Is there any causal link between shariah index and islamic unit trust growth ? Malaysian evidence

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Is there any causal link between shariah index and islamic unit trust growth ? Malaysian evidence

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Abstract

Islamic-based unit trust fund has been growing exponentially since 2007 and is believed as the main agent of stabilizer for FTSE Bursa Malaysia EMAS Shariah Index since then. This paper investigates the relationship between Islamic unit trust's net asset value (NAV) growth as the focus variable and FTSE Bursa Malaysia EMAS Shariah Index (FTFBMS)along with other control variables such as, Brent oil, USD/MYR exchange and inflation rate. Revealing the relationship will give us the right steps to build a stable Shariah index. We employed the Auto Regressive Distributed Lags (ARDL) or 'Bounds Test' to find cointegration, and Variance Decomposition (VDC) to discover exogeneity and endogeneity among the variables. Malaysia is used as a case study. The Variance Decomposition shows that inflation leads changes followed by USD/MYR exchange rate with Islamic unit trust being the most endogenous or lagging. There are significant relationships between the variables in the long run with a strong causal link between FTSE Bursa Malaysia EMAS Shariah Index and Islamic unit trust funds growth where the latter is affected mostly by the former. The results have strong policy implications.

Keywords: EMAS Shariah index, Unit trust, ARDL, VDC, Malaysia

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1. INTRODUCTION

The size of Collective Investment Scheme (CIS) especially unit trust fund or open-ended (mutual fund in the US) can have a huge impact on stocks prices or indices, in both the long and short term. Unit trust trading activity can push stock prices up or down in every trading day, and the herding effect of unit trust fund or other large-scale institutional investors can create long-lasting trends or counter-trend that influence indices' points over time. The nature of unit funds is usually to employ a buy-and-hold strategy even though they have the power to influence indices in the short term or even over the long term. With its sheer size, unit trust funds can create such large price movement and can create long-term bullish trends. Their mandate is sometimes according to the direction of the government which is to make market more stable at any time or acting as market makers.

A research by Yangbo et al. (2008) found that the degree of market openness determined Granger-cause between aggregate equity mutual fund flows and excess stock market return in Hong Kong and Singapore. Raddatz and Schmukler (2011) findings show that mutual funds help transmit crises across countries and that their behavior is driven by both the underlying investors and managers. They found that investors react to shock by pulling funds that invest in countries undergoing crises and during global crisis times.

According to an annual report by The Investment Company Institute (2017)[1], worldwide regulated open ended fund assets in 2016 are at USD40.4 trillion. Americas (North and South) holding a USD21.1 trillion followed by Europe (USD14.1 trillion) and Africa and Asia-Pacific (USD5.2 trillion). By contrast, Bloomberg's World Exchange Market Capitalization index pegs global equity at record USD76.3 trillion more than USD75.3 trillion

[1] *The **Investment Company Institute** (ICI) is the national association of U.S. investment companies of mutual funds, exchange-traded funds, closed-end funds and unit investment trusts.*

figure the International Monetary Fund uses to value the global economy. Combining both data, open-ended funds asset stood at 56% of global market cap

In Malaysia, unit trust fund has been offered to the public since 1959 by the Malayan Unit Trust Ltd and was relatively early compared to its Asian neighbors. But the development of the industry experienced three phases of growth; 1) Infant stage (1959-1979) shows a slow on the uptake due to overall poor financial literacy. 2) New Economic Policy (NEP) phase, where the government's new agenda was to narrow the economic gap between the Bumiputera and non-Bumis with the launching of government-sponsored unit trusts for Bumiputera i.e. Amanah Saham Bumiputera (ASB). 3) Introduction of Islamic Capital Market in 1990s that included Islamic unit trust as a component. During the Asian financial crisis 1998-1999, Malaysian government had used unit trust to maintain liquidity in the capital market in the midst of capital flight.

According to Securities Commission Malaysia, total net asset value (NAV) of unit trust in 2017 is at RM358 billion which is 21.5% to Bursa Malaysia Market Capitalization (RM1.67 trillion, 2016). From 2007 to 2017, Islamic-based or Shariah fund has grown from RM16.7 billion to about RM60 billion in size, a growth of 259% over 10 years which is currently about 6 per cent of Shariah compliant securities market capitalization. Relatively, the size of total unit trust NAV to total market cap is smaller than

Malaysia having dual financial system; conventional and Islamic, and even though Islamic liquidity can't invest in non-Shariah compliant securities, the conventional market is encouraged and can enter freely to buy Islamic assets. In this sense, 'Shariah money' can only be invested in Shariah compliant securities and support growth year to year. Since Islamic unit trust fund strategy is always long in investment, with low redemption, Shariah index is supposed to be the total beneficiary recipient of the capital inflow.

2. OBJECTIVES

There are numerous papers regarding unit trust in Malaysia but few have touched the influence of Shariah unit trust funds on FTSE Bursa Emas Shariah Index. This study has at least two humble objectives.

1) To find empirical evidence if Islamic unit trust's growth has a lead or lag influence on the performance of FTSE Bursa Malaysia EMAS Shariah Index.
2) To find the most influential variables between FTSE Bursa Malaysia EMAS Shariah Index, Islamic unit trust, Brent oil, USD/MYR exchange rate and inflation.

3. LITERATURE REVIEW

3.1 FTSE Bursa Malaysia EMAS Shariah Index

The use of FTSE Bursa Malaysia EMAS Shariah Index (FTFBMS) as a proxy for Islamic stock market and macroeconomic variables has been discussed before although not widely used. In 2006, Bursa Malaysia in cooperation with FTSE introduced a new series of tradable indices called FTFBMS in response to increasing interest in Shariah-compliant investment and as a new benchmark for investors that looking for a Malaysian Shariah principles trust fund.

Naseri and Masih (2013) investigate the dynamic relationship between FTFBMS as a proxy for Islamic stock market in Malaysia and three macroeconomic variables; money supply, CPI and exchange rate. They found that in the long run, FTFBMS are tied to the macroeconomic fundamentals. Vejsagic and Zarafat (2013) and Rashid et al. (2014) took a slightly different approach using FTSE Bursa Malaysia Hijrah Shariah Index (FTFBMHS)[2] as

[2] *Index are screened by the Malaysian Securities Commission's Shariah Advisory Council (SAC) and the leading global Shariah consultancy, Yaasar Ltd.*

dependent variables and investigated its relationship with extra variables and discovered that FTFBMHS influenced and led major macroeconomic variables.

3.2 Unit Trust Fund

There are limited studies on the causality between unit trust fund especially the net asset value (NAV) – that is equivalent to growth - to Malaysian index. Low and Ghazali (2007) examine short and long-run price linkages using evidence from Malaysia. The findings reveal no evidence of long-run equilibrium between unit trust funds and the local stock market index price. In the short-run, the Granger-causality tests indicate that unit trust funds and the local stock market index have a one-way relationship with market-to-fund causality. However, the study tests only one-way causality on past values of mutual funds and the stock market index. A research by Yangbo et al. (2008) found that the degree of market openness determined Granger-cause between aggregate equity mutual fund flows and excess stock market return in Hong Kong and Singapore. Chu (2010) examines short- and long-run price linkages with evidence from Hong Kong using monthly fund prices for 101 mandatory provident funds. The study finds some funds have both a long- and a short-run relationship. They also found. A paper by Raddatz and Schmukler (2011) shows that mutual funds help transmits crises across countries and that their behavior is driven by both the underlying investors and managers. They found that investors react to shock by pulling funds that invest in countries undergoing crises and during global crisis times.

3.3 Exchange Rate

For Malaysian market, Ibrahim (2001) investigated a negative long rung-run relationship between stock prices and MYR/USD where a depreciation in home currency is associated with the decline in the domestic stock market. Ghazali et al. (2008) suggested that under the pegged

regime, empirical evidence shows no relationship exist between USD/MYR to domestic stock price. Hussin et al. (2012) used the vector autoregression (VAR) and found that Islamic share prices had a negative and insignificant relationship with the exchange rate - Malaysian Ringgit to the US dollar. Wong et al. (2002) conducted a non-linear Granger causality test and their result shows no cointegration exists between currency and stock market.

3.4 Consumer Price Index (Proxy of Inflation)

Numerous studies have looked at the impact of inflation on stock returns with conflicting results. Early research suggest that Inflation rate has a negative relationship to index price where Fama (1981) and Schwert (1977) found that it is due to a positive relationship between future economic activities and stock returns (Geske and Roll, 1983), (Kaul, 1987). In contrast, later researches suggested that inflation rate and stock market indices returns are positively correlated (Boudoukh and Richardson, 1993), (Caporale and Jung, 1997), (Choudhry, 2001), (Hondroyiannis and Papapetrou, 2006).

3.5 Brent Oil Price

A paper to test the reaction of stock returns to oil shocks found that a significant relationship oil to the US market but no important significant to the UK and Japan (Jones and Kaul, 1996). Huang et. al (1996) explored that daily oil futures return has no significant effect to the broad-based market indexes i.e. S&P500 but has been invalidated later by Sadorsky (1999). Arouri and Julien (2009) and Hussin et al. (2012a) found that the stock market in GCC and Malaysia countries reacted mostly positively to oil and price increase. Lin et al. (2010) and Hussin et al. (2012b) proved that oil prices showed a positive relationship with stock returns in China and Islamic stock returns in Malaysia based upon the positive expectation effect. Later Hussin et

al. (2013) concludes that the black gold will affect the Malaysian Islamic stock return in the short run.

4. DATA AND METHODOLOGY

The following general specification has been used in this study to empirically examine the effect of Islamic unit trust NAV growth (UTF) as our focus variable, Brent oil price (BRN), USD/MYR exchange (FRX), and Malaysia inflation (INF) on FTSE Bursa Malaysia EMAS Shariah Index (BMS). All variables are taken in their natural logarithm.

$$LBMS = \beta_0 + \beta_1 LUTF + \beta_2 LBRN + \beta_3 LFRX + \beta_4 INF + \varepsilon_t$$

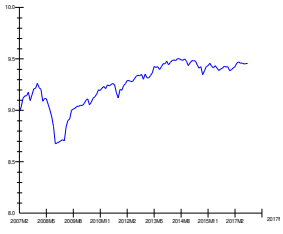
The study estimated the effect UTF, BRN, FRX and INF on Shariah stock price (BMS) in Malaysia. We use monthly data sets covering the period for eleven years starting from March 2007 with 128 observations. All data have been taken from secondary sources i.e. official website of Bursa Malaysia, Securities Commission Malaysia (SC), Department of Statistics Malaysia (DOSM) and Bank Negara Malaysia (BNM) database.

The relationships between the five variables are analyzed using 5 econometric tools namely; 1) Unit Root Test 2) Auto Regressive Distributed Lag (ARDL) - a more advanced cointegration test usable even if the variables are stationary at different levels I(0) and I(1). 3) Variance Decomposition (VDC) - to rank the leading variables or the most independent. 4) Impulse Function Response (IRF) - a test of their inter-temporal linkages, and 5) Persistence Profiling (PP) - an investigation of the impact of a system-wide shock on the variables.

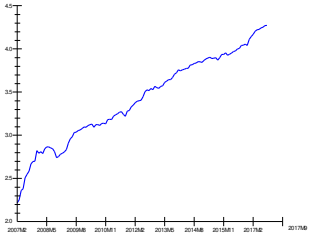
Figure 1 provides the time-series plots of these variables with two notable raw observations. Firstly, FTSE Bursa EMAS Shariah Index tend to move according to Islamic unit trust NAV growth. Secondly, all variables declined extensively during the sub-prime/economic

crisis in early 2008 to mid 2009. On the first point, both plots are indicative of positive relations between Shariah equity market and Islamic unit trust NAV growth. This motivates a preliminary analysis that such observation is not spurious.

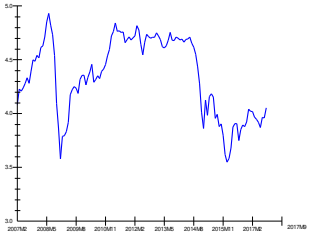
Figure 1: Time-series plots of five variables



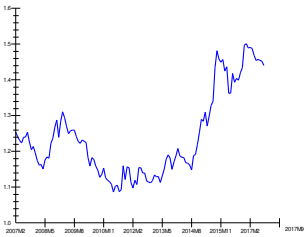
Shariah EMAS



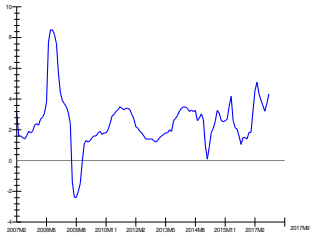
Shariah Unit Trust



Brent oil



USD/MYR



Inflation

4.1 UNIT ROOT TEST

Before we run the Unit Root Test, first we checked the co-efficient with standard Ordinary Least Square (OLS) and found that the independent variables at level form are all significant and all independent variables give positive correlation to FTSE Bursa Malaysia EMAS Index.

Figure 2: Ordinary Least Square Regression

$$BMS = 6.74\,\alpha + \underset{(0.0221)}{0.35UTF^{*}} + \underset{(0.0530)}{0.24BRN^{*}} + \underset{(0.1807)}{0.26FRX} - \underset{(0.0055)}{0.019INF^{*}}$$

R-Squared	.77019
Akaike Info. Criterion	108.3477
Schwarz Bayesian Criterion	101.2176

In time series, variables are mostly non-stationary in their raw form. That means, choosing these variables to perform an ordinary regression will produce us a misleading results.

Table 1: ADF test for Unit root

VARIABLE	TEST STATISTIC	CRITICAL VALUE	IMPLICATION
VARIABLES IN LEVEL FORM			
LBMS	-2.0613 SBC	3.4469	NON STATIONARY
	-2.9402 AIC	3.4469	NON STATIONARY
LUTF	-3.2830 SBC	3.4469	NON STATIONARY
	-3.9862 AIC	3.4469	STATIONARY
LBRN	-2.3164 SBC	3.4469	NON STATIONARY
	-2.7251 AIC	3.4469	NON STATIONARY
LFRX	-1.5825	3.4469	NON STATIONARY
INF	-2.1885	3.4469	NON STATIONARY
VARIABLES IN DIFFERENCED FORM			
DBMS	-9.4253 SBC	2.8853	STATIONARY
	-6.2556 AIC	2.8853	STATIONARY
DUTF	-10.810 SBC	2.8853	STATIONARY
	-5.2365 AIC	2.8853	STATIONARY
DBRN	-8.3161 SBC	2.8853	STATIONARY
	-5.7794 AIC	2.8853	STATIONARY
DFRX	-10.7492	2.8853	STATIONARY
INF	-5.2682	2.8853	STATIONARY

Next we test the variables to confirm that none of the variables is I(2) using Augmented DF test and observed that variables are I(1) when we checked at level form and I(0) at first difference.

4.2 DETERMINATION OF ORDER OF THE VAR MODEL

Using VAR order in serial correlation is a common features and useful where stationary time series move together. We need to determine the order of the Vector auto regression (VAR), how many lags to be used. The result below shows that AIC recommends order of 2 while SBC favors 0 lag.

Table 2: Test Statistics and Choice Criteria for Selecting the Order of the VAR Model

	Choice Criteria	
	AIC	SBC
Optimal order	1	0

But given the conflicting results we checked for serial correlation in each variable and obtained the following results as below:

Table 2A: Test Statistics and Choice Criteria for Selecting the Order of the VAR Model

VARIABLE	Chi-Sq P-Value	Implication at 5%
DBMS	0.015	There is serial correlation
DUTF	0.136	No serial correlation
DBRN	0.707	No serial correlation
DFRX	0.793	No serial correlation
DINF	0.000	There is serial correlation

As evident from the above results, there is autocorrelation in 2 out of 5 variables. Based on result we choose AIC since tends to produce the most accurate for bigger sample size for which SBC is more accurate for lower than 120 (Ivanov and Kilian, 2005).

4.3 TESTING CO-INTEGRATION

Angle-Granger is preliminary standard test in obtaining co-integration within variables where the H_0 is there is no co-integration. The null hypothesis could be rejected if Test Statistic is higher than the Critical Value. From the result, we failed to find any co-integration within the variables since T-value is smaller than the critical value given at -4.5327.

Table 3: Engle-Granger Unit Root Tests for Residuals

	TEST-STATISTIC	LL	AIC	SBC	HQC
DF	-2.0613	225.9363	222.9363	218.7302	221.2279
ADF (1)	-2.3425	227.9348	223.9438	218.3357	221.6659

Due to that we decide to proceed with ARDL a model was introduced by Pesaran et al. (2001) in order to incorporate stationary variables I(0) and non stationary I(1) variables in same

estimation. Previously OLS test is used with assumption that variables are all at I(0) level in time series data but obviously they are not held constant as most of them changing all the time. OLS will mistakenly show high T values and significant results and it is inflated due to common time component or spurious.

4.4 AUTO REGRESSIVE DISTRIBUTED LAG (ARDL)

To empirically analyze the dynamic relationship of multi dimensions variables, we use ARDL co-integration procedure developed by Pesaran et al. (2001) due to a few reasons. Firstly It is a unique technique against other multivariate cointegration like Johansen and Juselius (1990) where it allows co-integrating relationship to be estimated by OLS once the lag order is selected. Secondly, it doesn't require the pre testing of the variables in finding unit root. Thirdly, the error correction method integrates the short run dynamics with long run equilibrium without losing long run information (Joshi, 2015).

The ARDL procedure involves two stages. First, testing the existence of the long-run relation between the variables and secondly, estimating the coefficients of it.

In its basic form, an ARDL model looks like below where ε_t acted as random 'disturbance' term:

$$y_t = \beta_0 + \beta_1 y_{t-1} + \ldots.. + \beta p y_{t-p} + \alpha_0 x_t + \alpha_1 x_{t-1} + \alpha_2 x_{t-2} + \ldots.. + \alpha_q x_{t-q} + \varepsilon_t$$

The unrestricted error correction model (UECM) of ARDL model is used to examine the long run and short run relationship taking the following form:

Figure 3

$$\Delta LBMS_t = \alpha_0 + \beta_1 LBMS_{t-1} + \beta_2 LUTF_{t-1} + \beta_3 LBRN_{t-1} + \beta_3 LFRX_{t-1} + \beta_4 INF_{t-1} + \sum_{i=1}^{n} \gamma_i \Delta LBMS_{t-i} + \sum_{i=1}^{n} \eta_i \Delta LUTF_{t-i} + \sum_{i=1}^{n} \theta_i \Delta LBRN_{t-i} + \sum_{i=1}^{n} \lambda_i \Delta LFRX_{t-i} + \sum_{i=1}^{n} \phi_i \Delta INF_{t-i} + \varepsilon_t$$

When we perform the 'Bound Testing', we are testing the absence of a long-run equilibrium relationship between the variables with H_0 is there is no-lung run relationship. ARDL technic supply bound on the critical values with lower and upper number on the critical values. If the computed F statistic falls below the lower bound, we can conclude that the variables are I(0) so there is no-cointegration and if it exceeds the upper bound, then we conclude that we have cointegration. If the F-statistic falls between the bounds, the test is inconclusive.

The null hypothesis for the F-test is $H_0 = \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = \gamma_5 = 0$ which indicates there is no long-run co-integration among variables, against the alternative hypothesis that long run co-integration does exist among variables ($H_1 = \gamma_1 \neq \gamma_2 \neq \gamma_3 \neq \gamma_4 \neq \gamma_5 \neq 0$)

Given 5 variables are tested in this paper, according to the F-table, the lower bound is at 3.189 for I(0) and the upper bound I(1) is at 4.329. We believe that the variables are co-integrated in the long run if data is taken on daily or by-weekly basis but since we want to use Unit Trust as the focus variable, data availability is reported in monthly basis.

Table 4: Bound Testing Results

VARIABLES	F-STATISTIC	IMPLICATIONS
FBMS	1.3796	NO CO-INTEGRATION
UTF	0.7493	NO CO-INTEGRATION
BRN	1.9765	NO CO-INTEGRATION
FRX	1.4457	NO CO-INTEGRATION
INFL	6.6737	THERE IS CO-INTEGRATION

4.5 LONG RUN STRUCTURAL MODELLING (LRSM)

Based on our result that there is one co-integration with assumption that there must be at least more than one variable co-integrated in the long, we move to the long run equilibrium relationship between the variables. Here we attempt to quantify the theoretical relationship among the variables in order to compare our statistical findings with theoretical (or intuitive) expectations. We found that only one variable that is Brent oil is not significant while others are very significant. We also found that only Unit Trust growth will affect positively to FTSEBMS while others are negatively correlated. This support our intuition that the Unit Trust growth has a significant impact on Shariah Index. Other variables like inflation and USD/MYR exchange will have a negative impact with an increase of one percent. The result can be written as below:

$$LBMS = 8.90 + 0.6018LUTF^{**} - 0.08305LBRN - 1.1352LFRX^{**} - 0.0321INF^{**}$$

4.6 ERROR CORRECTION MODEL

In error-correction term the coefficient of ECM(-1) is the most important as the result must falls between -1 and 0 to prove that there exists partial adjustment . A value smaller than -1 indicates that the model over adjusts in the current period while a positive value implies that the model moves away from equilibrium in the long-run.

In our result on the e_{t-1} we notice that the coefficient of the error-correction term is a negative (-0.11508) and very significant (0.000). This is what we would expected if there is co-integration between the variables. The magnitude of this coefficient implies that nearly 11 per cent of any disequilibrium between the variables is corrected within one period or one month.

4.7 VARIANCE DECOMPOSITIONS (VDC)

Variance Decomposition refers to the breakdown of the forecast error variance for a specific time horizon. Variance decomposition can indicate which variable have a short-term and a long-term impacts on another variable of interest. In a nutshell, VDC able to disclose an analyst the percentage of the fluctuation in a time series attributable to other variables at a select time horizons.

There are two ways to identify the relative exogeneity of variables which are i) Generalized approach and ii) Orthogonalized approach. We use generalized approach as it is preferred compared to the former because the latter is not sensitive to the order of the variables in a VAR system and can produce one unique result. The generalized VDC analysis shows that variable that is explained by its own past variations will be the most exogenous. According the results below, the ranking of variables according to the degree of exogeneity.

Table 5: Generalized Variance Decompositions Results

Horizon 6

	BMS	UTF	BRN	FRX	INF	Total	RANKS
BMS	44.34%	30.30%	6.59%	11.47%	7.29%	100.00%	4
UTF	31.40%	43.37%	9.02%	10.89%	5.31%	100.00%	5
BRN	12.75%	16.72%	57.55%	6.46%	6.52%	100.00%	3
FRX	19.21%	16.45%	3.85%	58.44%	2.04%	100.00%	2
INF	2.98%	4.13%	16.71%	1.85%	74.22%	100.00%	1

Horizon 12

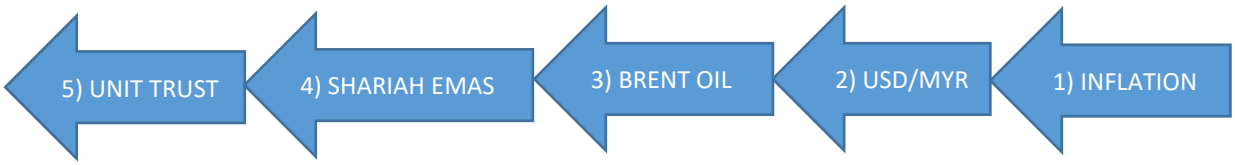
	BMS	UTF	BRN	FRX	INF	Total	RANKS
BMS	43.55%	30.03%	6.97%	11.40%	8.04%	100.00%	4
UTF	30.82%	42.64%	9.70%	10.81%	6.03%	100.00%	5
BRN	12.84%	16.51%	56.23%	6.62%	7.80%	100.00%	3
FRX	19.31%	16.44%	4.60%	57.35%	2.30%	100.00%	2
INF	6.16%	6.54%	16.40%	2.29%	68.61%	100.00%	1

Horizon 24

	BMS	UTF	BRN	FRX	INF	Total	RANKS
BMS	43.34%	29.93%	7.13%	11.33%	8.27%	100.00%	4

UTF	30.83%	42.47%	10.75%	10.75%	6.18%	100.00%	5
BRN	13.21%	16.82%	55.48%	6.54%	7.95%	100.00%	3
FRX	19.31%	16.43%	4.74%	57.19%	2.34%	100.00%	2
INF	6.26%	6.78%	16.92%	2.39%	67.64%	100.00%	1

Figure 4: Direction of Causality from left to right by exogeneity ranks.



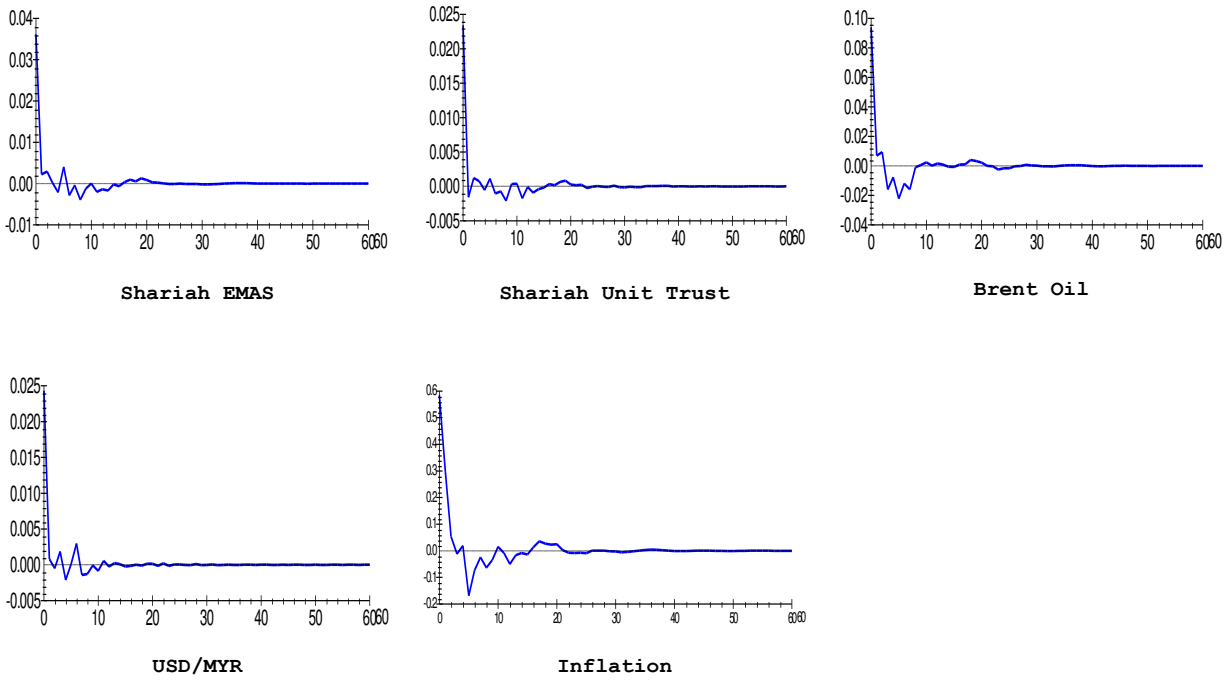
From the above results (Table 5), we can make the following key observations (Figure 4); The Generalized VDC result shows that inflation is the most exogenous variable followed by USD/MYR exchange, Brent oil, FTSE Bursa Malaysia EMAS Index (FTFBMS) and lastly Islamic unit trust. Statistically inflation being the most exogenous, changes are made by its own shock and it can change other variables. Islamic unit trust as being the most endogenous, partially changes by its own shock and other variables that more exogenous. The ranking is consistent through the long term period of 24 months. It also shows that each time series describes the prevalence of its own values.

FTFBMS influenced is contributed by its own innovation at more than 40 per cent for the whole period of 24 months. Whether it is short-run or long-run, FTFBMS shock is contributed by Islamic unit trust fund (30%) and USD/MYR exchange (11%) for the same period respectively. When shock is done to Islamic unit trust, its own innovation contributed over 40 per cent, with 30 per cent contributed from FTFBMS. The result of exogeneity between FTFBMS and Islamic unit trust growth showed that there prevails bi-directional causality with the former is more exogenous than the latter. With this we can safely conclude that FTSE Bursa Malaysia EMAS Shariah leads and can influence Islamic unit trust growth greater than the other way around.

4.8 IMPULSE RESPONSE FUNCTIONS (IRF)

To examine the dynamics of exogenous variables and their impact, we employ Impulse Response Function (IRF) to illustrate the dynamic patterns of all variables especially FTSE Bursa Emas Shariah Index and our focus variable, Islamic unit trust. The IRF are calculated over a 60-monthly time horizon. The initial shock in a variable is set to be equal to one standard error of innovation; the vertical axis in the figures reports the approximate percentage change in other variables in response to a one-percentage shock in issue. The results are shown in Figure 5. The Impulse Functions Response (IRF) essentially produce the same information as the VDC, except that they can be presented in graphical form.

Figure 5: Impulse Response for Five Variables



5. CONCLUSION

In order to find the lead–lag relationship between the growth of Shariah unit trust and Shariah Index this paper investigates multivariate setting consisting of Islamic unit trust NAV growth as the focus variable and FTSE Bursa Malaysia EMAS Shariah Index along with other control

variables such as: Brent oil, USD/MYR exchange and inflation rate in Malaysia. We apply time series econometric techniques of unit root, Auto Regressive Distributed Lags (ARDL) or 'Bound Test', Variance Decomposition (VDC) to study the long run relationship among the variables and discern their dynamic causal interactions.

The data are monthly covering eleven years starting from March 2007. From the analysis we detected the following results: The result shows that inflation is the most exogenous variable followed by USD/MYR exchange, Brent oil, FTSE Bursa Malaysia EMAS Index (FTFBMS) and closed by Islamic unit trust. The ranking is consistent through the long term period of 24 months. It also shows that each time series describes the prevalence of its own values with clear bi-directional causality. Inflation as the most exogenous can't be influenced by other variables and Islamic unit trust the most endogenous. There are significant relationships between the variables in the short-run and long-run with a strong causal link between Bursa EMAS Shariah Index with Islamic unit trust fund growth where the latter is affected mostly by the former. Between both, FTSE Bursa Malaysia EMAS Shariah is the leading variable and can influence Islamic unit trust growth greater than the other way around.

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