The impact of interest rate changes on islamic home financing: Malaysia as a case study

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The impact of interest rate changes on islamic home financing: Malaysia as a case study

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This paper investigated the impact of interest rate changes, specifically the base lending rate (BLR) on the demand for Islamic home financing in a dual banking system. Malaysia is taken as a case study. Theoretically, any increase in the interest rate (base lending rate), would lead customers who are guided by the profit motive to substitute Islamic home financing for conventional bank home loans and vice versa. Using a 109 monthly data series covering ten years, the study found that an increase in the base lending rate would trigger customers to obtain financing from Islamic banks. Conversely, any decrease in the base lending rate would induce customers to shift to the conventional home loans. The paper concludes that because customers are profit motivated, Islamic banks in the dual banking system, such as in Malaysia are exposed to interest rate risks despite operating on an interest free principle.

Keywords: Islamic financing, Bai-Bithaman Ajil, interest rates, base lending rates, Malaysia

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1. INTRODUCTION

Islamic banks in Malaysia are governed by the Islamic Bank Act 1983 which is based on the long term objective that a full-fledged Islamic banking system would operate in parallel with the conventional financial system. Islamic banks in Malaysia can be grouped into four. Firstly are the five full-fledged local and foreign Islamic banks which include Bank Islam Malaysia Berhad, Bank Muamalat, Kuwait Finance House and Al-Rajhi Bank. Secondly, the nine Islamic subsidiary banks among which include CIMB Islamic bank, MayBan Islamic bank, RHB Islamic bank and EON Capital Islamic bank. Thirdly, the Islamic windows in foreign conventional banks, such as Citibank, HSBC, Deutch Bank and finally the International Islamic banks, such as the Bank Muamalat Indonesia.

For Islamic banks to be competitive, the initial strategy adopted in Malaysia has been for Islamic banks to offer financial services which match those offered by the conventional banks. In most cases, the Islamic products were repackaged and adapted along features of conventional products with the non-shariah aspects eliminated. Hence, on the asset side, it is found that Islamic financing is dominated by property and asset term financing.

Table 1: Islamic Financing by Products

Products	RM million	Percentage (%)
Bai Bithman Ajil (BBA)	54,662.2	33.6
Ijara (leasing)	3,999.5	2.4
Ijara Thumma Al-Bai (AITAB)	43,992.2	27.1
Murabaha	23,734.3	14.6
Musharaka	4,104.4	2.5

Mudaraba	273.9	0.16
Istisna	1,613.5	0.9
Others	29,845.4	18.3
Total	**162,225.40**	**100**

Source: BNM Monthly Bulletins

From Table 1, we can see that he most popular financing product is Bai Bithamin Ajil (deferred payment sale) followed by Ijarah (leasing). Bai Bithamin Ajil (BBA) is a sales contract whereby the bank purchases the asset required by the customer at the market price and then sells it to the customer at a mark up price. As required by Shariah, the profit rate and the selling price are fixed throughout the financing period. In addition to that the repayments paid by the customer to the bank are by instalments. In practice, BBA financing is collateralized which implies that the profit to the bank is almost certain. In this respect, BBA financing is not much different from conventional bank loans (Radiah and Yap, 2009).

When the market interest rates increase, the cost of conventional loans will also increase, hence, induces new customers to choose for the relatively cheaper BBA financing because the profit rate is fixed. The reverse occurs when interest rates are falling. Such substitution effect implies that Islamic banks are exposed to interest rate risks even though operating on interest-free principles.

Theoretically, a dual banking system provides customers a relative advantage in terms of bank choice. Whilst pious Muslim customers a expected to stay with the Islamic banks, other customers, especially those who are profit-motivated would tend to compare between the cost of Islamic and conventional bank financing would choose the bank that offers the lower financing rate. It is important to understand this phenomenon because a negative consequence if

not mitigated, would jeopardize the growth of Islamic banks which are the new corners in the dual banking system.

The research question for this study is **whether bank customers in the dual system are influenced by the substitution effect.** This will be done by analysing the **impact of BLR on the Islamic home financing.** If it is proven that the base lending rate (BLR) have an impact on Islamic home financing, then there is a substitution effect. If however, the Islamic home financing is not affected by the changes in BLR, then there is no substation effect.

This study is significant due to two reasons:

i. The focus of this paper is the impact of interest rate changes on the demand for Islamic bank financing. It is found that past studies have only concentrated on the impact of interest on Islamic bank deposits (Sudin & Ahmad 2000, Bacha 2004, Rahmatina 2007). Only one past study by Radiah and Yap (2009) looked at the impact of interest changes on Islamic bank financing. However, our paper covers a longer time period and a more robust analysis was undertaken. Hence this paper extends the earlier research.

ii. The context of this paper is the period after the Asian financial crisis when interest rates are falling or remain low. It is of interest to investigate if the financing behaviour of customers in the dual banking system during such period is consistent with that in theory.

Our hypothesis is that, during low or falling interest rates, profit motivated customers would notice that BBA monthly payments are relatively higher than the instalments for conventional loans. Hence they would choose conventional loans if they expect that interest rate will continue to fall in the future. Such

behaviour would slow down the growth of Islamic financing and eventually affects the competitiveness of Islamic banks in the dual system.

This paper is organised into five sections. Section two provides a review of existing literature. The data and research methodology is presented in section three. The empirical analysis and findings are discussed in section four, while the conclusion and recommendations are given in section five.

2. LITERATURE REVIEW

Past studies have only concentrated on the impact of interest rates on Islamic bank deposits (Sudin & Ahmad 2000, Bacha 2004, Rahmatina 2007). Only one past study by Radiah and Yap (2009) looked at the impact of interest changes on Islamic bank financing. However, this paper covers a longer time period and a more robust analysis was undertaken. Hence this paper extends the earlier research.

Rosly (1999) provides the theoretical explanation of the impact of interest rate changes on Islamic bank performance in the dual system. He emphasized that Islamic banks are exposed to interest rate risks and the root cause of this phenomenon is the overdependence of Islamic banks on Bai Bithaman Ajil (BBA) financing, where the profit rate (financing rate) is fixed. Rosly (1999) also explains that when interest rates are rising, the base lending rate (BLR) and rates of return on deposits of the conventional banks would change accordingly to the changes in the market interest rate. As a result, the profit margin of the conventional banks will not be affected.

On the other hand, the Islamic bank cannot increase the rate of return on its deposits because the BBA profit margin is fixed. As a consequence, the deposit returns given by the Islamic banks are lower. The substitution effect comes into

play where depositors prefer the conventional banks. On the asset side, customers may find that the instalments for existing BBA financing are relatively cheaper than the instalments for existing conventional loans during times of rising interest rates. Hence, profit motivated customers would choose BBA financing if they expect interest rates to rise in the future. This will make the demand for BBA financing rising. However, the Islamic bank may not be able to fulfil this increased demand for BBA financing due to the fall in total deposits. The Islamic bank may not be willing to borrow from the Islamic inter-bank money market because the cost of funds in the money market is usually higher than that of bank deposits.

In the case of falling market interest rates, the conventional bank is able to adjust both its deposit and base lending rates downwards, thus, maintaining its profit margin. Islamic bank, on the other hand, also would reduce the rates of return on deposits in line with conventional deposit rates. Since the profit rate of BBA financing is fixed, it is rational for the Islamic bank to lower the deposit rates, hence, widening its profit margin.

In the case of Islamic financing, because existing BBA profit rates remain fixed, customers would find that existing BBA financing is relatively more costly than existing conventional loans. If customers expect the market interest rate to decline further, they would prefer conventional loans rather than BBA financing. Hence, the demand for conventional loan increases while the demand for BBA financing falls.

The above explanation theoretically shows that any changes in the market interest rate would, on the asset side, lead to a substitution effect between Islamic and conventional bank financing. It is recognised that the root cause of this problem is the weakness of the fixed BBA mechanism. Thus, overdependence on BBA financing by the Islamic bank has limited the bank's ability to compete with the conventional bank in the dual system.

3. DATA AND RESEARCH METHODOLOGY

3.1 Data

To examine the impact of interest rate changes (BLR) on Islamic home financing, data on total monthly residential property of Islamic banks (ISFIN), total monthly housing loans of conventional banks (CVFIN) and the monthly base lending rate (BLR) are used. These are the main variables of this study. Total residential property financing of Islamic banks is chosen because Islamic bank home financing is mainly dealt with the BBA contract. In comparison to this, the level of conventional housing loans is used to represent the conventional bank.

Data for this study is taken from the Monthly Statistical Bulletin, published by Bank Negara Malaysia. The data is spread over monthly observations, from January 2002 to January 2011, a total of 120 monthly observations.

3.2 Methodology

This study employs a time series technique, in particular, cointegration, error correction modelling and variance decomposition, in order to find empirical evidence of the impact of interest rate on Islamic home financing, as explained in the introductory section. This method is favoured over the traditional regression method for the following reasons. Firstly, most finance variables (including interest rates as will be evident below) are non-stationary. This means that performing ordinary regression on the variables will render the results misleading, as statistical tests like t-ratios and F statistics are not statistically valid when applied to non-stationary variables. Performing regressions on the differenced form of these variables

will solve one problem, at the expense of committing an arguably even bigger mistake. When variables are regressed in their differenced form, the long term trend is effectively removed. Thus, the regression only captures short term, cyclical or seasonal effects. In other words, the regression is not really testing long term (theoretical) relationships.

Secondly, in traditional regression, the endogeneity (for dependent variable) and exogeneity (for independent variable) of variables is pre-determined by the researcher based on the underlying theories. However, in this case, as we are discussing a relatively new area, there is notable absence of established theories. Cointegration techniques are advantageous in that it does not presume variable endogeneity and exogeneity. In the final analysis, the data will determine which variables are in fact exogenous, and which are endogenous. In other words, with regression, causality is presumed whereas in cointegration, it is empirically proven with the data.

Thirdly, cointegration techniques embrace the dynamic interaction between variables whereas traditional regression methods, by definition, exclude or discriminate against interaction between variables.

4. EMPIRICAL RESULTS

4.1 TESTING STATIONARITY OF VARIABLES

Unit Root Test: Time series data are often assumed to be non-stationary and thus it is necessary to perform a pre-test to ensure there is a stationary cointegrating relationship among variables to avoid the problem

of spurious regression[1]. Based on the error correction mechanism as indicated by Johansen (1990), it is necessary for the variables to be of the same order of integration.

The tests for stationarity or unit roots employ the augmented Dickey-Fuller (ADF) and Phillips-Peron (PP) test performed on the variables in levels and first differences. The ADF test for testing the unit root is utilised. ***ADF tests with null hypothesis of existence of unit root, which implies the variable, is non-stationary***. The results for the level form variables are represented in Table 2.

Table 2: Testing Stationarity of Variables in the Level Form

Variables	Test statistic	95% Critical Value	Implication
LISFIN	-2.3079 (AIC) -2.0603 (SBC)	-3.4535 -3.4535	Variable is non-stationary Variable is non-stationary
LCVFIN	-1.3005	-3.4535	Variable is non-stationary
LBLR	-2.3184	-3.4535	Variable is non-stationary

In the level log form all the variables represent a lower t statistic than the critical value, thus accepting the null hypothesis, that there is unit root. At 5 % significance level all variables are non stationary.

For the differenced form of the log variables, as represented in Table 3, the t statistics are higher than the 5 % significance value and thus the null

[1] A variable is stationary when its mean, variance and covariance are constant over time

hypothesis is rejected and the alternate hypothesis of no unit root accepted.

Table 3: Testing Stationarity of Variables in the Differenced Form

Variables	Test statistic	95% Critical Value	Implication
LISFIN	-2.991 (AIC) -3.0947 (SBC)	-2.8897 -2.8897	Variable is stationary Variable is stationary
LCVFIN	-7.0769	-2.8897	Variable is stationary
LBLR	-4.2971	-2.8897	Variable is stationary

Relying primarily on the AIC and SBC criteria, the conclusion that can be made from the above results is that ***all the variables we are using for this analysis are I(1)***, and thus we may proceed with testing of cointegration[2]. Note that in determining which test statistic to compare with the 95% critical value for the ADF statistic, we have selected the ADF regression order based on the highest computed value for AIC and SBC.

4.2 DETERMINATION OF THE ORDER OF THE VAR MODEL

Before proceeding with test of cointegration, we need to first determine the order of the vector auto regression (VAR), that is, the number of lags to be

[2] The null hypothesis for the ADF test is that the variable is non-stationary. In all cases of the variable in level form, the test statistic is lower than the critical value and hence we cannot reject the null. Conversely, in all cases of the variable in differenced form, the test statistic is higher than the critical value and thus we can reject the null and conclude that the variable is stationary (in its differenced form).

used. As per the table below, results show that AIC recommends order of 2 whereas SBC favours 1 lag [3].

Table 4: Order of VAR

	Choice Criteria	
	AIC	SBC
Optimal order	2	1

Given this apparent conflict between recommendation of AIC and SBC, the paper addresses the problem by choosing the lower order of the VAR between the two criteria, which is the recommendation by the SBC (order of VAR of 1). This is due to the relative small sample size consisting of 120 observations and to avoid the risk of over parameterization and loosing number of degrees of freedom.

4.3 TESTING COINTEGRATION

Once we have established that the variables are I(1) and determined the optimal VAR order as 1, we are ready to test for cointegration. Cointegration implies that the relationship among the variables is not spurious, for example there is a theoretical relationship among the variables and that they are in equilibrium in the long run. Employing the Cointegration LR Test based on Maximal Eigenvalue and the Trace of the Stochastic Matrix, the results imply that there **exists one cointegrating relationship at 5% significance level** (95% critical value) between the variables. (See Appendix 3)

[3] Based on highest computed values for AIC and SBC, after stipulating an arbitrary relatively high VAR order of 6.

Table 5: Cointegration LR Test based on Maximal Eigenvalue of the Stochastic Matrix

Null Hypothesis	Alternate Hypothesis	Stattistic	95% Critical Value	Implication
r = 0	r = 1	97.7382	25.4200	Reject null hypothesis Accept alternate hypothesis Exist one cointegrating vector
r =1	r = 2	3.5007	19.2200	Accept null hypothesis Reject alternate hypothesis No cointegrating vector

Table 6: Cointegration LR Test based on the Trace of the Stochastic Matrix

Null Hypothesis	Alternate Hypothesis	Stattistic	95% Critical Value	Implication
r = 0	r = 1	103.8875	42.3400	Reject null hypothesis

				Accept alternate hypothesis Exist one cointegrating vector
r =1	r = 2	6.1493	25.7700	Accept null hypothesis Reject alternate hypothesis No cointegrating vector

Based on the above result and as well as our intuition, we believe that there is one cointegrating vector or relationship. The economics interpretation would be that the Islamic home financing, the conventional home loans and the interest rate (BLR) are theoretically related, in that they tend to move together in the long terms. Their relationship to one another is nor merely spurious or by chance. This conclusion suggest that although the conventional loand and Islamic financing operated on different principles, being the latter is free from the element of interest (riba free), on the long run, the Islamic financing are also exposed to the interest rate risk

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4.4 LONG RUN STRUCTURAL MODELLING (LRSM)

In this step, the author attempts to quantify the theoretical relationship among the three variables, proven in the cointegration step. This step is necessary in order to compare the statistical findings with the underlying theory. Arising from the theoretical base, the Islamic home financing value is normalised in the Long Run Structural Modelling (LRSM). Uptil now, the

author have run the assumption that all variables are endogenous. With the identifying resctriction of A1 = 1 (A1 is Islamic home financing), the result is expressed in Table 7 below.

Calculating the t-ratios manually, it is found that only one variable, which is the conventional home loan (CV) to be significant. The other variable, which is the base lending rate (interest rate- BLR) is insignificant.

Table 7: Long Run Structural Modelling (LRSM) Normalized on Islamic Home Financing

Variable	Coefficient	Standard Error	T Ratio	Implication
ISFIN	-	-	-	-
CVFIN	1.1158	0.22305	5.002	Variable is significant
BLR	0.0046816	0.25289	0.189	Variable is insignificant

From the table it is concluded that the variable for conventional home loan (CVFIN) is significant with a t-ratio of 5.002, showing that it actually affects the normalised variable, the Islamic home financing (ISFIN), thus, we keep this variable in the equation.

However, a huge question arises when the variable of base lending rate (BLR) is proven to be insignificant, with a t-ratio of 0.189. it means that BLR does not affect the normalised Islamic home financing value. Driven by curiosity, the author decided to verify the significance of the variable by subjecting the estimates to over-identifying restrictions. The over-identifying restriction applied is A3=0 (A3 is BLR). We also did this for the conventional home loan (CVFIN).

Table 8: Long Run Structural Modelling (LRSM) Over-identifying Restriction: CVFIN and LBLR

Variable	Chi-Sq p-value	Implication
ISFIN	-	-
CVFIN	0.000	*Variable is significant*
LBLR	0.854	Variable is insignificant

The result depicted in Table 8 confirmed earlier findings that only CVFIN is significant, and LBLR is proven insignificant. Although the statistical result showed that the base lending rate (BLR) is not significant, the author however, is more inclined to include the variable in the equation. This is because firstly, the variable is proven to be cointegrated in step number three above. In addition to that, according to theory, base lending rate is an important variable in determining the demand of loans, specifically the conventional loans. When the BLR is high, the demand for loans generally will fall, as the cost to borrow is higher, conversely, when BLR is relatively low, the demand for loans tend to increase, as the cost of borrowing is cheaper. Thus, for the above reason, the author would still prefer to keep the BLR in the equation, despite the statistical result.

From the above analysis, we arrive at the following cointegrating equation. The numbers in parenthesis are standard error.

$$\underset{}{ISFIN} + \underset{(0.223)}{1.1158\ CVFIN} + \underset{(0.253)}{0.046816\ BLR}$$

4.5 VECTOR ERROR CORRECTION MODEL (VECM)

From our analysis thus far, we have established that the Islamic home financing, conventional home loans and the base lending rate are cointegrated to a significant degree. However, the cointegrating equation reveals nothing about causality, that is, which variable is the leader (exogenous) and which is the laggard variable (endogenous).

In light of this, the next part of our analysis involves the Vector Error Correction Model (VECM). The vector error correction model allows us to identify that which variables are exogenous and which are endogenous. The vector error correction model can be employed by the interpreting of the coefficient where if the error-correction term ($e_{t-1)}$ for each variable equation is insignificant, that implies that the corresponding dependent variable of that equation is 'exogenous. We have taken the approach of interpreting the probability numbers and the t-ratio.

The null hypothesis states that all the variables are exogenous and the alternate stating that the variable is endogenous[4]. At a 5 % confidence level, if the probability is higher than 0.05 it means that we would be making a greater error in rejecting the Null hypothesis, and thus we accept the Null Hypothesis. The other way of looking at it is by looking at the t-ratio, where if the t-ratio of a variable is more than 2, it is significant, therefore, the variable is endogenous. On the other hand, if the t-ratio of a variable is less than 2, it is insignificant, therefore, the variable is exogenous.

The resultant probability for the variables is summarized in the Table 8. From the table we are able to interpret that there are two exogenous variables, which are the base lending rate (BLR) and the conventional home loan (CVFIN), hence, leaving the Islamic home financing (ISFIN) as

[4] Ho: All variables are exogenous
Hi: All variables are endogenous

the endogenous variable. We can also make a conclusion that, the three VECM equations can be considered are more or less well-specified, with no serial correlation, no functionality form, no normality and no heteroscedasticity.

Table 8: Vector Error Correction Model (VECM) [5]

Variable	ECM(-1) t-ratio p-value	Probability	Conclusion	Implication
ISFIN	-11.8973	0.000	Significant	Variable is endogenous
CVFIN	0.75723	0.451	Insignificant	Variable is exogenous
LBLR	1.7031	0.091	Insignificant	Variable is exogenous

The implication of this result is that, the variable of interest to the borrowing public (customers) and to the loan/financing providers (conventional banks and Islamic banks) would be the base lending rate (BLR). In tandem to the underlying theory, interest rate, specifically the BLR plays an important role in determining the demand of loans and financing. As have explained in the above section, when the BLR is high, the demand for loans generally will fall, as the cost to borrow is higher, conversely, when BLR is relatively low, the demand for loans tend to increase, as the cost of borrowing is cheaper.

In addition, the VECM produces a statistic that may be of interest to the customers and banks. The coefficient of e_{t-1} tells us how long it will take to get back to long term equilibrium if that variable is shocked. The coefficient

[5] t ratio > 2 : significant, variable is endogenous
t ratio < 2: insignificant, variable is exogenous

represents proportion of imbalance corrected in each period. For instance, in the case of the BLR, the coefficient is 0.01684. This implies that, when there is a shock applied to this index, it would take, on average, 059.38 months for the BLR to get back into equilibrium with the other variables..

4.6 VARIANCE DECOMPOSITION (VDC)

Whilst we have established that the Islamic financing (ISFIN) is the endogenous variable, and the base lending rate (BLR) and conventional home loan (CVFIN) are the exogenous variables, we have not been able to say anything about the relative exogeneity between BLR and CVFIN. In other words, of the two, which is the most exogenous (leader) variable compared to the other?

As the VECM is not able to assist us in this regard, we turn our attention to variance decomposition (VDC).The Variance Decomposition Method, decomposes the variance of the forecast error of a particular variable into proportions attributable to shocks (or innovations) in each variable in the system including its own. The relative exogeneity/endogeneity of a variable can be determined by the proportion of the variance explained by its own past shocks. The variable which is explained mostly by its own shocks (and not by others) is deemed to be the most exogenous of all.

We started out applying orthogonalized VDCs and obtained the following results:

Forecast at Horizon = 10 months

	ISFIN	CVFIN	BLR
ISFIN	20.72%	79.23%	0.04%
CVFIN	7.19%	92.81%	0.00%
BLR	2.44%	2.50%	95.06%

For the above table, the rows read as the percentage of the variance of forecast error of each variable into proportions attributable to shocks from other variables (in columns), including its own. The columns read as the percentage in which that variable contributes to other variables in explaining observed changes. The diagonal line of the matrix (highlighted) represents the relative exogeneity. According to these results, the ranking of variable by degree of exogeneity (extent to which variation is explained by its own past variations) is as per the table below:

Table 9: Ranking of Variables by Degree of Exogeneity

No.	Variables
1	BLR
2	CVFIN
3	ISFIN

From the above table we can see that base lending rate is the most exogenous variable, compared to conventional loan. Therefore, even though in step 4, the LRSM, statistically, BLR was proven insignificant, in the above, it is proven otherwise, hence the decision to keep the variable in the equation is correct.

In order to make sense of this result, we need to recognize two important limitations of orthogonalized VDCs. Firstly it assumes that when a particular variable is shocked, all other variables are "switched off". Secondly and more importantly, orthogonalized VDCs do not produce a unique solution. The generated numbers are dependent upon the ordering of variables in the VAR. Typically, the first variable would report the highest percentage and thus would likely to be specified as the most exogenous variable.

Following this discovery, we decided to rely instead on Generalized VDCs, which are invariant to the ordering of variables. In interpreting the numbers generated by the Generalized VDCs, we need to perform additional computations. This is because the numbers do not add up to 1.0 as in the case of orthogonalized VDCs. For a given variable, at a specified horizon, we total up the numbers of the given row and we then divide the number for that variable (representing magnitude of variance explained by its own past) by the computed total. In this way, the numbers in a row will now add up to 1.0 or 100%. The tables below show the result.

Forecast at Horizon = 10 months

	ISFIN	**CVFIN**	**BLR**
ISFIN	24.29%	75.56%	0.14%
CVFIN	6.71%	93.20%	0.09%
BLR	2.36%	3.70%	94.00%

The Generalized VDCs, also confirm the earlier result, whereby the most exogenous variable is BLR, followed by CVFIN, and the endogenous variable is ISFIN.

4.7 IMPULSE RESPONSE FUNCTIONS (IRF)

The information that has been tabulated in VDC can be equivalently represented by Impulse Response Functions. IRFs essentially map out the dynamic response path of a variable owing to a one-period standard deviation shock to another variable. It is also can be explained as a variable specific shock. Figure 1 shows the generalised IRF for Islamic financing, where we shock the variable Islamic financing and see the effect on the conventional home loan BLR. Figure 2 shows the generalised IRF for conventional home loan, and the effect on the Islamic financing and BLR. Figure 3 shows the generalised IRF for BLR and the effect on the conventional home loan and Islamic financing.

From the three figures, it can be concluded that when we shock the most exogenous variable, which is the BLR that we can see the biggest difference in the other two variables. It is because the leader variable, BLR will naturally give the most impact to the other following variables.

Figure1

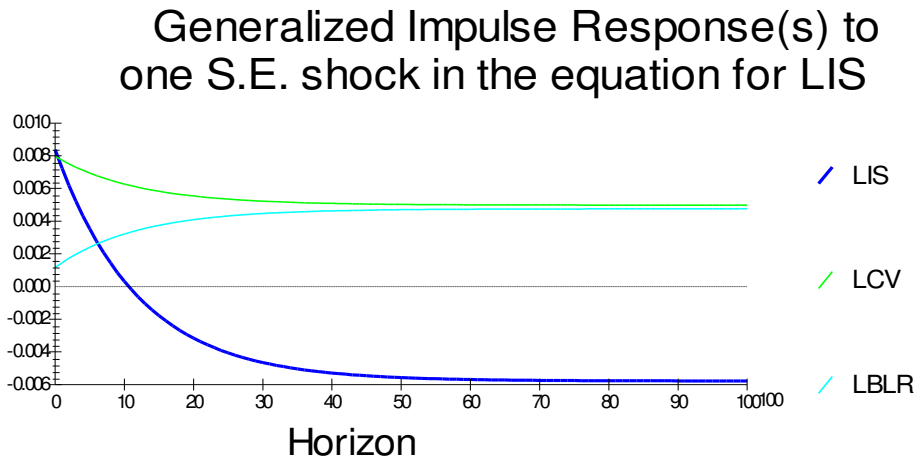


Figure 2:

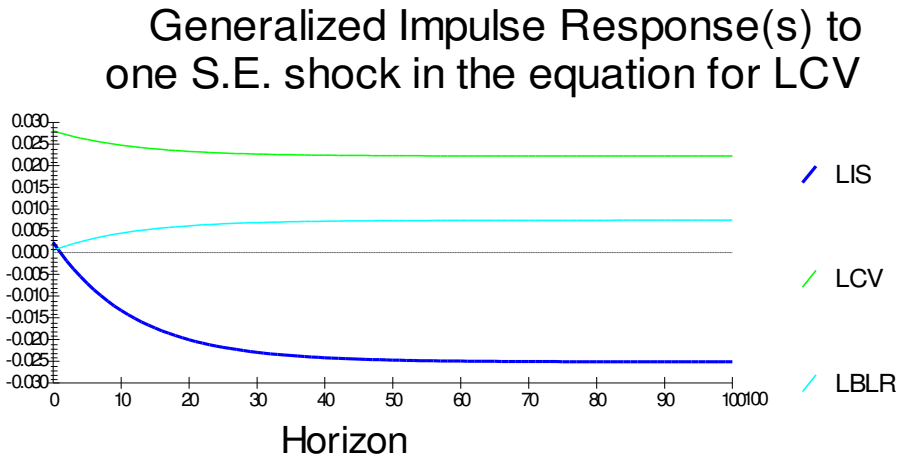
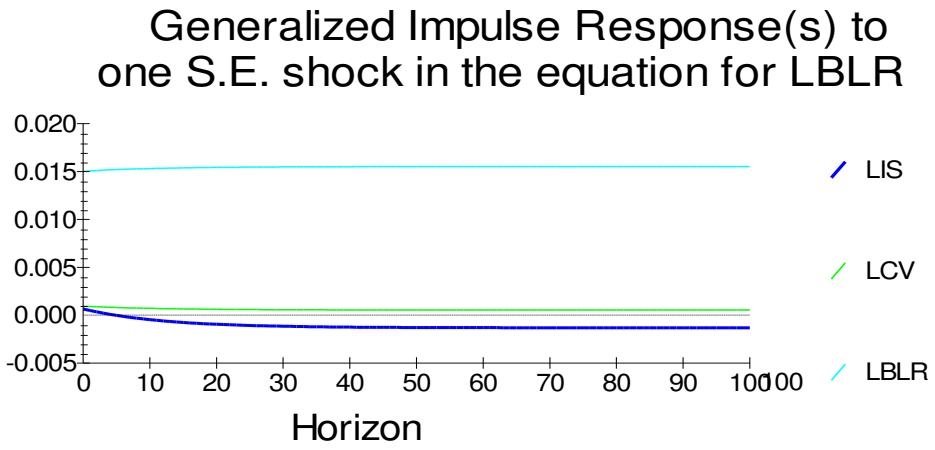
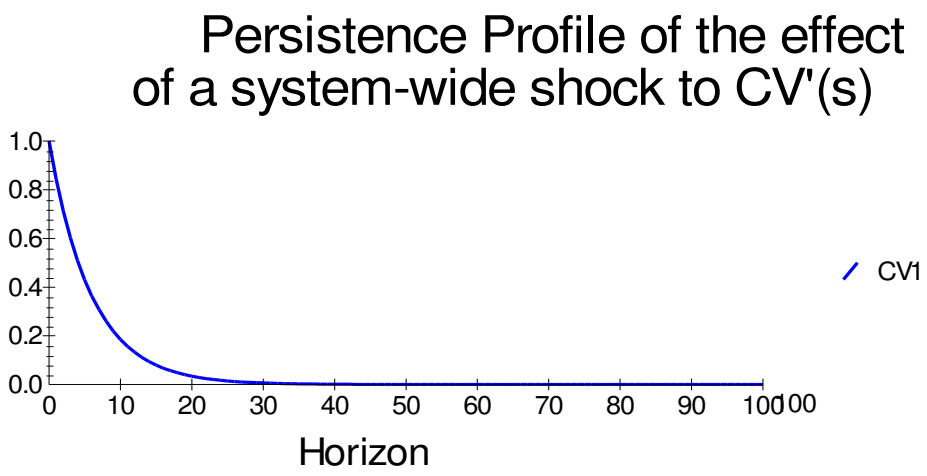


Figure 3:



4.8 PERSISTENCE PROFILE

The persistence profiles traces out the effects of a system-wide shock on the long-run relations in an equation. In difference with the Impulse Response Function which is variable specific shock, it indicates the time horizon that it takes to get back to equilibrium for a system wide shock.



In our model the persistence profile represents that it takes between 25 to 30 months for the equilibrium to be achieved again after a system wide shock.

5. CONCLUSION

Conceptually, customers of Islamic banks should not be guided by the profit motive. Hence, any changes in BLR should not trigger them to shift to conventional banking. If the above scenario was adhered to, the level of Islamic banking financing will not have any significant changes. However, this paper found that the Islamic financing, specifically BBA (Al-Bai Bithaman Ajil), seems to be affected by both conventional home loans and BLR. However, the response to BLR is more apparent. It implies that Islamic banks' customers are profit motivated and their decisions to obtain Islamic financing (BBA) was influenced by the substitution effect based on the changes in BLR. Our findings tend to support earlier research in that during rising interest rates, BBA financing would be more popular but during falling interest rates, customers were likely to turn to conventional banking.

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