Is islamic stock index related with conventional stock index ? evidence from the UK

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Is islamic stock index related with conventional stock index ? evidence from the UK

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Abstract

There has been an ongoing controversy for a long time as to whether the Islamic stock is related with the conventional stock or not. This paper empirically investigates whether the Islamic stock index is indeed related with the conventional stock index. The United Kingdom is taken as a case study The standard time series techniques have been employed for the analysis. The findings tend to indicate that the Islamic stocks are driven by the conventional stocks and inflation and not the other way around. These results cast doubt on the view that the Islamic stocks are independent of the influence of the conventional stocks at least in the context of the United Kingdom. The findings have important policy implications for the investors, practitioners and policymakers.

Keywords: Islamic stock price, conventional stock price, cointegration, VECM, VDC

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Introduction

There is much talk in the Islamic finance industry of regulatory standardization and harmonization between Islamic finance and conventional finance, with many proponents of Islamic finance itself admitting or even actively advocating the convergence of this nascent industry with the wider conventional finance industry. (Alexakis & Tsikouras, 2009; Bianchi, 2007; Habil, 2007; Karim, 2001; Maurer, 2010) Moreover, commentators such as El Gamal are convinced that Islamic finance in its current manifestations embraces legal form over economic substance, making it indistinguishable from conventional finance. (El-Gamal, 2005, 2006) Also, there is a vigorous debate in academic literature over whether contemporary Islamic finance helps or hinders the development of the real economic sector. (Chapra, 2007; Dusuki & Abozaid, 2007; Hamoudi, 2008) These arguments offer interesting food for thought for econometricians in Islamic finance. As a result, this study focuses on answering a question with respect to the UK's economy:

Can it be empirically shown that the Islamic stock index is related with the conventional stock index ?

1. Motivation of the Study

Several previous studies have already examined the long run relationship between conventional stock prices and major macroeconomic variables such as GDP and exchange rate. Although most of these studies primarily apply Johansen's Cointegration Model and the Vector Error Correction Model (VECM), some studies also applied other techniques as well, such as: Variance Decompositions (VDCs), Impulse Response Functions (IRFs), and Persistence Profiles. With respect to the selection of variables, GDP, exchange rates and interest rates are often used. However, this study will instead concentrate on examining the relationship between Islamic stock prices and conventional stock prices; money supply; and inflation. The practical relevance of this study lies in its implications for policymakers. By showing if and/or how Islamic stock prices are related to conventional stock prices and major macroeconomic variables such as money supply and inflation, this paper will help policymakers strategize more optimally with respect to monetary policy in both dual banking systems such as Malaysia, as well as of course conventional banking systems where Islamic finance features are embedded, such as the UK.

2. Literature Review & Theoretical Framework

A. Relationship between Islamic stock price and conventional stock price

Based on the views and commentators cited above in the Introduction to this study, this study will assume a priori that the Islamic stock price and conventional stock price in the UK are closely related. The increasing regulatory convergence of Islamic finance, coupled with the both the much larger scale of conventional finance and the widespread use of western professional services firms as key players in the forging of this relatively new financial industry, make it reasonable to assume a priori that Islamic stocks will feel shocks in the conventional system equally strongly, if not more. Put simply, as the new challenger to the incumbent secular global financial architecture, Islamic finance stands in constant danger of catching a cold when conventional finance sneezes: even trivial shocks in conventional finance would, theoretically, have a potentially substantial transferred effect on the Islamic financial system. Hence, any shock in conventional stock exchanges will maybe affect Islamic stocks too.

B. Relationship between Islamic stock price and money supply

Simple common sense intuition tells us that an increase in money supply will relate to an increase in stock price, as companies will have relatively more cash to invest, owing to the fact that the increased money supply enables consumers to purchase more from companies. Upon closer inspection however, money supply offers a less clear cut theoretical relationship with stock prices than inflation. On the one hand, changes in the money supply may be related to unexpected inflationary increases and future inflation uncertainty, and thus be related negatively to the stock price. In other words, if money supply is increased, investors may interpret this monetary policy move as an indication that the economy is not managing inflation well, and investor apprehension will be reflected in the lower stock prices.

On the other hand, as Humpe and Macmillan cautiously point out, there are arguments to support the view that money supply may positively influence stock prices in two ways: one, through its resulting impact on real economic activity, and two, portfolio theory explains the increase in money supply through a portfolio shift from non-interest bearing money to financial assets and equities. (Humpe & Macmillan, 2007, pp. 5-6) Moreover, relying on previous literature, Rahman and Mustafa make the argument that excess money supply leads to an increase in stock prices, due to subsequent liquidity, price and income effects which take effect relatively quickly. (Rahman & Ashraf, 2008, p. 3)

C. Relationship between Islamic stock price and inflation

Unexpected inflation may negatively influence actual stock prices by causing unanticipated changes in the price level. Also, as Humpe and Macmillan point out, based on theory, inflation uncertainty can also negatively influence actual stock prices by affecting discount rates and hence lowering the present value of future corporate cash flows. (Humpe & Macmillan, 2007, p. 5) Citing DeFina (1991), Humpe and Macmillan mention how rising inflation has an initial negative effect on stock prices as well.

As Lee elaborates however, the relationship between stock returns and inflation varies over time. (Lee, 2009) Moreover, stock returns and their relationship with inflation may well depend upon the actual source of inflation, e.g. non-monetary sources of inflation such as real economic output shocks. As a result, several factors or forces may be at play in influencing the relationship between stock returns and inflation. In this regard, Sharpe aptly refers to the stock price-inflation relationship as a "puzzle" when analysing it. (Sharpe, 1999, p. 7)

3. Sources of Data and Variables

The data used in this study is secondary level data downloaded from DataStream's database. 188 monthly observations starting from July 1996. Four macroeconomic variables are used in this study, as explained in the following table:

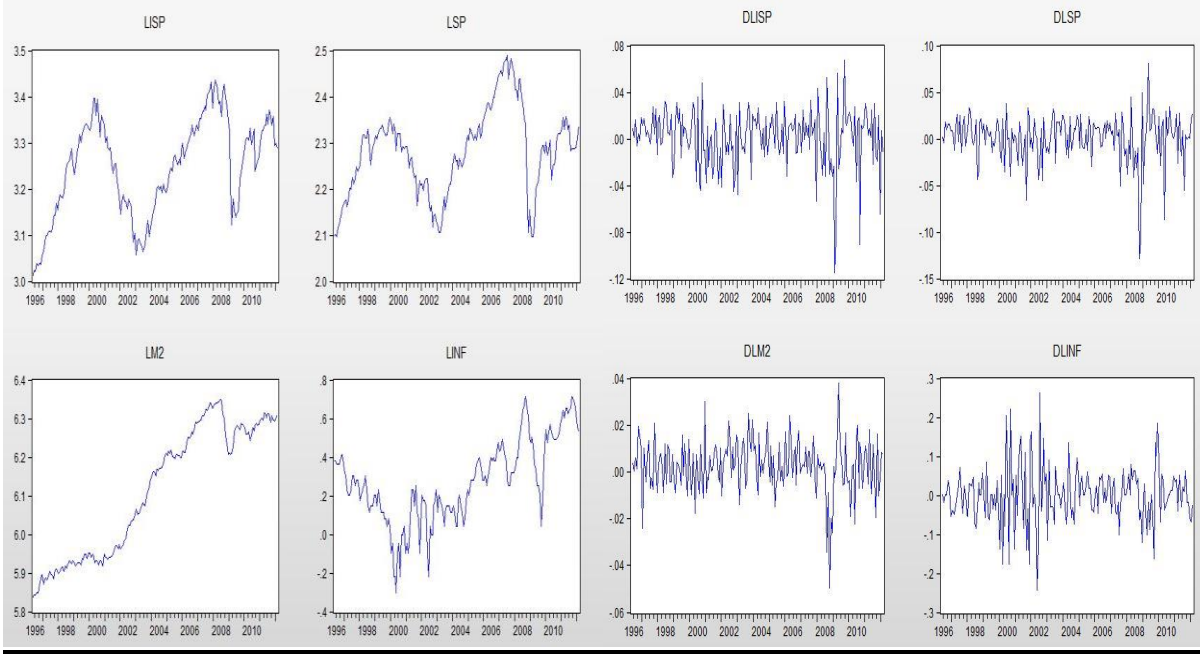
Table 1: Variables used in this study

Variable	Explanation
ISP	London Stock Exchange Islamic Stock price index
SP	London Stock Exchange price index
M2	Money Supply
INF	Inflation Rate

4. Methodology, Estimation and Interpretation

This paper uses Johansen's Cointegration test to ascertain whether the macroeconomic variables are cointegrated with the Islamic stock prices in the UK. Next, the Long Run Structural Modelling (LRSM) method is used to estimate meaningful relationships based on over-identifications. Then, the Vector Error Correction Model (VECM) is applied to determine the pace of the short-run adjustment which would allow for long run equilibrium through the size of the error correction coefficient. This error correction coefficient also signifies the proportion by which the disequilibrium of the dependent variable is being adjusted as per each short run period. Moreover, this study uses Variance Decompositions and Impulse Response Functions to assess the relative exogeneity/ endogeneity of the variables. Finally, this paper conducts a Persistence Profile test to determine the time horizon by which the cointegrating relationship would return to equilibrium, should a system-wide shock occur.

By plotting the variables LISP, LSP, LM2 and LINF, we get the following graphical outputs:



Graph: Level Forms *Graph: First Differenced Forms*

The level form graphs clearly indicate that the variables are non-stationary, as the mean, variance and covariance of the plots are not constant. However, the first differenced graphs of the same variables appear to have constant mean, variance and covariance. **Hence, the first differenced forms are stationary.**

A. *Unit root test (for Non-Stationarity/ Stationarity)*

The unit root tests used in this study are the Augmented Dickey Fuller (ADF) and Phillips Perron (PP) test. Both tests ascertain whether a variable is stationary or not.

Null Hypothesis: H_0: There is a Unit Root (Non-Stationarity)
Alternative Hypothesis: H_1: There is no Unit Root (Stationarity)

ADF (Intercept)

Variable	P-Value	Decision
LISP	0.1449	0.1449 > α = 0.05; Do not reject Null Hypothesis Conclusion: LISP is Non-Stationary
LSP	0.1654	0.1654 > α = 0.05; Do not reject Null Hypothesis Conclusion: LSP is Non-Stationary
LM2	0.6921	0.6921 > α = 0.05; Do not reject Null Hypothesis Conclusion: LM2 is Non-Stationary
LINF	0.2159	0.2159 > α = 0.05; Do not reject Null Hypothesis Conclusion: LINF is Non-Stationary

ADF (Intercept & Linear Trend)

Variable	P-Value	Decision
LISP	0.5007	0.5007 > α = 0.05; Do not reject Null Hypothesis Conclusion: LISP is Non-Stationary
LSP	0.4650	0.4650 > α = 0.05; Do not reject Null Hypothesis Conclusion: LSP is Non-Stationary
LM2	0.9250	0.9250 > α = 0.05; Do not reject Null Hypothesis Conclusion: LM2 is Non-Stationary
LINF	0.0554	0.0554 > α = 0.05; Do not reject Null Hypothesis Conclusion: LINF is Non-Stationary

ADF (Intercept)

Variable	P-Value	Decision
DLISP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLISP is Stationary
DLSP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLSP is Stationary
DLM2	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLM2 is Stationary
DLINF	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLINF is Stationary

ADF (Intercept & Linear Trend)

Variable	P-Value	Decision
DLISP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLISP is Stationary
DLSP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLSP is Stationary
DLM2	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLM2 is Stationary
DLINF	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis Conclusion: DLINF is Stationary

Philips-Perron Test (Intercept)

Variable	P-Value	Decision
LISP	0.1169	0.1169 > α = 0.05; Do not reject Null Hypothesis Conclusion: LISP is Non-Stationary
LSP	0.0950	0.0950 > α = 0.05; Do not reject Null Hypothesis Conclusion: LSP is Non-Stationary
LM2	0.7025	0.7025 > α = 0.05; Do not reject Null Hypothesis Conclusion: LM2 is Non-Stationary
LINF	0.2141	0.2141 > α = 0.05; Do not reject Null Hypothesis Conclusion: LINF is Non-Stationary

Philips-Perron Test (Intercept & Linear Trend)

Variable	P-Value	Decision
LISP	0.3994	0.3994 > α = 0.05; Do not reject Null Hypothesis Conclusion: LISP is Non-Stationary
LSP	0.2918	0.2918 > α = 0.05; Do not reject Null Hypothesis Conclusion: LSP is Non-Stationary
LM2	0.8338	0.8338 > α = 0.05; Do not reject Null Hypothesis Conclusion: LM2 is Non-Stationary
LINF	0.0508	0.0508 > α = 0.05; Do not reject Null Hypothesis Conclusion: LINF is Non-Stationary

Philips-Perron Test (Intercept)

Variable	P-Value	Decision
DLISP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLISP is Stationary
DLSP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLSP is Stationary
DLM2	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLM2 is Stationary
DLINF	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLINF is Stationary

Philips-Perron Test (Intercept & Linear Trend)

Variable	P-Value	Decision
DLISP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLISP is Stationary
DLSP	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLSP is Stationary
DLM2	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLM2 is Stationary
DLINF	0.0000	0.0000 < α = 0.05; Reject Null Hypothesis
		Conclusion: DLINF is Stationary

Interpretation

Unlike the non-stationary level forms of the variables, the first differenced forms of the variables are stationary. **Therefore, we can safely deduce that for all the variables- LISP, LSP, LM2, and LINF, they are I(1) variables. In other words, they are integrated of order 1.**

B. Determination of VAR Order

The table below indicates the VAR order to be used when testing for cointegration. The results are from Eviews , but Microfit also provides the same outputs for selecting the VAR order.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	164.8060	NA	0.009869	-1.780500	-1.763028	-1.773418
1	419.6734	504.1942	0.000625	-4.539929	-4.504984*	-4.525765*
2	419.6786	0.010069	0.000632	-4.529115	-4.476697	-4.507869
3	419.8458	0.327299	0.000638	-4.520063	-4.450174	-4.491736
4	423.5007	7.111048*	0.000619*	-4.548920*	-4.461558	-4.513511
5	423.5549	0.104890	0.000626	-4.538640	-4.433805	-4.496149
6	425.2859	3.330335	0.000621	-4.546586	-4.424279	-4.497013

* indicates lag order selected by the criterion

AIC: Akaike information criterion

SC: Schwarz information criterion

Interpretation

AIC suggests a VAR order of 4, whilst SC suggests a VAR order of 1. Hence, we will use a VAR order of 2, which is somewhere in the middle.

Although AIC suggests a VAR order of 4, we still consider instead a lower VAR order of 2, as the sample size is relatively small. Also, this will help minimize loss of degrees of freedom.

C. *Cointegration Test with VAR Order 2*

Null Hypothesis: H_0: There is no Cointegration

Alternative Hypothesis: H_1: There is Cointegration

Decision Rule: *If Calculated Statistic > 95% critical value, we can reject the H_0.*

If Calculated Statistic < 95% critical value, we cannot reject the H_0.

Cointegration with unrestricted intercepts and restricted trends in the VAR

Cointegration LR Test Based on Maximal Eigenvalue of the Stochastic Matrix

Null	Alternative	Statistic	95% Critical Value	90%Critical Value
r = 0	r = 1	72.1118	31.7900	29.1300
r<= 1	r = 2	15.2528	25.4200	23.1000
r<= 2	r = 3	11.8299	19.2200	17.1800
r<= 3	r = 4	2.0471	12.3900	10.5500

Cointegration with unrestricted intercepts and restricted trends in the VAR

Cointegration LR Test Based on Trace of the Stochastic Matrix

Null	Alternative	Statistic	95% Critical Value	90%Critical Value
r = 0	r>= 1	101.2416	63.0000	59.1600
r<= 1	r>= 2	29.1298	42.3400	39.3400
r<= 2	r>= 3	13.8770	25.7700	23.0800
r<= 3	r = 4	2.0471	12.3900	10.5500

Interpretation

The calculated maximum eigenvalue statistic is 72.1118, which is greater than the 95% critical value of 31.79. Also, the calculated trace test statistic is 101.2416, which is greater than the 95% critical value of 63.0000.

Hence, in both cases, we can safely reject the Null Hypothesis of r = 0 and accept the Alternative Hypothesis of r >= 1, which indicates that there is at least one cointegrating relationship. **Therefore, we find one statistically significant cointegrating relationship among the variables**.

D. Long Run Structural Modelling (LRSM)

To estimate theoretically meaningful (i.e. non-spurious) long-run relationships, we first put an exactly identifying restriction of "A1= 1" on the cointegrating relationship. We can then observe that with this exact identifying restriction of "A1=1", the variable of inflation becomes insignificant, as it's t-ratio is less than 2. This result indicates that inflation can be dropped from the cointegrating relationship. Next, we put an over-identifying restriction of "A4= 0" together with "A1= 1", in order to ascertain whether inflation can be safely dropped from the cointegration relationship. Here, the null and alternative hypotheses are:

Null Hypothesis: H_0: A4 = 0
Alternative Hypothesis: H_1: A4 ≠ 0

Decision Rule: *If P-Value > 0.05, we cannot reject the H_0; statistically insignificant*
If P-Value < 0.05, we can reject the H_0; statistically significant

Variables	A1 = 1	A1 =1; A4 =0
LISP	1.0000 (NONE)	1.0000 (NONE)
LSP	-1.1248 (.079586)	-1.1475 (.081139)

	t-ratio: 14.133139 SIGNIFICANT	
LM2	.50348 (.012542) t-ratio: 40.1435178 SIGNIFICANT	.53885 (.12607)
LINF	.064128 (.037501) t-ratio: 1.7100344 **INSIGNIFICANT**	0.00 (NONE)
Chi-Square (P-value)		2.9225 [.087]

For "A1=1" and "A4=0" restrictions, we derive a p-value of .087, which is greater than a 5% level of significance. This result suggests to us that the "A4=0" restriction imposed for over-identification seems valid. Hence, we can safely drop the variable of inflation from our cointegrating relationship. According to this result, the following equation explains the theoretical relationship amongst the variables:

LISP – 1.1475LSP + 0.53885LM2

Though the LRSM suggests that we should drop the inflation variable from the cointegrating relationship, we know from economic theory that inflation plays a major role in the determination of stock prices. As this study concerns itself with Islamic stock prices, for the remainder of this study, I will still persist in retaining inflation as a variable in the cointegrating relationship for the purpose of prudence.

E. Vector Error Correction Model (VECM)

To make sense of the VECM statistics, it is important to understand what the error correction term signifies. Put simply, it signifies the long term relationships among the variables. If the error correction term statistic is insignificant, then the commensurate dependent variable is "exogenous". Conversely, if the error correction term is significant, then the commensurate dependent variable is "endogenous". The coefficient of the error correction term is also important, as it indicates the speed which short term adjustment can take place so as to achieve long-term equilibrium. In this respect, the coefficient's statistical size signifies the proportion by which the disequilibrium of the commensurate variable in each short time period is being corrected. Lastly, the VECM technique enables us to differentiate between "short-term" and "long-term" Granger causality.

Using the VECM, we get the following results:

Dependent Variable	**Coefficient**	**T- ratio**	**P - Value**	**Exogenous/Endogenous**
DLISP	-.27105 (.032315)	8.3875	.000	Endogenous
DLSP	-.025978 (.038298)	.67832	.498	Exogenous
DLM2	-.033979 (.016431)	2.0679	.040	Endogenous
DLINF	-.084379 (.10971)	.76908	.443	Exogenous

Interpretation

The table above suggests that Islamic stock price and money supply are both endogenous (dependent) variables, as they both have p-values which are less than 5%. When the p-values are

less than 5%, the results are statistically significant, and the commensurate variable becomes endogenous. Similarly, when the result is insignificant, the commensurate variable is exogenous (leader). Here, following this line of reasoning, the two variables of conventional stock price and inflation are both exogenous variables (leader variables).

The error correction coefficient of the Islamic stock price is 0.27105, which indicates that the speed of short-term adjustment to bring about long-term equilibrium for the Islamic stock price. Here, disequilibrium in the Islamic stock price seems to be corrected by 27.105% in each short period. In other words, it takes roughly 4 (=1/0.27105) months to correct the disequilibrium.

The error correction coefficient of the Islamic stock price is 0.025978, which indicates that the speed of short-term adjustment to bring about long-term equilibrium for the conventional stock price. Here, disequilibrium in the conventional stock price seems to be corrected by 2.5978% in each short period. In other words, it takes roughly 38.5 (=1/0.025978) months to correct the disequilibrium.

The error correction coefficient of the Islamic stock price is 0.033979, which indicates that the speed of short-term adjustment to bring about long-term equilibrium for the Islamic stock price. Here, disequilibrium in Islamic stock price seems to be corrected by 3.3979% in each short period. In other words, it takes roughly 29.5 (=1/0.033979) months to correct the disequilibrium.

The error correction coefficient of the Islamic stock price is 0.084379, which indicates that the speed of short-term adjustment to bring about long-term equilibrium for the Islamic stock price. Here, disequilibrium in Islamic stock price seems to be corrected by 8.4379% in each short period. In other words, it takes roughly 12 months (=1/0.084379) months to correct the disequilibrium.

Overall then, we can conclude that the disequilibrium is most rapidly corrected in the Islamic stock price, which means that if there is any shock in the Islamic stock market, that shock will likely dissipate in roughly 4 months, by which time the markets will return to equilibrium.

F. Variance Decompositions (VDCs)

Variance decomposition is a process with which the variance of the forecast error of a particular variable is decomposed into proportions that are attributable to shocks in each variable in the overall system, including the variable under examination. The relative exogeneity or endogeneity of a variable can then be ascertained with reference to the proportion of the variance which can be explained by its own previous shocks. In this regard, the variable which can relatively be explained the most by reference to its own shocks is the one which is most exogenous. For this study, the future periods were used at intervals of 10, namely: 10, 20, 30, 40, 50. The results are as follows:

Variance Decomposition of LISP

Period	LISP	LSP	LM2	LINF
10	0.218575	0.617368	0.113187	0.05087
20	0.068975	0.718739	0.157918	0.054368
30	0.043277	0.733233	0.169274	0.054216
40	0.034264	0.737816	0.173886	0.054034
50	**0.029774**	0.74001	0.176296	0.05392

Interpretation

The shock in the Islamic stock price is contributing to its own variance by 2.97774% in the 50th period.

Variance Decomposition of LSP

Period	LISP	LSP	LM2	LINF
10	0.014478	0.783827	0.199796	0.001899
20	0.02229	0.770646	0.203982	0.003083

30	0.025814	0.765134	0.205433	0.003619
40	0.027638	0.762329	0.206136	0.003897
50	0.028714	**0.760678**	0.206547	0.004061

Interpretation

The shock in the conventional stock price is contributing to its own variance by 76.0678% in the 50th period.

Variance Decomposition of LM2

Period	LISP	LSP	LM2	LINF
10	0.040615	0.2978	0.653373	0.008211
20	0.050577	0.324818	0.614813	0.009792
30	0.054863	0.335612	0.599055	0.01047
40	0.057062	0.341042	0.591079	0.010818
50	0.058356	0.344229	**0.586393**	0.011022

Interpretation

The shock in the money supply is contributing to its own variance by 58.6393% in the 50th period.

Variance Decomposition of LINF

Period	LISP	LSP	LM2	LINF
10	0.050753	0.013849	0.029855	0.905543
20	0.07494	0.034708	0.047927	0.842426

30	0.086792	0.046826	0.057098	0.809284
40	0.093292	0.053743	0.062169	0.790796
50	0.09728	0.05803	0.065286	**0.779404**

Interpretation

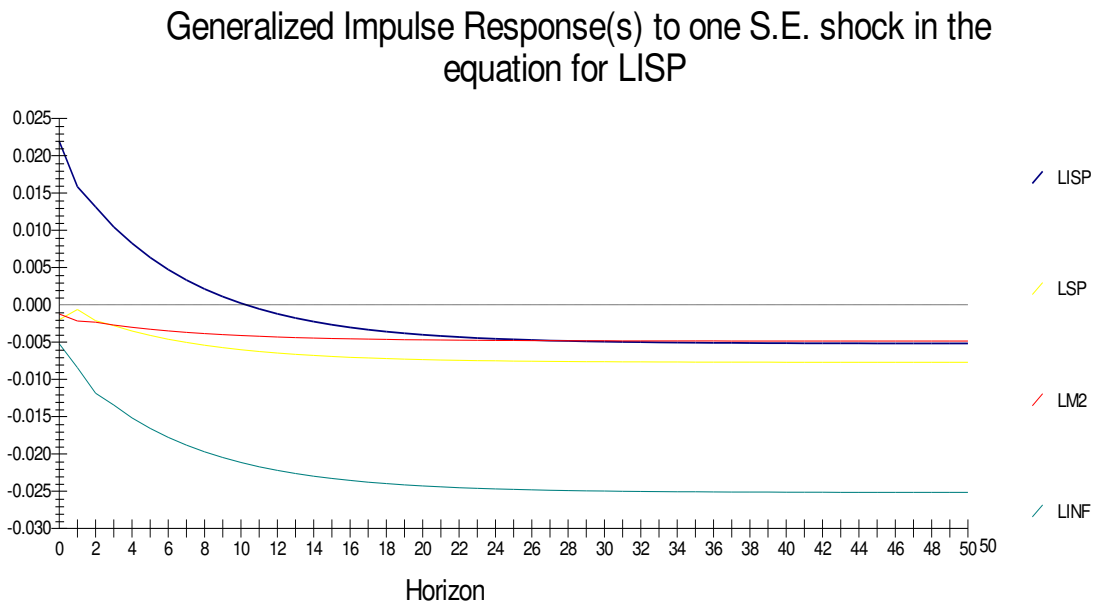
The shock in the inflation variable is contributing to the variance of itself by 77.9404% in the 50^{th} period.

Overall, the variable which is contributing most to its own variance in the most distant period is the most influential leader variable. In our study, this is inflation, which is contributing 77.9409% to its own variance in the 50^{th} period. So, inflation is the most leader variable in our study.

G. Impulse Response Functions

Impulse Response Functions (IRFs) are the graphical representations of variance decompositions. In effect, IRFs chart the dynamic response path of a variable when there is a shock to itself or another variable. Using Eviews 7.1, this study obtained the following four Impulse Response Function graphs:

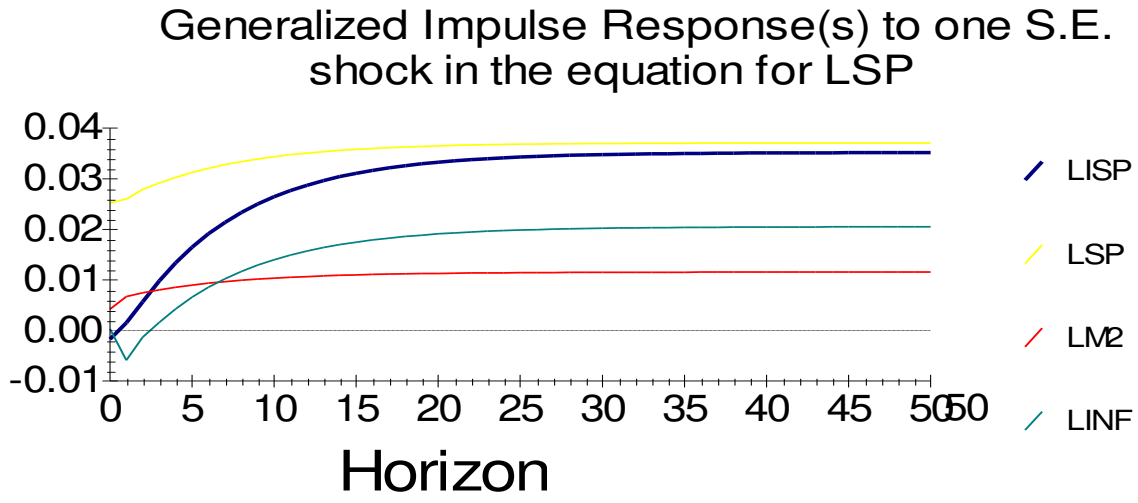
IRF 1: Shock to LISP



Interpretation

When the Islamic stock price is shocked by one standard deviation, the effect on the other variables is that they decline rapidly at first, before continuing to decline more consistently. Among the variables, the one most affected is the inflation variable, as it begins at a negative starting point and rapidly declines the most.

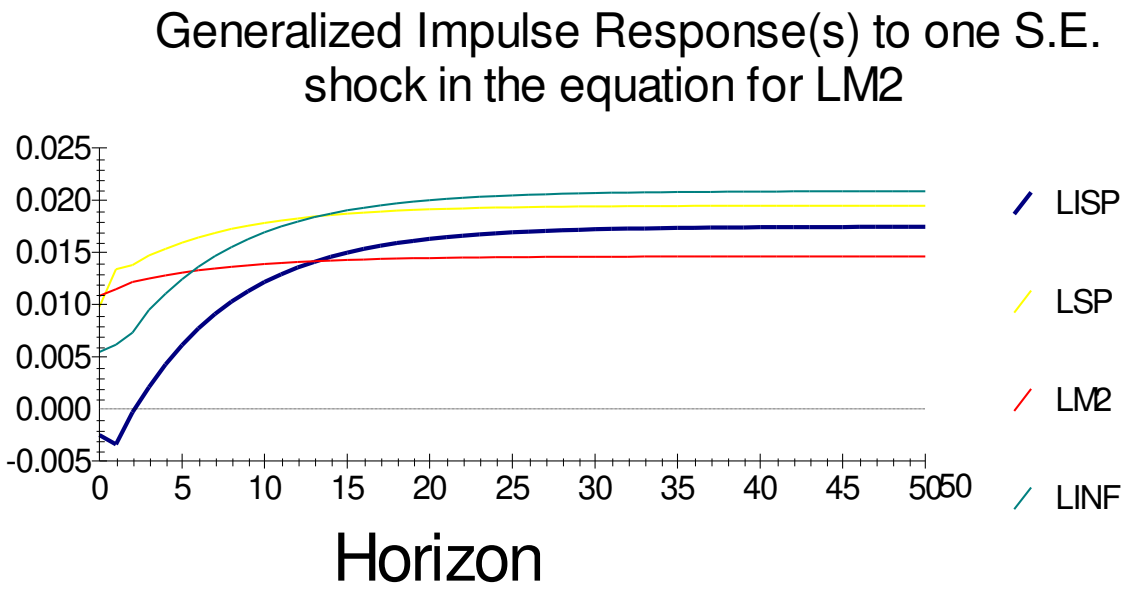
IRF 2: Shock to LSP



Interpretation

When the conventional stock price is shocked by one standard deviation, the effect on the other variables is as follows. The Islamic stock price increases rapidly at first, before continuing to increase more consistently. The money supply increases more sedately at first, before continuing to increase at an evenly consistent rate. Interestingly however, the inflation rate first declines, before beginning to increase at a medium rate, after which it finally continues to increase at an evenly consistent rate.

IRF 3: Shock to LM2:

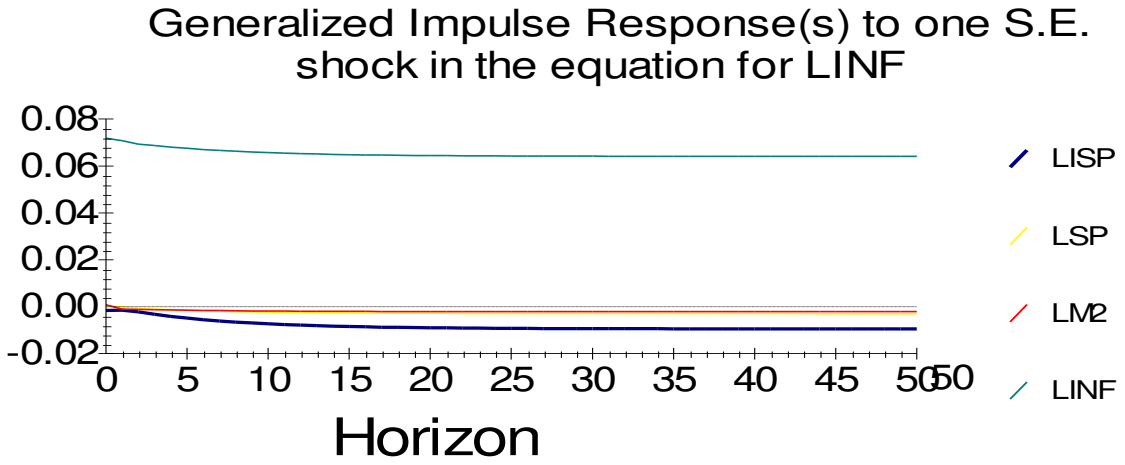


Interpretation

When the money supply is shocked by one standard deviation, the effect on the other variables is as follows. The inflation rate declines at first, before beginning to increase at a rapid rate, after which it finally continues to increase at an evenly consistent rate. The conventional stock price increases more sedately at first, before continuing to increase at an evenly consistent rate. The Islamic stock price declines first, before beginning to increase at a rapid rate, after which it finally continues to increase at an evenly consistent rate.

IRF 4: Shock to LINF

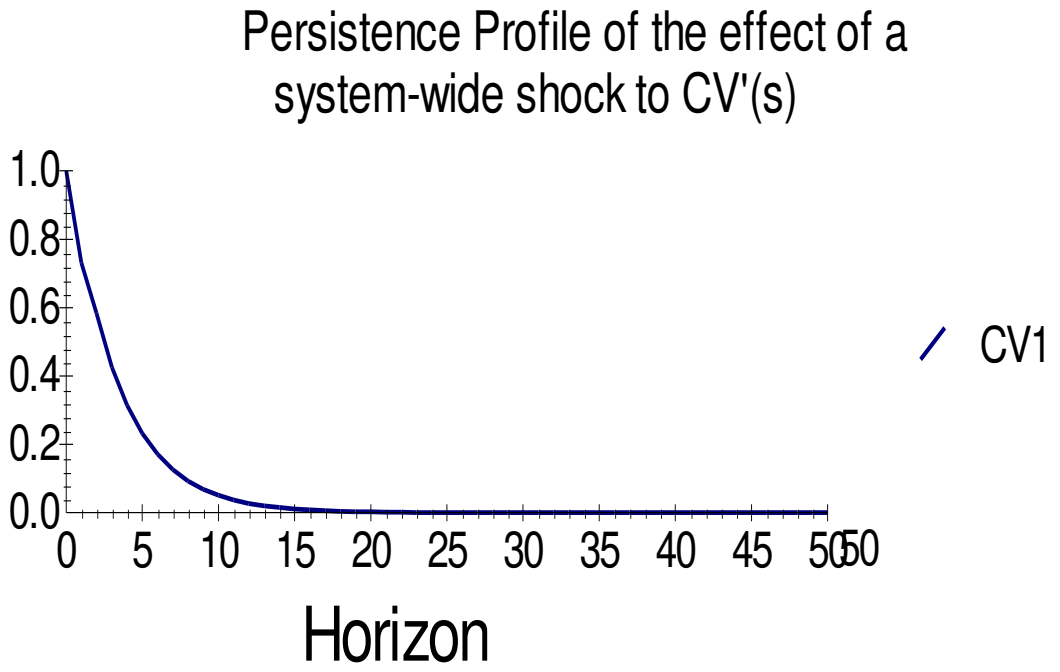
Interpretation



When the inflation rate is shocked by one standard deviation, the effect on the other variables is as follows. The conventional stock price and money supply both decline fairly steadily. However, the Islamic stock price declines more rapidly at first, before beginning to decrease at a more evenly consistent rate.

H. Persistence Profile

A Persistence Profile graphically displays the time horizon required for the cointegrating relationship to return to a state of equilibrium when a system-wide shock occurs. Using this technique on our current variables, we obtain the following result:



Interpretation

Once there is a system-wide shock, it takes 17 months for to return to equilibrium according to the above graph, which is a relatively average pace in the financial world.

Concluding Remarks and Policy Recommendations

From the results of the econometric analysis, we find some results with interesting and thought-provoking implications for policymakers. Of the 4 variables, 2 of them are endogenous (dependent variables), and 2 of them are exogenous (independent/ leader variables). The 2 dependent variables are LISP, the Islamic stock index price; and LM2, the M2 money supply. The 2 independent variables are LSP, the conventional stock index price; and LINF, the rate of inflation. Of the two independent leader variables, our VDC analysis indicates that the most leading variable is LINF, that is, inflation (0.779404 vs. 0.760678 for LSP). The following implications thus arise.

First, inflation needs to be adequately controlled by the government of the day in order to prevent negative effects on the Islamic stock index price. If inflation is allowed to run rampant, the Islamic stock index price would most likely be depressed. This implication is consistent with our *a priori*

theoretical framework, where we speculated that reckless and unexpected inflation would drive stock prices down, as a resulting increase in interest rates would raise discount rates and consequently lower the Islamic stock prices. Of course, the relationship between stock price and inflation is much more complex and multi-faceted, but such considerations are outside the scope of this study.

Second, the conventional stock price and Islamic stock price are more intimately related than many would like to admit. In other words, any trivial shocks in the conventional stock price would almost certainly have a knock on effect on the Islamic stock price. As a result, if conventional stock prices are kept stable or buoyant, there should be little to worry about Islamic stock prices. However, as we have seen in recent years, conventional finance is quite under fire since 2008, leading some to call for Islamic finance to be decoupled from conventional finance. However, our results show that this would be fallacious thinking in the extreme, given the close interrelationship between conventional finance and Islamic finance. Therefore, Islamic finance policymakers and regulators would be better off strengthening the global financial architecture rather than separating from it.

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