3.449464	-2.820756	1.165699	0.909139
	1st 4 months	1.076612	12.01426	-4.002978	-2.6259	2.783421	1.051796	4.499641	1.649131
	1st 5 months	1.143922	12.07257	-2.102945	-1.192878	1.993628	0.643341	4.808427	1.037002
	1st 6 months	1.431324	13.12435	-4.917985	-2.327953	8.335399	2.367945	13.48327	2.597342
	1st 7 months	1.405677	11.50732	-4.296196	-1.956863	8.530824	2.322659	13.69987	2.786603
	1st 8 months	1.769505	9.032736	-5.748143	-1.674293	10.19645	1.594369	14.83406	1.702791
	1st 9 months	2.335673	6.645994	-8.123508	-1.485222	12.76692	1.284359	12.90995	1.134373
Fixed Cross Sec	1st 3 months	0.102792	4.272394	-0.431018	-0.879346	-2.419882	-2.532003	0.693271	0.653389
	1st 4 months	0.782891	9.552207	1.150707	0.886463	-5.354819	-2.030678	-0.071055	-0.027586
	1st 5 months	0.898033	9.232684	2.037695	1.250187	-2.329369	-0.697188	4.218616	0.990448
	1st 6 months	1.313399	11.61772	-2.220013	-1.147203	7.240757	1.869033	13.63898	2.694372
	1st 7 months	1.306047	11.28873	-2.07623	-1.090693	6.874224	1.819539	11.99953	2.508538
	1st 8 months	1.828381	10.20757	-5.756854	-1.968307	14.19441	2.291436	16.80554	2.10616
	1st 9 months	2.525565	8.305039	-9.290603	-2.026687	18.20184	1.889293	15.16428	1.304816
Fixed Both	1st 3 months	0.104372	3.505494	-0.680155	-1.037533	-2.706903	-2.164467	1.356183	1.06635
	1st 4 months	0.972647	9.122057	-2.958812	-1.66117	-1.37186	-0.410343	3.324735	1.078475
	1st 5 months	1.020504	9.538119	-0.712202	-0.354602	-2.625853	-0.74297	2.547912	0.497049
	1st 6 months	1.368045	11.07461	-4.213959	-1.739455	6.152094	1.514212	12.25696	2.111223
	1st 7 months	1.315298	9.208043	-3.309338	-1.278266	5.553586	1.271256	11.95994	2.164717
	1st 8 months	1.674331	7.20848	-4.457896	-1.087392	6.908202	0.910817	12.41877	1.252926
	1st 9 months	2.210704	5.255811	-5.939202	-0.913196	7.467474	0.62142	6.626118	0.496216

Table 17 - Equation 2: Exogenous Combined Funds Winners

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b2 (winners)	b2 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.119746	7.352248	-0.35054	-0.930955	1.103669	2.060381	-1.148072	-2.077342
	1st 4 months	0.898283	30.71162	-1.499951	-3.126769	2.332567	3.00505	0.650885	0.809501
	1st 5 months	0.943232	17.04838	0.645852	0.803279	0.799924	0.930038	6.049794	3.145743
	1st 6 months	1.272806	34.94452	2.966944	5.435228	-3.095014	-3.160352	4.294314	3.679545
	1st 7 months	1.253158	32.86771	2.539088	4.975714	-2.113788	-2.320213	1.806023	2.063279
	1st 8 months	1.820603	23.04762	6.238943	5.482627	-10.44997	-5.210774	7.859713	3.912547
	1st 9 months	2.504223	16.19439	7.291406	3.810065	-14.04657	-3.900087	8.983934	2.492585
Fixed Period	1st 3 months	0.115302	7.491448	-1.688357	-4.244949	2.227858	4.544645	-0.570959	-1.158794
	1st 4 months	0.9445	30.67744	-1.015006	-1.943268	1.355254	1.718004	0.637875	0.779295
	1st 5 months	1.080469	18.72202	-2.088462	-1.858504	0.828195	1.013263	5.637554	2.616577
	1st 6 months	1.1957	32.76347	0.762559	1.49346	-0.067415	-0.072353	2.031204	1.950142
	1st 7 months	1.194701	30.02149	0.475019	0.93633	0.40641	0.439684	0.179907	0.208484
	1st 8 months	1.662639	17.63351	2.052697	1.561062	-4.704536	-2.019645	4.588427	2.058086
	1st 9 months	2.530238	12.96793	6.268816	2.629871	-14.14519	-3.201208	10.08002	2.483289
Fixed Cross Sec	1st 3 months	0.13625	7.684709	0.185598	0.446817	0.25703	0.422178	-0.690967	-1.111803
	1st 4 months	0.830218	27.01458	-2.824528	-5.404198	4.562247	5.334523	-0.542859	-0.645015
	1st 5 months	0.976761	15.1467	0.350256	0.314649	1.118816	0.989512	4.434883	1.379969
	1st 6 months	1.276119	30.89999	3.061698	4.84053	-3.153524	-2.781674	4.148707	3.245937
	1st 7 months	1.242023	28.75416	2.513683	4.232608	-1.82676	-1.723134	1.378634	1.447457
	1st 8 months	1.816011	20.16267	6.604674	4.981604	-10.59964	-4.539334	7.659457	3.448124
	1st 9 months	2.449726	14.71838	7.00232	3.366525	-12.94339	-3.306394	8.065182	2.133037
Fixed Both	1st 3 months	0.102931	5.869079	-1.65505	-3.571106	2.419498	4.211893	-0.699297	-1.233661
	1st 4 months	0.83601	25.35485	-2.998293	-5.111012	4.723401	5.302876	-0.942138	-1.117941
	1st 5 months	1.146969	16.90238	-2.93391	-1.865445	0.89033	0.858391	4.063556	1.06428
	1st 6 months	1.164919	28.59412	0.131939	0.220868	1.026354	0.965599	0.999279	0.902753
	1st 7 months	1.153422	26.19008	0.005614	0.009604	1.557911	1.490469	-0.934457	-1.027989
	1st 8 months	1.578971	14.39148	1.197086	0.757848	-2.702183	-0.979098	3.100194	1.249003
	1st 9 months	2.477913	11.33167	5.275503	1.934636	-12.86771	-2.583729	9.729516	2.254422

Table 18 - Equation 2: Exogenous Combined Losers

Test Type	Period	C (intercept)	T-Stat	b1 (gradient)	b1 T-Stat	b3 (losers)	b3 T-Stat	b4 (RTN SQ)	b3 T-Stat
Pooled	1st 3 months	0.119746	7.352248	0.753129	2.914239	-1.103669	-2.060381	-1.148072	-2.077342
	1st 4 months	0.898283	30.71162	0.832616	2.128188	-2.332567	-3.00505	0.650885	0.809501
	1st 5 months	0.943232	17.04838	1.445776	2.002192	-0.799924	-0.930038	6.049794	3.145743
	1st 6 months	1.272806	34.94452	-0.128071	-0.258099	3.095014	3.160352	4.294314	3.679545
	1st 7 months	1.253158	32.86771	0.4253	0.914341	2.113788	2.320213	1.806023	2.063279
	1st 8 months	1.820603	23.04762	-4.211028	-4.286486	10.44997	5.210774	7.859713	3.912547
	1st 9 months	2.504223	16.19439	-6.755164	-3.695287	14.04657	3.900087	8.983934	2.492585
Fixed Period	1st 3 months	0.115302	7.491448	0.5395	2.074491	-2.227858	-4.544645	-0.570959	-1.158794
	1st 4 months	0.9445	30.67744	0.340248	0.744837	-1.355254	-1.718004	0.637875	0.779295
	1st 5 months	1.080469	18.72202	-1.260267	-1.200815	-0.828195	-1.013263	5.637554	2.616577
	1st 6 months	1.1957	32.76347	0.695144	1.300054	0.067415	0.072353	2.031204	1.950142
	1st 7 months	1.194701	30.02149	0.881428	1.654231	-0.40641	-0.439684	0.179907	0.208484
	1st 8 months	1.662639	17.63351	-2.65184	-2.146873	4.704536	2.019645	4.588427	2.058086
	1st 9 months	2.530238	12.96793	-7.876369	-3.304937	14.14519	3.201208	10.08002	2.483289
Fixed Cross Sec	1st 3 months	0.13625	7.684709	0.442628	1.495231	-0.25703	-0.422178	-0.690967	-1.111803
	1st 4 months	0.830218	27.01458	1.737719	4.133144	-4.562247	-5.334523	-0.542859	-0.645015
	1st 5 months	0.976761	15.1467	1.469073	1.581116	-1.118816	-0.989512	4.434883	1.379969
	1st 6 months	1.276119	30.89999	-0.091826	-0.163084	3.153524	2.781674	4.148707	3.245937
	1st 7 months	1.242023	28.75416	0.686923	1.301267	1.82676	1.723134	1.378634	1.447457
	1st 8 months	1.816011	20.16267	-3.994966	-3.550847	10.59964	4.539334	7.659457	3.448124
	1st 9 months	2.449726	14.71838	-5.941069	-3.01281	12.94339	3.306394	8.065182	2.133037
Fixed Both	1st 3 months	0.102931	5.869079	0.764447	2.455495	-2.419498	-4.211893	-0.699297	-1.233661
	1st 4 months	0.83601	25.35485	1.725108	3.529584	-4.723401	-5.302876	-0.942138	-1.117941
	1st 5 months	1.146969	16.90238	-2.04358	-1.390233	-0.89033	-0.858391	4.063556	1.06428
	1st 6 months	1.164919	28.59412	1.158293	1.967489	-1.026354	-0.965599	0.999279	0.902753
	1st 7 months	1.153422	26.19008	1.563525	2.67141	-1.557911	-1.490469	-0.934457	-1.027989
	1st 8 months	1.578971	14.39148	-1.505097	-1.051881	2.702183	0.979098	3.100194	1.249003
	1st 9 months	2.477913	11.33167	-7.592207	-2.879738	12.86771	2.583729	9.729516	2.254422

Table 19 - Equation 3: Combined Funds

Test Type	Period	C (intercept)	T-Stat	RTN	RTN T-stat	DW*RTN	T-Stat	DL*RTN	T-Stat	DW*RTN*D1	T-Stat	DL*RTN*D1	T-Stat
Pooled	1st 3 months	0.134736	9.715461	0.077667	0.485051	1.662177	3.712317	0.377573	0.587631	-1.435808	-3.212493	-0.674729	-0.94262
	1st 4 months	0.957449	43.84075	0.49377	2.223313	1.372697	2.281062	-3.305717	-3.696696	-1.064688	-1.772475	2.758534	2.890167
	1st 5 months	1.01533	45.01812	1.658866	7.270044	-0.537468	-1.074143	-2.585287	-3.475171	1.719265	3.401414	1.817076	2.2336
	1st 6 months	1.183427	50.36696	1.39881	5.919101	-0.63066	-1.268031	-2.921136	-3.854572	1.641014	3.27536	2.745893	3.357007
	1st 7 months	1.174829	49.88856	1.395781	6.194835	-0.825045	-1.753375	-2.30047	-3.193597	1.457262	3.08777	2.281339	2.926041
	1st 8 months	1.49677	29.54263	-0.173659	-0.359072	0.441411	0.445564	-0.326721	-0.223441	0.168409	0.16973	1.761244	1.106235
	1st 9 months	1.97223	20.61276	-0.940216	-1.197845	3.294524	1.909087	3.502524	1.216763	-3.931199	-2.228951	-1.413978	-0.470518
Fixed Cross Sec	1st 3 months	0.138412	9.51074	-0.001887	-0.010824	1.206785	2.456213	0.200239	0.292524	-0.854667	-1.73948	-0.47122	-0.615991
	1st 4 months	0.952755	43.93776	0.605891	2.667206	1.064401	1.719639	-3.619764	-4.050631	-0.774066	-1.252076	2.925037	3.042268
	1st 5 months	1.016141	44.69281	1.647299	6.952147	-0.696292	-1.337372	-2.881804	-3.789632	1.960383	3.69929	2.27392	2.708768
	1st 6 months	1.188758	49.03615	1.385675	5.529014	-0.648482	-1.232667	-3.045751	-3.886031	1.644916	3.054083	3.276632	3.814271
	1st 7 months	1.178075	49.30497	1.38304	5.834086	-0.74049	-1.482248	-2.299827	-3.12542	1.436444	2.861007	2.773323	3.438015
	1st 8 months	1.483072	28.00928	0.152826	0.292213	0.309057	0.287903	-0.613041	-0.398574	0.169082	0.15521	2.196921	1.290854
	1st 9 months	1.94871	20.34683	-0.640181	-0.789252	3.500366	1.941853	3.088591	1.067546	-4.009291	-2.139627	-1.187275	-0.388762
Fixed period	1st 3 months	0.158206	11.44035	-0.333044	-1.513186	1.30779	3.221008	1.047096	1.832954	-0.976831	-2.404982	-1.060382	-1.642681
	1st 4 months	0.986913	45.26129	-0.166655	-0.498381	1.983024	3.297133	0.415283	0.472639	-1.604199	-2.662423	-1.241707	-1.300593
	1st 5 months	1.060882	49.44633	0.489206	1.496932	1.01925	2.139395	0.395036	0.566061	0.187507	0.381674	-1.403716	-1.782823
	1st 6 months	1.205904	58.02922	0.482616	1.529771	0.784376	1.752981	0.161399	0.238628	0.358161	0.773304	-0.811798	-1.073479
	1st 7 months	1.213019	55.80273	0.206686	0.661929	0.588816	1.328795	0.277652	0.411162	0.327065	0.718347	-0.467273	-0.619365
	1st 8 months	1.546405	28.69807	-1.418561	-1.962326	0.225392	0.219663	0.364084	0.240954	1.27084	1.192485	0.820579	0.478986
	1st 9 months	2.019045	20.14414	-2.307632	-1.814899	0.688378	0.366639	0.419093	0.133235	0.455254	0.23022	1.937354	0.571623
Both fixed	1st 3 months	0.149991	9.860743	-0.174039	-0.686085	1.260408	2.830044	0.718035	1.152642	-0.969665	-2.181454	-0.766919	-1.083942
	1st 4 months	0.976109	46.12083	0.075855	0.222948	1.711784	2.889935	0.049019	0.05749	-1.423094	-2.40333	-1.195644	-1.27487
	1st 5 months	1.060769	50.20345	0.47653	1.403406	0.959529	2.027731	0.035077	0.050591	0.252258	0.516123	-1.178377	-1.482189
	1st 6 months	1.21412	58.31475	0.332343	0.986459	0.775931	1.714334	-0.032046	-0.047388	0.382679	0.813671	-0.475077	-0.61501
	1st 7 months	1.216501	56.20976	0.170566	0.508841	0.629835	1.397469	0.294316	0.438578	0.287855	0.624465	-0.283033	-0.370254
	1st 8 months	1.523595	26.44422	-0.940144	-1.136731	-0.192823	-0.176106	0.109625	0.068685	1.488549	1.30544	0.71722	0.386899
	1st 9 months	2.017221	19.96317	-2.597979	-1.889205	0.793989	0.409918	-0.008016	-0.002508	0.631084	0.306483	1.804799	0.516983

Table 20 - Equation 3: Conventional Funds

Test Type	Period	C (intercept)	T-Stat	RTN	RTN T-stat	DW*RTN	T-Stat	DL*RTN	T-Stat	DW*RTN*D1	T-Stat	DL*RTN*D1	T-Stat
Pooled	1st 3 months	0.136621	8.414374	0.331835	1.785121	1.369252	2.748407	-0.176911	-0.259184	-1.375495	-2.770315	-0.211856	-0.275801
	1st 4 months	0.967612	40.5009	0.547164	2.268911	1.535704	2.367756	-3.233906	-3.568156	-1.191695	-1.842973	2.647857	2.733692
	1st 5 months	1.020417	41.96946	1.626236	6.743194	-0.535521	-1.031296	-2.686055	-3.65828	1.798062	3.427429	1.780853	2.212648
	1st 6 months	1.182153	46.09495	1.536765	6.076078	-1.150344	-2.430633	-3.090064	-4.023934	2.046672	4.313099	2.457027	2.953357
	1st 7 months	1.180313	45.67225	1.335339	5.600395	-1.014673	-2.073708	-2.051869	-2.794844	1.682413	3.420206	2.090206	2.613664
	1st 8 months	1.497427	25.61855	-0.201083	-0.371197	0.17106	0.158445	-0.436255	-0.285612	0.496832	0.458482	1.928091	1.151384
	1st 9 months	1.978131	17.55264	-0.616266	-0.681932	2.297189	1.209607	3.14313	1.017629	-3.294702	-1.689225	-1.400659	-0.432819
Fixed Cross Sec	1st 3 months	0.138974	8.071628	0.312562	1.52298	0.857875	1.549096	-0.320375	-0.434736	-0.809939	-1.471473	-0.165188	-0.198879
	1st 4 months	0.960865	41.23011	0.691481	2.85209	1.350426	2.047592	-3.559554	-4.000205	-1.038167	-1.575255	2.857414	2.98221
	1st 5 months	1.021071	42.18036	1.586157	6.426408	-0.540718	-1.004775	-2.874579	-3.888787	1.945657	3.551795	2.272435	2.773892
	1st 6 months	1.18971	45.08373	1.491277	5.596504	-1.105395	-2.220413	-3.213746	-4.054432	2.026816	3.985426	3.168627	3.624385
	1st 7 months	1.18377	45.26752	1.358587	5.44827	-0.95593	-1.858945	-2.078058	-2.771534	1.627675	3.124448	2.626522	3.176914
	1st 8 months	1.486322	24.44102	0.086665	0.148549	0.100843	0.086861	-0.671387	-0.415961	0.443766	0.37261	2.540473	1.417159
	1st 9 months	1.950277	17.466	-0.460128	-0.501548	2.652668	1.356729	3.025675	0.98217	-3.092519	-1.503699	-1.188461	-0.363527
Fixed period	1st 3 months	0.153987	10.40594	0.059417	0.263335	1.11149	2.657733	-0.033514	-0.058534	-1.087698	-2.600525	0.091773	0.141015
	1st 4 months	0.984754	42.02356	0.204565	0.593645	2.02454	3.175542	-0.04634	-0.052009	-1.710971	-2.676409	-0.819279	-0.847205
	1st 5 months	1.046792	46.14197	0.99098	3.045394	0.680066	1.395324	-0.2396	-0.347214	0.43843	0.868527	-0.956773	-1.231968
	1st 6 months	1.190583	53.06597	0.952413	2.920882	0.147654	0.298066	-0.21032	-0.304604	0.85607	1.715832	-0.686291	-0.899315
	1st 7 months	1.216803	51.8896	0.266307	0.840478	0.343021	0.748457	0.367708	0.530676	0.548582	1.163495	-0.477466	-0.618067
	1st 8 months	1.546091	24.75609	-1.327221	-1.673138	-0.01645	-0.014485	0.277275	0.170317	1.483034	1.258479	1.006734	0.54718
	1st 9 months	2.022175	17.00899	-1.776103	-1.243271	-0.21493	-0.102263	0.201503	0.057926	0.9412	0.423647	1.837959	0.491243
Both fixed	1st 3 months	0.138974	8.071628	0.312562	1.52298	0.857875	1.549096	-0.320375	-0.434736	-0.809939	-1.471473	-0.165188	-0.198879
	1st 4 months	0.97238	43.92131	0.483108	1.416843	1.84618	3.001234	-0.397366	-0.469269	-1.663255	-2.698691	-0.756299	-0.813322
	1st 5 months	1.049017	47.86543	0.912484	2.778156	0.783496	1.635821	-0.489567	-0.724633	0.389192	0.780101	-0.669352	-0.864458
	1st 6 months	1.202303	53.91222	0.760941	2.230131	0.213195	0.430465	-0.40124	-0.582409	0.818454	1.629009	-0.158875	-0.203168
	1st 7 months	1.219699	52.25442	0.2835	0.83683	0.358725	0.777496	0.400077	0.576666	0.463386	0.977356	-0.313307	-0.39776
	1st 8 months	1.526069	22.90228	-0.907174	-1.004723	-0.349744	-0.289766	0.015504	0.008883	1.637185	1.3002	1.106573	0.550373
	1st 9 months	2.017122	16.99663	-2.235487	-1.471461	0.161887	0.075839	0.1131	0.03205	1.223677	0.535229	1.474659	0.383133

Table 21 - Equation 3: Islamic Funds

Test Type	Period	C (intercept)	T-Stat	RTN	RTN T-stat	DW*RTN	T-Stat	DL*RTN	T-Stat	DW*RTN*D1	T-Stat	DL*RTN*D1	T-Stat
Pooled	1st 3 months	0.090712	4.254597	-0.277489	-1.055133	0.08682	0.089627	10.85104	4.398999	0.249743	0.256498	-11.49026	-4.580731
	1st 4 months	0.94016	17.1931	0.132482	0.215785	1.7118	0.948724	-6.243334	-1.835821	-1.842361	-1.025297	7.147574	2.03425
	1st 5 months	1.005952	17.08829	2.428293	3.443509	-0.118156	-0.09166	-5.982629	-1.630793	0.50764	0.359032	5.992589	1.56593
	1st 6 months	1.191745	19.5983	2.822426	3.857909	-1.05769	-0.51058	-7.250883	-2.044166	0.709195	0.340181	6.211083	1.693076
	1st 7 months	1.165055	20.23048	2.430419	3.584473	-0.022201	-0.01332	-6.117172	-1.916344	-0.075349	-0.04487	5.558301	1.679115
	1st 8 months	1.490578	15.56284	0.69029	0.605219	6.671286	2.127281	-6.774322	-1.30783	-6.91514	-2.20763	6.637312	1.231137
	1st 9 months	1.968845	13.1072	-2.172341	-1.50424	7.609574	1.690703	-5.167631	-0.722423	-7.101031	-1.564845	8.473133	1.150998
Fixed Cross Sec	1st 3 months	0.097011	4.886992	-0.492579	-1.928018	0.594212	0.624694	8.035238	3.340067	-0.053655	-0.055743	-8.615266	-3.535602
	1st 4 months	0.93902	16.00569	0.067752	0.100207	0.685826	0.34082	-6.074706	-1.647329	-0.593874	-0.290002	6.775929	1.738257
	1st 5 months	1.007954	16.03236	2.224885	2.819054	-0.798476	-0.554028	-5.7823	-1.452132	1.602336	0.991904	5.748126	1.375574
	1st 6 months	1.187648	18.34468	2.861962	3.466811	-1.659954	-0.718657	-6.73672	-1.769532	1.386032	0.597515	5.32687	1.329976
	1st 7 months	1.160402	19.53392	2.432647	3.355467	-0.487213	-0.273071	-5.605933	-1.680902	0.621648	0.339782	4.958713	1.407556
	1st 8 months	1.465573	14.50352	1.146963	0.930377	6.307918	1.83231	-5.918922	-1.052479	-6.613127	-1.89462	4.81706	0.81277
	1st 9 months	1.96237	12.29407	-1.34391	-0.823139	6.510957	1.299181	-5.016471	-0.660187	-7.40571	-1.456179	6.536072	0.824505
Fixed period	1st 3 months	0.128763	4.298954	-1.037587	-1.76353	-1.170773	-1.028116	10.86291	4.081756	1.705484	1.516314	-11.8595	-4.366176
	1st 4 months	1.045079	17.53189	-3.395809	-2.905154	4.951311	2.445621	2.513328	0.657949	-3.92189	-1.910178	-2.053077	-0.515995
	1st 5 months	1.130856	18.9927	-2.04492	-1.787424	2.817548	2.076182	1.22384	0.294525	-1.291979	-0.840054	-1.525859	-0.349032
	1st 6 months	1.265233	21.38319	-0.561931	-0.476475	0.871447	0.357528	-3.225054	-0.753904	0.03195	0.012625	2.534388	0.56852
	1st 7 months	1.214139	20.79201	0.298429	0.259948	1.566548	0.822245	-2.947611	-0.764588	-0.812773	-0.414731	2.395311	0.596153
	1st 8 months	1.587839	15.24299	-2.099882	-1.13327	3.688015	0.902191	-10.64824	-1.499904	-1.914069	-0.457632	10.83065	1.474135
	1st 9 months	2.019997	12.90994	-4.214503	-1.626215	2.508131	0.409745	-8.50124	-0.790819	-0.040538	-0.006404	11.8944	1.077762
Both fixed	1st 3 months	0.132367	4.602517	-1.284393	-2.193608	0.809173	0.734327	11.24452	4.559241	-0.148581	-0.137083	-12.26844	-4.885067
	1st 4 months	1.050084	16.20379	-3.671083	-2.771213	4.105714	1.8055	2.377123	0.565677	-2.89201	-1.230732	-2.679635	-0.60047
	1st 5 months	1.12763	17.79071	-2.130998	-1.650985	2.522442	1.686568	2.370248	0.534087	-0.91407	-0.53165	-3.537545	-0.751644
	1st 6 months	1.258816	20.02436	-0.73102	-0.530227	1.278483	0.468717	-1.845638	-0.403558	-0.291065	-0.105301	0.321499	0.066614
	1st 7 months	1.21707	20.43633	-0.024191	-0.018877	1.581605	0.776297	-1.921913	-0.488447	-0.638317	-0.310092	0.895709	0.215494
	1st 8 months	1.575333	14.25018	-1.824337	-0.876509	3.239733	0.727209	-9.985227	-1.312922	-1.648962	-0.365525	9.233364	1.159111
	1st 9 months	2.026619	12.16418	-3.184091	-1.036171	-0.110085	-0.016357	-9.167453	-0.8135	0.718655	0.104491	10.84635	0.941715

Table 22 - Equation 4: Combined Funds Old & Young

Test Type	Period	C (intercept)	T-Stat	RTN	RTN T-Stat	(WINNER * RTN)	b6 T-Stat	(LOSER * RTN)	b7 T-Stat	(DW*RTN*OLD)	b8 T-Stat	(DW*RTN*YOUNG)	b9 T-Stat	(DL*RTN*OLD)	b8 T-Stat	(DL*RTN*YOUNG)	b9 T-Stat
Pooled	1st 3 months	0.137	9.831	0.069	0.429	0.575	1.607	-1.321	-1.589	-0.158	-0.415	-0.351	-0.884	1.390	1.518	1.431	1.451
	1st 4 months	0.957	43.713	0.496	2.226	0.262	0.508	-1.989	-2.145	0.034	0.061	0.460	0.798	0.739	0.730	2.120	1.811
	1st 5 months	1.010	44.695	1.674	7.314	0.306	0.625	-2.205	-2.834	0.130	0.242	1.336	2.390	1.083	1.219	1.542	1.577
	1st 6 months	1.172	49.914	1.430	6.029	-0.308	-0.693	-1.503	-2.137	0.941	1.835	1.854	3.517	0.850	1.039	1.046	1.128
	1st 7 months	1.163	49.429	1.426	6.320	-0.462	-1.167	-0.873	-1.331	0.723	1.581	1.860	3.720	0.687	0.894	-0.130	-0.146
	1st 8 months	1.488	29.423	-0.145	-0.300	-0.185	-0.224	0.705	0.569	1.106	1.137	1.233	1.220	0.758	0.493	-0.222	-0.122
	1st 9 months	1.975	20.622	-0.946	-1.202	-0.287	-0.193	1.294	0.621	1.035	0.577	0.646	0.348	0.915	0.376	2.511	0.861
Fixed Cross Sec	1st 3 months	0.140	9.592	-0.015	-0.084	0.751	1.904	-1.160	-1.273	-0.487	-1.170	-0.189	-0.435	1.125	1.141	1.303	1.207
	1st 4 months	0.950	43.694	0.626	2.744	0.328	0.610	-2.304	-2.380	-0.121	-0.215	0.338	0.562	0.849	0.822	2.139	1.732
	1st 5 months	1.010	44.199	1.675	7.024	0.403	0.776	-2.252	-2.733	-0.034	-0.060	1.323	2.233	1.313	1.417	1.218	1.157
	1st 6 months	1.175	48.352	1.446	5.725	-0.256	-0.534	-1.118	-1.473	0.963	1.777	1.540	2.690	0.747	0.857	0.313	0.295
	1st 7 months	1.164	48.677	1.430	6.005	-0.350	-0.821	-0.405	-0.582	0.746	1.554	1.645	3.018	0.626	0.778	-0.838	-0.849
	1st 8 months	1.475	27.904	0.192	0.367	0.014	0.015	0.508	0.379	0.686	0.656	0.568	0.498	1.259	0.763	-0.468	-0.226
	1st 9 months	1.954	20.383	-0.686	-0.844	0.322	0.205	0.369	0.170	0.271	0.146	0.357	0.176	2.234	0.883	3.459	1.098
Fixed period	1st 3 months	0.157	11.234	-0.278	-1.249	0.477	1.618	-0.255	-0.385	-0.101	-0.334	-0.045	-0.142	0.551	0.752	0.583	0.721
	1st 4 months	0.984	44.820	-0.054	-0.160	0.745	1.603	-1.691	-2.057	-0.418	-0.873	-0.063	-0.126	0.799	0.898	2.425	2.290
	1st 5 months	1.062	49.532	0.506	1.542	0.893	2.068	-1.394	-2.089	-0.167	-0.366	0.959	2.029	0.486	0.647	1.656	1.935
	1st 6 months	1.208	58.925	0.458	1.461	0.611	1.633	-0.727	-1.251	0.193	0.467	1.164	2.724	0.140	0.211	0.770	0.998
	1st 7 months	1.213	56.555	0.143	0.460	0.360	1.039	-0.152	-0.269	0.265	0.694	1.501	3.573	-0.023	-0.035	0.396	0.511
	1st 8 months	1.541	28.941	-1.388	-1.932	0.776	0.971	1.065	0.896	0.488	0.539	0.898	0.944	0.067	0.046	-0.349	-0.196
	1st 9 months	2.008	20.256	-2.173	-1.715	0.988	0.665	1.752	0.848	0.150	0.086	-0.137	-0.075	0.133	0.056	1.019	0.349
Both fixed	1st 3 months	0.150	9.730	-0.150	-0.583	0.535	1.622	-0.045	-0.061	-0.222	-0.657	-0.113	-0.323	0.175	0.220	0.250	0.278
	1st 4 months	0.973	45.486	0.199	0.573	0.641	1.362	-1.787	-2.158	-0.309	-0.645	-0.232	-0.459	0.575	0.654	2.125	1.951
	1st 5 months	1.061	50.081	0.509	1.484	0.883	1.986	-1.383	-2.044	-0.057	-0.123	0.849	1.764	0.352	0.467	1.366	1.530
	1st 6 months	1.215	59.193	0.322	0.957	0.669	1.712	-0.440	-0.735	0.258	0.614	0.967	2.172	-0.028	-0.042	0.360	0.420
	1st 7 months	1.215	56.894	0.126	0.377	0.407	1.118	0.210	0.365	0.361	0.924	1.280	2.895	-0.248	-0.377	0.031	0.037
	1st 8 months	1.521	26.826	-0.913	-1.112	0.715	0.806	0.505	0.397	0.199	0.203	0.545	0.508	0.622	0.404	-0.508	-0.249
	1st 9 months	2.010	20.174	-2.459	-1.793	1.302	0.822	0.824	0.385	0.030	0.017	-0.332	-0.167	1.052	0.429	0.738	0.233

Table 23 - Equation 4: Conventional Funds Old & Young

Test Type	Period	C (intercept)	T-Stat	RTN	RTN T-Stat	(WINNER * RTN)	b6 T-Stat	(LOSER *RTN)	b7 T-Stat	(DW*RTN*OLD)	b8 T-Stat	(DW*RTN*YOUNG)	b9 T-Stat	(DL*RTN*OLD)	b8 T-Stat	(DL*RTN*YOUNG)	b9 T-Stat
Pooled	1st 3 months	0.139	8.511	0.323	1.733	0.212	0.542	-1.980	-2.021	-0.040	-0.095	-0.149	-0.341	1.954	1.832	1.822	1.615
	1st 4 months	0.968	40.418	0.546	2.256	0.203	0.389	-2.329	-2.294	0.104	0.186	0.693	1.175	1.076	0.983	2.384	1.919
	1st 5 months	1.016	41.740	1.640	6.793	0.285	0.582	-2.930	-3.460	0.160	0.295	1.614	2.823	1.819	1.930	2.063	2.012
	1st 6 months	1.168	45.338	1.578	6.190	-0.502	-1.133	-2.097	-2.647	0.933	1.839	1.692	3.158	1.103	1.218	0.937	0.950
	1st 7 months	1.168	45.184	1.368	5.726	-0.449	-1.097	-0.948	-1.356	0.618	1.302	2.050	3.803	0.789	0.961	0.241	0.259
	1st 8 months	1.488	25.471	-0.171	-0.316	-0.167	-0.189	0.260	0.188	1.121	1.044	1.285	1.146	1.455	0.860	0.233	0.118
	1st 9 months	1.983	17.563	-0.626	-0.691	-0.800	-0.495	0.423	0.168	1.349	0.677	0.651	0.303	1.803	0.633	2.638	0.789
Fixed Cross Sec	1st 3 months	0.140	8.143	0.300	1.460	0.366	0.846	-1.934	-1.791	-0.421	-0.919	-0.057	-0.117	1.677	1.453	1.787	1.437
	1st 4 months	0.959	41.010	0.706	2.902	0.319	0.597	-2.775	-2.682	-0.081	-0.143	0.477	0.792	1.322	1.210	2.683	2.082
	1st 5 months	1.015	41.752	1.620	6.533	0.468	0.912	-2.784	-3.151	0.007	0.012	1.564	2.616	1.912	1.984	1.677	1.546
	1st 6 months	1.172	44.055	1.585	5.880	-0.452	-0.954	-1.578	-1.856	1.021	1.911	1.333	2.306	0.964	1.001	0.178	0.160
	1st 7 months	1.169	44.545	1.405	5.602	-0.365	-0.832	-0.462	-0.626	0.622	1.255	1.780	3.020	0.739	0.859	-0.494	-0.477
	1st 8 months	1.478	24.306	0.116	0.199	0.044	0.046	0.121	0.081	0.706	0.616	0.593	0.470	2.121	1.171	0.248	0.110
	1st 9 months	1.957	17.490	-0.517	-0.562	0.025	0.014	-0.111	-0.043	0.637	0.312	0.788	0.339	2.807	0.959	3.546	0.994
Fixed period	1st 3 months	0.154	10.253	0.099	0.432	0.188	0.632	-0.682	-0.931	-0.166	-0.540	0.034	0.106	1.022	1.279	0.447	0.517
	1st 4 months	0.983	41.531	0.309	0.883	0.580	1.246	-1.895	-2.118	-0.344	-0.711	0.140	0.275	0.917	0.960	2.407	2.156
	1st 5 months	1.045	46.127	1.048	3.204	0.684	1.615	-2.105	-2.947	-0.094	-0.206	1.074	2.255	1.003	1.278	2.121	2.401
	1st 6 months	1.189	53.666	0.903	2.775	0.411	1.116	-1.045	-1.626	0.318	0.792	1.101	2.577	0.291	0.408	0.714	0.896
	1st 7 months	1.217	52.629	0.200	0.634	0.340	0.965	-0.185	-0.316	0.114	0.292	1.669	3.751	0.106	0.157	0.663	0.837
	1st 8 months	1.541	24.879	-1.319	-1.665	0.785	0.917	0.951	0.709	0.392	0.390	0.827	0.777	0.461	0.287	-0.302	-0.153
	1st 9 months	2.013	17.095	-1.657	-1.161	0.461	0.283	0.890	0.360	0.221	0.114	-0.255	-0.121	1.021	0.370	1.440	0.432
Both fixed	1st 3 months	0.144	8.627	0.305	1.135	0.209	0.623	-0.687	-0.845	-0.334	-0.970	-0.093	-0.258	0.762	0.875	0.379	0.391
	1st 4 months	0.969	43.191	0.605	1.739	0.504	1.093	-2.092	-2.401	-0.291	-0.615	-0.106	-0.213	0.803	0.879	2.317	2.072
	1st 5 months	1.046	47.637	0.990	2.984	0.766	1.787	-1.829	-2.578	-0.009	-0.019	0.937	1.972	0.696	0.905	1.736	1.923
	1st 6 months	1.199	54.550	0.743	2.178	0.506	1.331	-0.535	-0.816	0.341	0.838	0.827	1.882	0.002	0.002	0.173	0.199
	1st 7 months	1.218	52.837	0.239	0.705	0.360	0.975	0.163	0.275	0.169	0.425	1.402	2.981	-0.102	-0.149	0.358	0.413
	1st 8 months	1.523	23.134	-0.888	-0.984	0.757	0.798	0.388	0.271	0.060	0.056	0.449	0.375	1.169	0.682	-0.075	-0.033
	1st 9 months	2.015	17.166	-2.160	-1.420	1.050	0.608	0.210	0.083	0.023	0.012	-0.116	-0.051	1.734	0.615	1.136	0.317

Table 24 - Equation 4: Islamic Funds Old & Young

Test Type	Period	C (intercept)	T-Stat	RTN	RTN T-Stat	(WINNER * RTN)	b6 T-Stat	(LOSER *RTN)	b7 T-Stat	(DW*RTN*OLD)	b8 T-Stat	(DW*RTN *YOUNG)	b9 T-Stat	(DL*RTN*OLD)	b8 T-Stat	(DL*RTN*YOUNG)	b9 T-Stat
Pooled	1st 3 months	0.094	4.157	-0.292	-1.060	1.587	1.451	0.115	0.147	-1.169	-1.040	-1.649	-1.438	-0.583	-0.557	0.218	0.069
	1st 4 months	0.940	16.848	0.134	0.216	-4.269	-1.072	0.680	0.410	4.894	1.221	3.822	0.951	-0.835	-0.394	-0.064	-0.018
	1st 5 months	0.998	16.910	2.552	3.621	-0.910	-0.394	0.353	0.169	1.728	0.724	0.578	0.241	-1.989	-0.782	-0.623	-0.168
	1st 6 months	1.176	19.227	2.860	3.874	-2.043	-0.951	-1.916	-0.977	1.916	0.802	1.828	0.815	0.373	0.164	0.347	0.092
	1st 7 months	1.149	19.926	2.470	3.628	-0.632	-0.458	-0.848	-0.480	3.030	1.473	0.215	0.146	-0.226	-0.104	-1.263	-0.446
	1st 8 months	1.480	15.308	0.728	0.629	0.512	0.219	0.243	0.090	1.812	0.543	-0.331	-0.134	-3.277	-0.852	-0.592	-0.140
	1st 9 months	1.957	12.988	-2.153	-1.477	2.464	0.719	4.557	1.340	-0.178	-0.033	-1.610	-0.445	-5.019	-1.087	-1.363	-0.260
Fixed Cross Sec	1st 3 months	0.098	4.646	-0.505	-1.907	1.201	1.140	0.438	0.572	-0.633	-0.583	-0.677	-0.611	-1.435	-1.412	-0.165	-0.047
	1st 4 months	0.934	15.634	0.151	0.221	-5.203	-1.087	0.907	0.481	5.765	1.198	4.863	1.024	-1.553	-0.654	-2.441	-0.525
	1st 5 months	1.139	19.333	-2.306	-1.999	0.520	0.244	-0.648	-0.339	1.434	0.646	1.662	0.750	0.709	0.299	1.003	0.288
	1st 6 months	1.172	17.964	2.985	3.577	-2.413	-0.994	-2.162	-0.981	2.331	0.873	2.081	0.820	-0.125	-0.049	0.871	0.187
	1st 7 months	1.144	19.262	2.531	3.474	-0.409	-0.276	-0.820	-0.438	3.098	1.406	-0.076	-0.047	-0.953	-0.409	-0.821	-0.264
	1st 8 months	1.459	14.301	1.201	0.960	0.917	0.360	-0.269	-0.093	0.651	0.177	-0.871	-0.312	-3.585	-0.876	-1.562	-0.340
	1st 9 months	1.956	12.203	-1.180	-0.716	1.927	0.512	2.699	0.714	-1.519	-0.255	-3.002	-0.725	-4.739	-0.949	-2.235	-0.383
Fixed period	1st 3 months	0.137	4.216	-1.105	-1.737	1.025	0.956	-0.474	-0.610	-0.409	-0.379	-1.084	-0.989	-0.457	-0.463	4.843	1.577
	1st 4 months	1.058	17.432	-3.505	-2.931	-0.155	-0.042	-0.318	-0.207	1.845	0.503	1.305	0.357	1.796	0.906	0.496	0.145
	1st 5 months	0.999	15.774	2.507	3.157	-1.204	-0.459	0.198	0.084	1.808	0.670	1.035	0.382	-2.184	-0.752	-0.578	-0.129
	1st 6 months	1.255	21.529	-0.485	-0.407	0.731	0.365	-1.297	-0.717	-0.480	-0.215	0.637	0.309	0.718	0.342	-0.191	-0.054
	1st 7 months	1.208	20.925	0.246	0.212	0.293	0.226	-0.357	-0.217	1.513	0.765	0.744	0.528	-0.489	-0.236	-1.175	-0.419
	1st 8 months	1.571	15.214	-2.156	-1.141	1.758	0.761	1.010	0.391	0.723	0.221	0.444	0.184	-4.085	-1.057	-2.648	-0.618
	1st 9 months	2.000	13.086	-4.331	-1.639	2.956	0.845	5.512	1.631	-1.471	-0.272	-0.204	-0.054	-6.936	-1.441	-2.574	-0.483
Both fixed	1st 3 months	0.136	4.271	-1.163	-1.814	0.685	0.659	-0.198	-0.260	0.071	0.068	-0.337	-0.320	-1.013	-1.066	6.554	1.887
	1st 4 months	1.066	16.208	-3.902	-2.852	-0.442	-0.100	-0.415	-0.236	2.445	0.555	1.413	0.327	1.194	0.538	-3.441	-0.752
	1st 5 months	1.140	18.049	-2.415	-1.818	0.354	0.148	-1.377	-0.641	1.608	0.648	1.827	0.737	0.873	0.323	0.936	0.220
	1st 6 months	1.258	20.052	-0.793	-0.559	0.536	0.236	-1.539	-0.764	0.225	0.090	0.827	0.357	0.092	0.039	-0.967	-0.217
	1st 7 months	1.217	20.608	-0.156	-0.119	0.487	0.356	-0.126	-0.074	1.961	0.950	0.505	0.337	-2.054	-0.931	-1.127	-0.369
	1st 8 months	1.577	14.354	-2.167	-1.019	1.811	0.726	0.997	0.369	0.327	0.091	0.114	0.042	-5.537	-1.347	-5.186	-1.122
	1st 9 months	2.023	12.403	-3.346	-1.063	0.984	0.255	4.807	1.303	-1.691	-0.283	-0.727	-0.169	-8.906	-1.690	-4.811	-0.819