



Roles of the Islamic banks in the monetary transmission process in Malaysia

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Abstract

Purpose – This paper aims to determine the importance of the Islamic banks in the monetary transmission process in the Malaysian economy. In particular, the paper analyzes the relevance of Islamic banks' financing and deposit in channelling the monetary policy effects to the real economy.

Design/methodology/approach – The paper relies on the co-integration test, impulse response functions, and variance decomposition analysis, focusing on the period from January 1994 to May 2007.

Findings – The results show that both Islamic banks' financing and deposit play important roles in the monetary transmission process in the Malaysian economy. In particular, both Islamic deposit and financing are shown to be statistically significant in linking the monetary policy indicator to the real output.

Practical implications – The results imply that the monetary authority should also consider the Islamic banks in the implementation of monetary policy in Malaysia. The results also imply that ensuring the stability of the Islamic financial institutions is just as important as that of the conventional counterpart to achieve an effective transmission of monetary policy in the economy.

Originality/value – This paper is a pioneer study undertaking empirical investigation on the role of Islamic banks in the monetary transmission process in an economy.

Keywords Monetary policy, Financing, Malaysia, Banks, Islam, Economics

Paper type Research paper

Introduction

The impacts of monetary policy can be transmitted to the real economy via several channels, such as the interest rate, credit, asset price, and exchange rate channels. The relative importance of a particular channel in the transmission of monetary policy generally depends on, among other things, the structural characteristics of the economy. For example, a highly open economy where the external trade sector plays a very crucial role in generating economic activity might find that the exchange rate channel plays a significant role in the monetary transmission process. Similarly, a country which is highly dependent on bank credit to finance its economic activity might find that the credit or bank lending channel is an important channel for monetary policy transmission.

The bank lending channel is a likely candidate for an important channel of monetary transmission process in the Malaysian economy due to the critical role that the banking sector plays in financing economic activities in the economy. At the end of 2006, of total financing in the Malaysian economy, 70 percent were in the form of bank loans



and only 30 percent came from the capital market (Bank Negara Malaysia, 2007). Owing to its importance, bank lending accounted for more than 100 percent of the country's total gross domestic product at end-2006. It is important to highlight that the importance of the banking sector in channelling monetary policy effects has several economic implications. Suppose that the banking sector is important in the monetary transmission process in the economy, it is critical to ensure the stability of the banking sector due to its great repercussions on the economy. In such circumstances, ensuring the health and resilience of the banking system is a crucial pre-condition towards the overall economic stability.

In the case of Malaysia, the importance of the bank lending channel in the monetary transmission process of the country has been well-established. Several studies provide empirical evidences on the importance of the banking sector in transmitting the impact of monetary policy. This includes that of Kassim and Abdul Majid (2008), Ibrahim (2005), Azali (2003), Tang (2000, 2002) and Vaithilingam *et al.* (2003) which employ rigorous econometric techniques that enabled detailed and conclusive findings. In general, these studies are supportive of the important role played by banking sector in the transmission of monetary policy in the Malaysian economy.

The bank lending channel highlights the importance of the banking institutions in channelling the monetary policy effects to the real economy. Studies that are supportive of the existence and importance of the bank lending channel in general find that bank loan behaves in a predictable manner when a policy shock is exerted on the economy. In particular, bank loan is found to be important in the monetary transmission process by propagating the impact of policy shocks through the money channel. The central bank can influence the economic activity by controlling the level of bank loan supply in the economy. When a central bank conducts open market operations to reduce liquidity in the system, banks' deposit and liquidity are reduced, thereby restricting the ability of banks to supply new loan. Credit is less available in the economy, resulting in firms to cut down on investment and production, thus lower aggregate output in the economy. In view of this, empirical studies analyzing the importance of the banking sector in the monetary transmission process focus on the relationship and impact of disturbances in the banking sector on the aggregate economic activity (Bernanke and Blinder, 1988; Bernanke and Mark, 1995; Domac and Giovanni, 1998; Garretsen and Swank, 1998; Guender, 1998; Gertler and Gilchrist, 1993; Suzuki, 2001). In general, these studies measure the responses of selected macroeconomic variables (such as output, unemployment rate, and inflation) and major bank balance sheet variables (deposit – representing bank liability and loan – representing bank asset) to changes in the monetary policy indicator (such as interest rates).

In Malaysia, a relatively recent development in the financial sector is the rapid development of the Islamic banking and finance industry. Despite its recent history, Islamic banking has staged a very impressive growth. This is well reflected by high growth of the asset of the Islamic banking industry in Malaysia grew by approximately 30 percent per annum since its inception in 1983. In view of the increasing presence of Islamic banking in the Malaysian financial landscape, it is indeed timely to investigate the relevance of Islamic banking in the transmission process of monetary policy in the Malaysian economy. To our knowledge, this topic has yet to be explored, and in this regard, the study hopes to contribute towards

enriching the literature, not only in the context of Islamic banking and finance, but also to offer new dimensions in the area of monetary economics.

The rest of this paper is organized as follows: the next section provides some background information on the development of the Islamic banking and finance industry in Malaysia. It follows with a discussion on the data and empirical method employed in this study. Subsequently, the empirical findings and analysis of the results are presented. Lastly, it concludes and draws relevant policy recommendations.

Development of Islamic banking in Malaysia

The rapid growth of the Islamic banking and finance industry in Malaysia will not be possible without the full support and conducive environment provided by the Malaysian government. This includes ensuring a strong foundation for the industry to grow such as establishing the financial and legal infrastructures for the industry as well as ensuring ample supply of human resource to complement the rapidly growing industry.

The history of Islamic banking and finance in Malaysia started with the establishment of the Pilgrims Management and Fund Board (PMFB) which represents the pioneer interest-free financial institution in the country (Ariff, 1989). The PMFB was set up in August 1969 with the main role of collecting and mobilizing saving from those who intend to go for the *hajj* (pilgrim) in Mecca. Since the early 1980s, the local Muslim community has been continuously demanding for *shari'ah*-compliant banking product and services which could serve as an alternative to the conventional banking services. This request was well responded by the government by establishing a steering committee to study its possibility in 1982. Shortly after that, the new Islamic Banking Act (IBA) was enacted in 1983. Subsequently, the first Islamic bank in Malaysia, namely Bank Islam Malaysia Berhad (BIMB) was established and commenced operation on July 1, 1983. BIMB was given an initial capital of about RM580 million, comprising of authorized capital of RM500 million and paid-up capital of RM80 million. The initial capital of BIMB was contributed by the Malaysian government, PFMB, and various religious councils and agencies (BIMB, 1983-1992; Ariff, 1989).

Apart from the IBA 1983, the operations of the Islamic bank were also subject to the deliberations of the *shari'ah* advisory council of the Bank Negara Malaysia. This is to ensure that every aspect of the BIMB operations as well as the products and services that it offers are in line with the *shari'ah* principles.

BIMB has shown a remarkable performance since its early years of operations. In 1987, approximately after three years in operation, BIMB gained the 12th rank among 23 locally incorporated commercial banks in terms of both assets and deposits, while based on shareholders funds, it was ranked the ninth (Ariff, 1989). The performance in terms of the growth of assets, deposit, and financing has also been encouraging.

As shown in Table I, the growth of assets has in general increased, although in some years, it has experienced a small percentage of growth or even negative growth. In several years, total assets recorded negative growth, namely in 1984 (- 11.9 percent), 1987 (- 14.7 percent), and 1991 (- 1.8 percent). However, in 1986, BIMB total assets increased more than 100 percent. Overall, total assets grew between 19 and 21 percent such as in 1988, 1989, 1992, and 1993. The impressive growth could be attributed to the "grace period" which allows BIMB to operate with no competition for the first ten years of its inception.

Year	Total assets	Total deposits	Total financing	Annual changes (%)		
1983	370	274	250	–	–	–
1984	326	241	161	– 11.9	– 12	– 35.6
1985	514	410	392	57.7	70.1	143.5
1986	1,093	967	525	112.6	135.9	33.9
1987	932	809	429	– 14.7	– 16.3	– 18.3
1988	1,134	1,022	610	21.7	26.3	42.2
1989	1,368	1,229	666	20.6	20.3	9.2
1990	1,426	1,221	817	4.2	– 0.7	22.7
1991	1,400	1,175	808	– 1.8	– 3.8	– 1.1
1992	1,676	1,323	1,028	19.7	12.6	27.2
1993	2,009	2,259	1,065	19.9	70.7	3.6
1994	4,885	4,655	1,737	143.2	106.1	63.1
1995	6,197	4,926	3,492	26.9	5.8	101
1996	10,133	7,264	6,143	63.5	47.5	75.9
1997	17,881	10,330	10,750	76.5	42.2	75
1998	21,632	16,432	10,943	21	59.1	1.8
1999	36,136	24,804	13,724	67	51	25.4
2000	47,068	35,923	20,891	30.2	44.8	52.2
2001	58,929	47,106	28,201	25.2	31.1	35
2002	68,070	53,306	36,718	15.5	13.2	30.2
2003	82,196	60,212	48,615	20.8	13	32.4
2004	94,580	72,859	57,883	15.1	21	19.1
2005	111,824	83,875	67,365	18.2	15.1	16.4
2006	133,031	99,181	78,513	19	18.2	16.6
2007	157,125	121,975	89,857	18.1	23	14.4

Table I.
Performance of Islamic
banks in Malaysia

Note: RM million

Sources: BIMB (1983-1992) *Annual Reports*; Bank Negara Malaysia (1994-2007) *Monthly Statistical Bulletin*, various issues

After ten years operating without any competition, in 1993, the “Islamic banking window” concept was introduced, whereby interested conventional banks are allowed to offer Islamic banking products using their existing infrastructure. In other words, the bank customers could choose either to have the conventional banking products or the Islamic banking products by patronizing the existing conventional bank. The new policy was well received as the conventional banks as they continue to leverage on their existing reputation and network infrastructure. In particular, the wide bank networking also contributed towards better consumer acceptance of the Islamic banking products and services. Since then, the overall performance of the Islamic banking industry in Malaysia (BIMB and Islamic banking windows) has improved significantly compared to that of BIMB alone. In 1994, performance of the Islamic banking assets was remarkable. It doubled to RM4,885 million from RM2,001 million in 1993, recording an increase of 143.2 percent. Similarly, deposit and financing also recorded impressive increase. In 1993, total deposit and total financing were RM2,259 million and RM1,065 million, respectively, whereas, when Islamic banking windows had been introduced, deposit and financing jumped to RM4,655 million and RM1,737 million, respectively. When Malaysia experienced an economic boom in 1988-1996, in addition to the implementation of New Development Policy, the performance of the Islamic banking industry was also affected. The growth of assets has increased considerably high, from

26.8 percent in 1995 to 63.5 percent in 1996, and 76.5 percent in 1997. Deposit and financing also experienced the same trend with deposit grew by about 40-59 percent during 1996-2000, and financing grew by about 70 percent in 1996 and 1997. When the Asian financial crisis occurred in 1998, the financing grew only slightly about 1.8 percent. However, it recovered to 52.2 percent in 2000. In the early 2000s, Islamic banks asset has grown steadily with an average growth of 15-25 percent.

Data and empirical framework

Data

In efforts to investigate the importance of the Islamic banks in the transmission process of monetary policy, consistent with major studies on the monetary transmission mechanism such as Bernanke and Blinder (1988), Garretsen and Swank (1998), Gertler and Gilchrist (1993) and Suzuki (2001), the study analyzes a model comprising of variables representing the real economy and monetary policy, and focus variables being considered as possible channels of monetary policy. In view of this, the following model is being considered:

$$IPI = f(IF, ID, ONIGHT)$$

where IPI is industrial production index, IF is Islamic financing, ID is Islamic deposits, and ONIGHT is the overnight interest rate. In this model, the IPI is being used as a proxy for economic output, IF and ID are the Islamic banks' two major balance sheet items being Islamic financing and Islamic deposit, respectively, and ONIGHT is the indicator for the monetary policy interest rate. The adoption of the overnight interest rate as the monetary policy indicator is in line with the adoption of the rate by the Bank Negara Malaysia. All variables are in the natural logarithm form, except the overnight interest rate.

In terms of data frequency, the study employs monthly data series for the period from January 1994 to May 2007. To cater for the Asian financial crisis 1997/1998, a dummy variable is being used which starts from June 1997 to May 1998. All data are sourced from the various issues of the Bank Negara Malaysia's (1994-2007) *Monthly Statistical Bulletin*.

Empirical framework

As in any time series estimation procedure, we undertake the pre-tests to determine the unit root properties as well as the degree of integration of the variables involved in the study before more rigorous investigation techniques are adopted. As such, the following steps are undertaken: first, the unit root and cointegration tests, followed by the variance decomposition (VDC) analysis and impulse response functions (IRF). The details of the tests are elaborated in the following sections.

Unit root tests

The unit root test is very important in the context of time series analysis so as to check the level of stationarity of the data. Utilizing non-stationary data in a model will result in a spurious regression whereby the result shows that the relationship between the variables of X and Y is significant, whereas a priori there should be none. In order to test for the order of integration of the variables, four types of unit root tests are employed in this study, namely the Augmented Dickey Fuller (ADF), Phillips-Peron (PP), Dickey-Fuller GLS (DF GLS) tests and lastly, Kwiatkowski-Philips-Schmidt-Shin (KPSS) test.

Cointegration test

Cointegration is said to exist if two (or more) series are linked to form an equilibrium relationship spanning the long-run, even though the series themselves may contain stochastic trends (non-stationary). They will nevertheless move closely together over time and difference between them will be stable (Harris, 1995).

From the above definition, it implies that even though examining non-stationary variables may result in spurious regression however, if the residual of the model is found to be stationary, then the variables is said to have co-movement in the long run or they have a long-term equilibrium relationship. Hence, the regression is meaningful. There are at least two types of cointegration tests, namely the Engle-Granger (EG) and Johansen and Juselius (JJ) tests. In this study, the JJ method is being adopted due to various weaknesses that are well-known in the EG test.

The JJ procedure is able to prevent the use of two-step estimator and can test for the presence of multiple cointegrating vectors. The JJ procedure is nothing more than a multivariate generalization of the DF test. The key important thing in this procedure is the determination of the rank matrix (π). Rank π is equal to the number of independent cointegrating vectors. If rank $\pi = 0$, then the matrix is null, hence the standard VAR model in first differences is employed. If rank π is of rank n (number of variables) then the vector is stationary. If rank of $\pi = 1$, there is a single cointegrating vector and the component of πx_{t-p} is the error correction factor (Enders, 1995). Other case whereby $1 < \text{rank } \pi < n$, there are multiple cointegrating vectors.

At this point in time, it is necessary to outlines the VAR order selection or the selection of relevant lag length in the modelling of VAR. There are some of the criteria used in selecting the VAR lag length for each variable are, among others, the Akaike's information criterion (AIC) and the Schwarz criterion. The lag length used should be long enough to confine the dynamics of the system. However, it should not be too long to exhaust the degree of freedom.

IRF and VDC

An IRF measures the time profile of the effect of shocks at a given point in time on the (expected) future values of variables in a dynamical system (Pesaran and Shin, 1998). The approach is well-suited because not only that it allows for the relative strength of various shocks to be quantified in terms of their contributions to variations in a particular variable of interest, but it also enables the pattern and direction of the transmission of shocks to be traced. In the context of this study, we are interested to analyze the responses of the objective variables, namely IPI, Islamic deposit and Islamic financing to a shock in the monetary policy variable which is the overnight rate.

Meanwhile, the VDC analysis shows the fraction of forecast error variance of a variable attributed to shocks in other variable particularly to make inferences about the relative strength of innovations in the variable of interest. It is a method of providing a literal breakdown of the change in the value of a variable in a given period arising from changes in the same variable and in other variables during previous periods. The VDC which is termed as an out-of-sample causality tests, partition the variance of forecast error of a certain variable into proportions attributable to innovations (or shocks) in each variable in the system including its own, can provide an indication of these relatives.

Empirical results and analysis

Unit root test results

The results of the unit root tests are presented in Table II. It was conducted in the log level and first difference, and in both cases it uses intercept, and trend and intercept. It can be seen that most of the variables are stationary in the first difference or simply, are I(1) process.

In the case of Islamic financing, both ADF and PP tests show that it is an I(0) process, while based on the KPSS test, the result shows that it is non-stationary even in the first difference. The only test which Islamic financing is found to be I(1) is in the DF GLS. Other variables such as IPI and overnight rate, both show I(1) in ADF and PP, while Islamic deposit is found to be integrated of order one in the KPSS. Based on these tests, in general, it can be concluded that all the variables are I(1) process.

Confirming the data suitability by unit root test for VAR approach, we continue to examine whether there exists long-run equilibrium among the variables by conducting the JJ cointegration test.

Cointegration test results

The lag length used in conducting the cointegration test was based on several criteria which are commonly used in many empirical studies such as AIC, SC, LR as well as FPE. Based on the optimal lag length selection criteria, the chosen lag length is seven. The results of cointegration test based on lag seven are shown in Table III:

As shown in Table III, the cointegration test results suggest that there exist long run co-movement among the variables. Based on the Trace statistics, there exist three cointegrating equations as shown by the value of Trace statistics which is greater than the 5 percent critical value ($112.7 > 63.87$, $63.43 > 42.9$, and $30.52 > 25.87$). Similarly, the Max-Eigen statistics show that there are two cointegrating equations since the values are greater than the 5 percent critical value ($49.26 > 32.11$, $32.9 > 25.82$). The normalized cointegration equation is represented as follows:

$$\begin{array}{cccccc} \text{LIPI} = & 0.31 & \text{LIF} - & 0.189 & \text{LID} - & 0.02 & \text{ONIGHT} + & 0.0011 & \text{TREND} \\ & \text{SE} & & (0.052) & & (0.065) & & (0.016) & & (0.0007) \end{array}$$

From the model above, it can be inferred that there are significant association of all the variables to the real output. The positive sign of LIF would mean that when Islamic financing increases, the IPI would also increase. The negative relationship between overnight rate and IPI means that when interest rate increases, it will be followed by reduction in the IPI. This can be explained by theory which says that in an attempt to slow down an economy, the central bank can raise the policy interest rate. Ironically, the relationship between Islamic deposit and industrial production is found to be negative. While theoretically an increase in deposit is normally associated with an increase in IPI, the reverse seems to be the case in this study. However, further discussion will be provided on this issue in the subsequent section.

Impulse response functions

The IRF allow for the analysis of the impact of a shock on the monetary policy indicator on the other variables. In the context of this study, the IRF shows the magnitude and timing of the responses of the objective variables (IPI, IF and ID) to a

Table II.
Results of the unit
root tests

Series	ADF		PP		Trend and Itcpt (Itcpt)		DF GLS		KPSS	
	Level	1st diff	Level	1st diff	Level	1st diff	Level	1st diff	Level	1st diff
Islamic financing	-4.580 ^{***} (-7.701 ^{***})	-8.871 ^{***} (-2.565)	-3.989 ^{**} (-6.23 ^{***})	-9.101 ^{***} (-8.369 ^{***})	-0.731 (0.304)	-3.463 ^{***} (-3.217 ^{***})	0.3 ^{***} (1.4 ^{***})	0.173 ^{***} (0.817 ^{***})		
IPI	-5.037 ^{***} (-0.983)	-2.892 (-2.89 ^{**})	-5.643 ^{***} (-1.614)	-23.734 ^{***} (-23.38 ^{***})	-2.394 (0.564)	-1.954 (-2.430 ^{**})	0.062 (1.517 ^{***})	0.418 ^{***} (0.349 [*])		
Overnight rate	-2.831 (-1.389)	-6.96 ^{***} (-6.97 ^{***})	-2.624 (-1.806)	-20.12 (-20.16 ^{***})	-1.483 (-1.364)	-1.566 ^{**} (-0.647)	0.14 (0.77 ^{***})	0.102 (0.109)		
Islamic deposit	-3.145 [*] (3.751 ^{***})	-4.187 ^{***} (-10.25 ^{***})	-3.783 ^{**} (-4.402 ^{***})	-10.890 ^{***} (-10.25 ^{***})	-0.312 (1.784)	-1.079 (-0.403)	0.380 ^{***} (1.486 ^{***})	0.096 (0.733 ^{**})		

Note: Significant at *10, **5, and ***1 percent levels, respectively

shock in the monetary policy variable (ONIGHT). This enables a comparison of the extent of responses of the objective variables to the policy shocks. In all cases, the IRFs are reported over the 30-month horizon. One standard deviation of confidence bands have been obtained by Monte Carlo integration methods with 1,000 replications.

In determining whether the Islamic banks play an important role in the transmission process of monetary policy in Malaysia, we analyze the nexus of shocks originating from the monetary policy indicator to the real economy. The result of the IRF clearly provides the evidence which is in support of the bank lending channel through the Islamic financing. A significant nexus of monetary transmission can be traced from ONIGHT to ID to IF to IPI. More specifically, the shock in ONIGHT is responded negatively by the Islamic deposit, implying that when there is a contractionary monetary policy (or high-interest rate policy), it will be followed by a reduction in the Islamic deposit. The negative relationship between interest rate and Islamic deposit is consistent with many other studies such as that of Kassim *et al.* (2009). Essentially, the negative relationship reflects the displaced commercial risk faced by the Islamic banks operating in a dual banking system. As mentioned earlier, this seems to be ironic since the results are suggesting the significant influence that the interest rate has on the Islamic banks. This phenomenon is known as the displaced commercial risk which may occur in the context of a dual banking system such as in Malaysia. In a situation whereby interest rate on deposit is relatively attractive as compare to the profit rate given to Islamic bank depositor, one would likely see a significant deposit withdrawal from Islamic bank to conventional bank. This result would also suggest that the Islamic bank depositors, whether Muslim or non-Muslim, tend to have profit motive in their saving behaviour.

The IRF results show that Islamic financing responded positively to a shock in Islamic deposits. In the context of the monetary transmission mechanism, it essentially means that as an extension from the shock in the policy interest rate which resulted in the contraction in Islamic deposit, this would results in a contraction in Islamic financing, which leads to the same impact on real output, as being shown by the significant negative response of IPI to Islamic financing. The responses of the objective variables to the monetary policy shocks are as predicted by the bank lending channel of the monetary transmission process. Tight monetary policy limits the ability of banks to supply loan/financing, leading to a contractionary impact on the real economy Figure 1.

VDC analysis

The VDC analysis is used to asses the dynamic interactions between the monetary policy indicator and Islamic banks' balance sheet items. At the same time, the VDCs of the macroeconomic variables are also provided to show the contribution of Islamic

Model	Null hypothesis	Trace statistic	5 percent critical value	Max-Eigen statistic	5 percent critical value
$r \leq 0$	0.275301	112.7006	63.8761	49.26584	32.11832
$r \leq 1$	0.193529	63.43472	42.91525	32.90837	25.82321
$r \leq 2$	0.112378	30.52635	25.87211	18.23902	19.38704
$r \leq 3$	0.077169	12.28733	12.51798	12.28733	12.51798

Table III.
Results of the
cointegration test

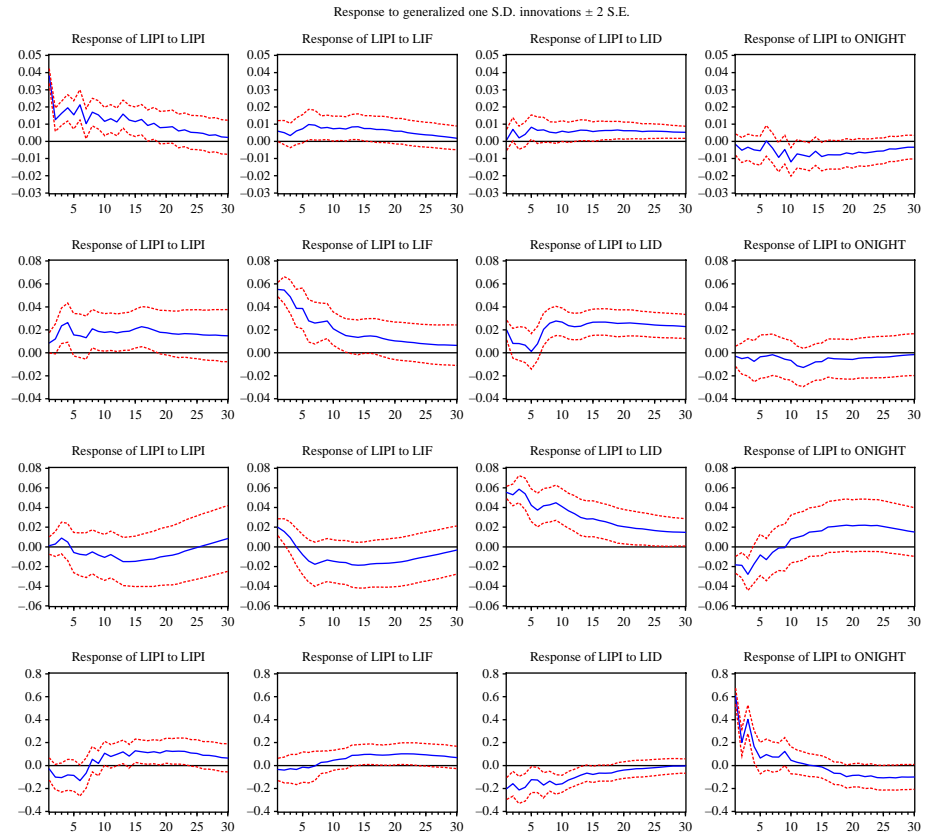


Figure 1.
Generalized IRF

deposit and financing in explaining the variations in the macroeconomic variables. The results from the VDC analysis are shown in Table IV. In general, these results further substantiate our earlier findings based on the IRFs.

In terms of the VDC of IPI, the result indicates that Islamic deposit contributed significantly in explaining the forecast error variance of IPI at around 10-22 percent at the longer term horizon. This is consistent with the earlier result based on the IRF. Similarly, the results show a significant contribution of Islamic deposit in explaining the forecast error variances of Islamic financing (approximately 32-48 percent in the longer term horizons). This suggests that deposit is an important source for the Islamic financing. Compared with the conventional banks, Islamic banks have limited access to raise funds other than deposit. Not only that the money market instrument has to be backed by asset to comply with the *shari'ah* but also in practice, secondary trading is very thin due to the small number of players. This reason perhaps may explain the result of why Islamic deposit is important in explaining the variations in Islamic financing.

An interesting finding revealed by the VDC analysis is the significant contribution of Islamic deposit in accounting for the forecast error variance of the monetary

Period	SE	LIPI	LIF	LID	ONIGHT
<i>VDC of LIPI</i>					
3	0.052	97.155	1.449	0.991	0.403
6	0.064	95.298	1.845	1.057	1.797
9	0.072	92.833	2.267	1.548	3.350
12	0.078	90.162	2.568	2.699	4.569
15	0.082	87.224	2.732	4.671	5.370
18	0.085	83.957	2.786	7.446	5.808
21	0.088	80.422	2.764	10.836	5.975
24	0.092	76.759	2.695	14.583	5.960
27	0.094	73.125	2.600	18.438	5.835
30	0.097	69.645	2.496	22.208	5.649
<i>VDC of LIF</i>					
3	0.112	0.267	89.928	9.528	0.275
6	0.149	2.153	86.177	9.392	2.277
9	0.171	6.333	79.850	8.359	5.456
12	0.193	10.997	69.281	12.614	7.106
15	0.215	14.777	58.644	19.439	7.138
18	0.238	17.328	49.765	26.474	6.431
21	0.260	18.792	42.730	32.901	5.574
24	0.282	19.425	37.183	38.586	4.805
27	0.303	19.470	32.766	43.584	4.178
30	0.322	19.129	29.206	47.978	3.685
<i>VDC of LID</i>					
3	0.146	0.037	3.190	96.361	0.411
6	0.230	0.149	1.548	97.643	0.658
9	0.291	0.268	1.046	98.011	0.674
12	0.337	0.380	0.820	98.172	0.626
15	0.375	0.481	0.695	98.255	0.567
18	0.406	0.567	0.615	98.303	0.513
21	0.432	0.640	0.559	98.333	0.467
24	0.455	0.699	0.518	98.353	0.428
27	0.476	0.747	0.486	98.369	0.396
30	0.493	0.784	0.460	98.384	0.371
<i>VDC of ONIGHT</i>					
3	0.817	0.683	0.327	23.125	75.863
6	1.028	0.548	0.268	40.162	59.020
9	1.203	0.677	0.393	52.586	46.342
12	1.347	0.920	0.536	60.635	37.907
15	1.464	1.188	0.645	65.799	32.366
18	1.557	1.429	0.716	69.192	28.661
21	1.632	1.626	0.759	71.492	26.121
24	1.690	1.777	0.783	73.102	24.336
27	1.737	1.887	0.794	74.263	23.053
30	1.774	1.963	0.797	75.123	22.114

Table IV.
Results of the
VDC analysis

policy rate, ONIGHT. This result suggests the importance of Islamic deposit as a “trigger variable” for monetary policy in the Malaysian case. In the context of monetary transmission mechanism, this finding implies that the Islamic deposit variable is an effective variable to be considered in the implementation of monetary policy due to its significant influence on the monetary policy variable.

Conclusion

This study attempts to determine the importance of the Islamic banks in the monetary transmission process in the Malaysian economy. In particular, the study analyzes the relevance of the Islamic banks' financing and deposit in channelling the monetary policy effects to the real economy. Theoretically, bank lending channel exists when the impact of monetary policy works through bank deposit, bank lending and subsequently to the real economy. Given the fact that Malaysia has a dual banking system, it is then interesting to see whether the Islamic banks are also able to react in a similar manner with the conventional banks once the central bank imposes a certain monetary policy. Therefore, this study intends to contribute in terms of offering more detailed aspects of the monetary policy strategy particularly in the context of a dual banking system.

The result suggests that the Islamic banks play an important role in the transmission process of monetary policy in Malaysia. Owing to the effective role of the Islamic banks in transmitting the monetary policy effects to the real economy, it is therefore important that the policymakers to take into account the Islamic banks in their design and implementation of monetary policy. In addition, to ensure efficient transmission of monetary policy, it is important that the policymakers to remain vigilant of not only the conventional banking institutions, but also the Islamic banking institutions.

Apart from the above, the study reaches at two other interesting findings. First, the study finds supportive evidence of the existence of the displaced commercial risk in the Islamic banks in Malaysia. As such, there is a pressing need for the Islamic banks, particularly in a dual banking system such as in Malaysia to find relevant mitigating techniques to handle this risk. Second, we found that Islamic deposit is a very important source of financing for the Islamic banks. A heavy reliance on deposit to some extent is not healthy for the Islamic banks given the existence of the displaced commercial risk and the preference for smaller tenor of deposit among the customers. Hence, there should be an attempt for the Islamic banks to raise fund other than deposit. One of the solutions would be to develop the Islamic money market which could provide the Islamic banks with an alternative source of funding.

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