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20 August 2017

Online at <https://mpra.ub.uni-muenchen.de/106192/>
MPRA Paper No. 106192, posted 19 Feb 2021 06:25 UTC

Does the growth of islamic bank financing depend on stock market growth? evidence from Malaysia

Cheah Chee Keong¹ and Mansur Masih²

Abstract:

The stability of Islamic banks compared to that of the conventional banks during the Asian Financial crisis of 1997-1998 facilitated the growth of Islamic banks. The Islamic banks had a significant growth since then. This paper is focused on identifying the major macroeconomic drivers of Islamic banks. Malaysia is used as a case study. The standard time series techniques are employed with the cointegration (i.e., the long run theoretical relationship) of the variables tested through the ARDL method which takes care of the limitations of Johansen and Engle-Granger methods. The findings based on VECM and VDCs tend to indicate that Islamic financing was driven by the stock market growth followed by the bank lending rate and industrial production. The policy makers are urged to keep an eye on maintaining the stability of the stock markets with a view to enhancing the stability and growth of Islamic financing.

Key words: Islamic bank financing, stock markets, ARDL, VECM, VDCs , Malaysia

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Introduction

By the enactment of the Islamic Banking Act in April 1983, Malaysia introduced the Islamic banking system in Malaysia. The first Islamic bank in Malaysia, Bank Islam Malaysia Berhad (BIMB) was founded in July 1983 which promoted the mechanism of Interest-free Banking that allowed offering Shariah financing instrument to Muslim and non-Muslim customer. As of today, Malaysia achieved the most developed Islamic financial system in the world that operates dual-banking system which consists of conventional and Islamic banking side by side. Besides the Interest-free lending, Malaysia has a well-developed Islamic capital market, Islamic interbank money market and Takaful (Insurance) business.

Similar to its conventional counterparts, Islamic banks also act as intermediaries between depositors and investors besides offering custodial and other services offered in traditional banking systems. Islamic Banks operate under the prescriptions of the Shariah Law. The prohibition of Riba (interest), prohibition of maysir and gharar (increasing wealth through excessive speculation and uncertainties), prohibition of haram (illegal) activities and contribution of part of the banks' profit in the form of zakat for the benefit of the society; are four of the unique features of Islamic banks.

Nonetheless, the instability in banking sector in recent financial crisis has demonstrated the significance of market risk to the banking sector. As both Islamic and conventional banks operate as financial intermediaries within the financial industry, they are both exposed to systemic risk and business cycles. In view of the majority study empirically investigating the determinants and impacts of macroeconomic indicators influencing the financial growth in long time series consideration, these studies focused mainly on capital market indicator variables as financing development before and after the financial crises. These highlighted the importance for an effective application of good governance in capital market to achieve sustainable growth in Islamic banking industry.

The growth in the economy is represented by GDP. Most empirical literature has shown an ambiguous relationship between financing and growth. Similarly, the direction of causality between these variables is still under much debate. The mainstream theory agreed that the upward movement of the business cycle lead by spending growth and financing activities. The bank loan or bank credit has been one of the major contributions to literature on macroeconomic growth. Economic Theory of Bank Credit written by Hahn (1920) was concerned with the effects of credit criterion and credit extension on economic development. The rate of interest charged on loans in the business life cycle model affected the lending activities and benefitted the growth and firm earning profiles.

The Efficient-market hypothesis developed by Hayek's (1945) argue that markets are the most effective way of aggregating the relevant investment and financing activities in spread and share information within a society by individual. Given the motivation of acquired profit from an organization, investor and financing institution are expected to act rationally on their private information in achieving continued growth revenue. Along with his theory, stock index, a tool which describes the market and exhibits return on investments have the ability to perform as information platform of financial activities. Kuala Lumpur composite Index (KLCI) acts as an important market indicator in Malaysia showing the expected economy performance in future and the key benchmark of financing activities. If banks are optimistic about the economic growth, while they believe on the ability of repayment and sharing of profit, bank would be motivated to lend more. Therefore, stock index will have a positive relationship with financing expectation in this study.

Under the Base lending Rate (BLR), The Malaysia central bank (BNM) defined the rate by referring the how much on the costing of financial institutions while providing financing activities to the both commercial and consumer sector. Meanwhile, the cost of getting the funding source by banking sector which determined by the Overnight Policy Rate (OPR) in the Malaysia money market. Meanwhile, effective January 2, 2015, the introduction of Base Rate (BR) which not only referring the proxy of money market OPR however as well as and Statutory Reserve Requirement (SRR). The new framework encourages greater transparency and competitiveness among the banking sector and more option to bank client enjoy better financial decisions. In this study, Although the new framework being introduced, BLR and BR still reflecting as proxy of financing cost of borrower to get funding from financial institutions both conventional or Islamic banking sector

The objective of this study is to investigate whether a stability of stock exchange index impacts the Islamic financing growth. This study employed cointegration technique on the estimation and the identification of relationships among macroeconomics variables and capital market indicator are particularly appropriate to endogenous financial growth models after the crisis period. By testing the empirical relationship between financial development and economic growth in Malaysia during six years' monthly data starting from January 2010. The objective was to test the lead-lag relationship between the macro variables GDP, KLCI and BLR indicators and Islamic bank financing.

Theoretical Underpinnings

In conventional mainstream theories, most of the researcher argue that the role of the financial sector incapable to the economic growth. Joan Robinson (1952) in his book stated that “where enterprise leads finance follows”. From his point of view, finance is unable to contribute to growth, however, finance only reflects the demands from the “real sector and is therefore overemphasized.

Merton Miller, Nobel Prize Laureate (1998) argues that, “financial markets contribute to economic growth is a proposition too obvious for serious discussion”. Due to the motivation of profit oriented, the extreme maturity mismatch on banks balance sheets lead by the fast growing of lending, the deposit obligations inherently vulnerable and ruining the real economic sector.

Another Nobel Laureate Robert Lucas (1988) also holds the same opinion that existing literature has over stressed the role of finance in conventional sector in economic growth. In fact, resolving the queries of financial development for economic growth is significant in developing the theoretical models. In addition, policymaker’s try to attempt and identify based on the importance of finance lead the growth will affect the construction of appropriate financial sector that reforms worldwide.

The extent of critiques against the conventional financial system, present configuration of Islamic banking industry goes as an alternative way by understanding the requirement of depositors and the need of borrowers, an Islamic bank who applies Profit and Lost (PLS) paradigm will enable the industry has been achieving high annual growth as it provides a possible banking solution to the failed financial system which happened between the year 2007 & 2008. Statistical evidence showed high growth of the financing activities of Islamic banking is gaining acceptance among the borrower.

In this respect, the Islamic financing that focus on the financing activities to real economics sector to protect the financial system against the speculative activities causes the failure of an institution. Based on the above theoretical standpoints, this study attempts to provide empirical analysis whether the stability of Islamic financing activities being well implemented to avoid any systemic risk, which mainly due to failure of the capital market. The data proxy beginning with 2010 which after the global financial crisis in response to the objective of this study whereby capital market in a consistently stability growth recently year bring impact to ensure better financial intermediation.

Literature Review

There have been various attempts both theoretically and empirically examining the financial growth and macroeconomic variable relationship. There is abundance of literature related to financial growth available which not only in conventional mainstream, in addition to the Islamic financial sector too. Those studies mainly clustered into categories such as, determinant financial growth in particular country, cross country comparison, impacts government policies both fiscal and monetary towards financial development and the relationship between loan and financial institutional profitability.

Earlier study conducted by Kim and Moreno (1994) on the justification of stock price movements associated to fluctuations in bank lending. The proxy Japan as a case study and found that in the mid-1980s there debilitated relationship between stock prices and bank loan activities. The changing of the regulatory environment motivate the banking sector as financial intermediation too focus their capital positions. Soonest, in the late 1980s, fluctuations in stock prices positive related to the in bank lending activities in Japan.

In Malaysia case, Ibrahim (2006) investigate the dynamic interactions between bank loans and stock prices and access the lending significantly in transmitting financial shocks to the real sector. As evidence result, he concluded that the bank lending positively affected the stock and accommodate expansion in real economic growth, however, no influence of bank loans on real GDP growth. Moreover, despite the noted mismatch exchange rate is an key factor that causing the crisis, he found no evidence that the exchange rate fluctuations have negative effect to the bank loan. The important implication of this study highlighted an effective policy attempts to stimulate bank loans is a solution to boost the stock market activities and enable to extend the impact to real economic activities.

In a developed country, Rondorf (2012) proxy the bank loan as financial development investigates whether an incremental of bank lending contribute the production growth in the Eurozone area. By employing the cross country comparison, he able to empirical show evidence the change in loan supply still play an essential role output growth in Eurozone. In contrast, the fluctuations of loans in United States also lead to a response in economic growth as financial stability in Eurozone does not react to regional compare the US.

Moinescu and Codirlasu (2012) investigate the relationship between the credit offer to private

sector and GDP growth in the European countries and found that the swings in credit impulse induced by loose income policy, unfavorable sovereign risk development and euro-zone recession causes the fluctuated and unstable of economic growth in the member's countries. Moreover, he provide an evidence the persistence of a credit flow weaker than potential growth and excessive financing are associated with high levels of non-performing loans ratio two years later.

Uddin, Shahbaz et al. (2014) examine the relationship between financial development, economic growth and poverty reduction in Bangladesh and found long run relationship between the variables. The objective of financial sector significant contributing in allocation savings into productive investments and yet lead the economic growth. However, the ARDL method which applied into the study found the effect is not linear due to some structural breaks, mainly due to crisis happening in between. They conclude that the financial development in the country able to decrease the poverty rate.

The other recent study that employed ARDL approach which investigated the impact of financial development on economic growth was conducted by Samargandi, Fidrmuc et al. (2014) which concluded that financial development had a positive effect on the growth of the non-oil sector in Saudi Arabia. Meanwhile, the study was unable to find any significant relationship that the oil-sector growth, which the main contribution of GDP production in that particular country, produce a positive growth to entire fundamental economic development. Moreover, they also justify that financial development and economic growth may be different in an oil rich economies.

In reviewing to these empirical studies, the purpose of this study is to examine empirically the main determinants of Islamic bank financing growth and to extend the understanding of the impact of these factors after the crisis period. Moreover, examining the factors have similar impact to the literature and suggesting policy implication in order to achieve sustainability growth of Islamic financing activities.

Methodology Applied

In order to test a time series relationship between variables, the techniques of cointegration introduce by such as Johansen (1988) and Pesaran (2001) which specify the Autoregressive Distributed Lag (ARDL) approach to empirically determine the significant relationship among the variables. The ARDL model applied in order to overcome the limitation and conflict result

of other cointegration approaches, ie Engle and Granger (1987) and Johansen (1991). This technique enable to employed only small or finite samples and empirically test the regressors whether I(0) or I(1) or mutually integrated. However, before the cointegration test begin, the pre testing of the variables for unit root required in this study still required to ensure that the series are not integrated of an order and mitigate to avoid the spurious results issues. Few approaches such the Augmented Dickey-Fuller (ADF), Phillip Peron and KPSS tests to determine the stationary of the variable.

Simultaneously, by considering justification number of lags, the ARDL approach that utilized the general to specific modeling framework. It able to estimate a regressions maximum lag for each variable, where $(p + 1)k$, p is refer to optimal lag to be used and k defined as number of variables available in the model based on the criterion of SBC, AIC, RBC and HQC.

Moreover, the approach also helping in determined the dependent variables (endogenous) and the independent variables (exogenous) without any pre-assumption model define in earlier stage. Therefore, if there is a cointegration and long term relationship between the variables, then the ARDL produce an ECM model for every variable, which estimate coefficient of the error correction term in regard to the speed adjust back to equilibrium once shocked of dependent variable. This provide a result as evidence to justify that the financing growth in Islamic Bank at a higher speed compared to other macroeconomic variables, such as GDP and BLR.

This article develops a simple model to investigate the variations in financing growth (IL), which proxy the Islamic loan offered by Islamic Banks in Malaysia. The model specifications of the functional relationship of Islamic Financing growth (IL) between other macroeconomics variable GDP(GD), which proxy the Industrial production, core capital market indicator, KLCI (KL) and lending cost from money market BLR(BR) .

The functional form of the model is as:

$$IL = f (GD, KL, BR)$$

Where

IL = Islamic Loan offered by Islamic banks in Malaysia.

GD = Gross domestic Product , Proxy (Industrial production)

KL = Kuala Lumpur Composite Index.

The ARDL approach to cointegration involves estimating the unrestricted error correction model version of the ARDL model for Islamic saving deposit and its determinants:

The error correction version of the model is as follows:

LIL, LGD LKL, LBR

$dLIL_1 =$

$$a \sum_{i=1}^k b_1 dLGD_{t-i} + \sum_{i=0}^k b_2 dLKL + \sum_{i=0}^k b_3 dLBR_{t-i} + b_4 LG_{t-1} + b_5 LKL_{t-1} + b_6 LBR_{t-1} + \mu_t$$

$H_0: \delta_1 = \delta_2 = \delta_3 = 0$ No existence of the long-run relationship

$H_1: \delta_1 \neq \delta_2 \neq \delta_3 \neq 0$ Existence of a long - run relationship

Data, Empirical Results and Discussions

The data employed in this study which are the monthly from the period January 2010 to September 2015 in considering the after the global financial crisis beginning 2008 and ended 2009 in regard to the objective of this study assuming capital market experience a consistently stability growth. The data is carry from the Monthly Statistical Bulletin from Bank Negara Malaysia (BNM). A total of 64 observations were obtained.

In order to investigate the cointegration model testing, all the following variables such as Islamic banks loan financing (IL), Growth Domestic Product (GD), Kuala Lumpur composite Index (KL) and Base Lending rate (BR) will transformed into logarithms form to achieve stationarity in variance for the lead-lag analysis. All the level forms including the Base Lending rate (BR) which present in a percentage form were transformed into the logarithm scale although the variable expected to be stationary.

The testing will begin in their original level form, expected to be a non-stationary and in their first differenced form, they are expected achieve stationary, I(1), after taking the difference of variables log forms.

$$DIL = LIL - LIL_{t-1}$$

Some unit root test like Augmented Dickey-Fuller (ADF), Philip-Perron (PP) and KPSS test will carry out to investigate whether these variable corresponding with stationary result in their level

and difference form.

Table 1 : ADF Test

LOG FORM	VARIABLE	T-STAT.	C.V.	RESULT
	LIL		- 0.061	- 2.908
LGD		- 1.223	- 2.908	Non-Stationary
LKL		- 2.634	- 2.908	Non-Stationary
LBR		- 2.998	- 2.908	Stationary

1ST DIFF. FORM	VARIABLE	T-STAT.	C.V.	RESULT
	DIL		- 5.630	- 2.908
DGD		-10.192	- 2.908	Stationary
DKL		- 4.842	- 2.908	Stationary
DBR		- 6.919	- 2.908	Stationary

Table 2 : PP Test

LOG FORM	VARIABLE	T-STAT.	C.V.	RESULT
	LIL		0.536	0.404
LGD		0.525	0.404	Non-Stationary
LKL		0.480	0.404	Non-Stationary
LBR		0.123	0.150	Stationary

1ST DIFF. FORM	VARIABLE	T-STAT.	C.V.	RESULT
	LIL		0.122	0.150
LGD		0.134	0.150	Stationary
LKL		0.115	0.150	Stationary
LBR		0.141	0.150	Stationary

Table 3 : KPSS Test

LOG FORM	VARIABLE	T-STAT.	C.V.	RESULT
	LIL		- 2.312	- 3.476
LGD		-10.504	- 3.476	Stationary
LKL		- 1.023	- 3.476	Non-Stationary
LBR		- 5.000	- 2.904	Stationary

1ST DIFF. FORM	VARIABLE	T-STAT.	C.V.	RESULT
	LIL		- 9.590	- 2.905
LGD		-43.340	- 2.905	Stationary
LKL		- 8.638	- 2.905	Stationary
LBR		- 9.074	- 2.905	Stationary

The above unit root test results show varies from one test to another test especially in the level form. However, all variables in the differenced form able to achieve stationary result and therefore, variables we are using for this analysis are I(0) or I(1).

As the results of unit root test are not consistent we decided to use ARDL technique to test the long run relationship among the variables. Before proceeding with the test of cointegration, we try to determine the order of the vector auto regression (VAR), that is, the number of lags to be used.

Table 4 : VAR Order Selection

	Order	AIC	SBC	p-Value	C.V.
Optimal Level of VAR	1	692.808	671.536	[.558]	5%

As per the table 4, results show that both AIC and SBC recommends order of one lag.

Testing Cointegration

An evidence of cointegration implies that the relationship among the variables is not spurious, i.e. there is a theoretical relationship among the variables and that they are in equilibrium in the long run.

Table 5 : Engle –Granger (E-G) Test

		T-stat	CV
Order of the ADF Test	1	2.8776	-4.276

As depicted in the above table the critical value is higher than t statistics. So, we cannot reject the null that the residuals are non-stationary. Statistically, the above results indicate that the variables we have chosen, in some combination, result in not a stationary error term. As Its non-stationary that indicates that there is not any cointegration. These initial results are not according to our initial model assumption that long run existence between variables. Hence, the Johansen cointegration test carry out in following step.

Table 6 : Johansen cointegration

Cointegration LR Test Based on Maximal Eigenvalue of the Stochastic Matrix

Null	Alternative	Statistic	95% Critical Value	90% Critical Value	Result
$r = 0$	$r = 1$	72.611	31.790	29.130	2 cointegration
$r \leq 1$	$r = 2$	28.204	25.442	23.100	

Cointegration LR Test Based on Trace of the Stochastic Matrix

Null	Alternative	Statistic	95% Critical Value	90% Critical Value	Result
$r = 0$	$r \geq 1$	115.616	63.000	59.160	2 cointegration
$r \leq 1$	$r \geq 2$	43.0045	42.340	39.340	

As depicted in the table 6 above, refer to Johansen log-likelihood maximal eigenvalue and trace test statistics based on cointegration with unrestricted intercepts and restricted trends in the VAR, result show the maximal Eigenvalue and Trace indicate that there is two cointegration vector exist in the between the variables. The result conflict with Engle– Granger each and other, an limitation taking care, we decided to go for ARDL approach for testing cointegration among variables.

Table 7: F-Statistics for Testing the Existence of Long-Run Relationship

VRBL	F-statistic	Critical Value Lower	Critical Value Uper
DIL	1.4688	2.850	4.049
DGD	4.9929*	2.850	4.049
DKL	1.4688	2.850	4.049
DBR	2.1026	2.850	4.049

The critical values are taken from Pesaran et al. (2001), unrestricted intercept and no trend with six regressors. * denote rejecting the null at 5 percent level.

Result from table t above shows the calculated F-statistics is higher than the upper bound critical value 4.049 at the 5% significance level. This implies that the null hypothesis of no cointegrating long-run relationship can be rejected. These results reveal that a long-run relationship exists between the Islamic Financing and macroeconomic variables in Malaysia. This could be considered as a finding in view of the fact that the long run relationship between the variables

is demonstrated here avoiding the pre-test biases involved in the unit root tests and cointegration tests required in the standard cointegration procedure. The evidence of long run relationship rules out the possibility of any spurious relationship existing between the variables. In other words, there is a theoretical relationship existing between the variables.

An ECM representation for the ARDL model is selected AIC criterion to estimates of the ARDL long-run coefficient for the model in Table 8 below. The estimated long run coefficients of the long run relationship above show that only KLCI have a significant effects on the Islamic Financing of Islamic banks in Malaysia, and they are co-integrated. Moreover, at this stage we run the ARDL test not only to confirm the long-term relationship, study long-run coefficients and error-correction model, also which variables are endogenous and which are exogenous being identify.

Table 8 : Results of Error Correction Models

ecm1(-1)	Coefficient	Standard Error	T-Ratio [Prob.]	C.V.	Result
dLIL	-.031733	.010742	-2.9542[.004]	5%	Endogenous
dLGD	-1.1922	.11897	-10.0208[.000]	5%	Endogenous
dLKL	-.083869	.064310	-1.3041[.197]	5%	Exogenous
dLBR	-.18628	.044963	-4.1429[.000]	5%	Endogenous

The critical values are taken from Pesaran et al. (2001), unrestricted intercept and no trend with six regressors. * denote rejecting the null at 5 percent level.

As discussed earlier, cointegration tells us that there is a long run relationship between the variables. However, there could be a short-run deviation from the long-run equilibrium. Cointegration does not unfold the process of short-run adjustment to bring about the long-run equilibrium. For understanding that adjustment process we need to go to the error-correction model. The T-ratio or the p- value of the error-correction coefficient indicates whether the deviation from equilibrium (represented by the error-correction term, ‘ecm’) has a significant feedback effect or not on the dependent variable (e.g. Islamic Financing). In other word, whether the variable is endogenous or exogenous. The error-correction coefficient being significant confirms our earlier findings of a significant long-run cointegrating relationship between the variables. Moreover, the size of the coefficient of the error-correction term indicates the speed of medium to long run adjustment of the dependent variable to bring about the long run equilibrium.

The size of the coefficient of the error-correction term is also indicative of the intensity of the arbitrage activity to bring about the long-run equilibrium. The error correction coefficient estimated for only for KLCI at -0.083869 (0.064310) is highly significant, has the correct sign and implies a slow speed of adjustment to equilibrium after a shock. However, the rest of the variable GDP and BLR shows not significant to the model. Finally, the “t” or “p” value of the coefficients of the differenced variables indicate whether the effects of these variables on the dependent variables. Our result shows that KLCI is significant which regard our research objective that a strong and stable capital markets in emerging market, i.e. Malaysia important in Islamic Financing growth. Although the error correction model tends to indicate the endogeneity/exogeneity of a variable, we had to apply the variance decomposition technique to discern the relative degree of endogeneity or exogeneity of the variables.

Variance Decompositions (VDC)

The relative exogeneity or endogeneity of a variable can be determined by the proportion of the variance explained by its own past. The variable that is explained mostly by its own shocks (and not by others) is deemed to be the most exogenous of all. There are existence of two approach in the VDC result namely orthogonalized VDCs and Generalized VDCs. There are two important limitations of orthogonalized VDCs. Firstly it depend on the particular ordering of the variables in the VAR, Secondly it assumes that when a particular variable is shocked, all other variables in the system are switched off. Generalized VDCs overcome the limitations and can be more accurate and trusted. In this regard, this study used Generalized VDCs in obtaining the result. In order to obtain the ranking of the variables. The results in generalized VDC the percentage to be added up to 100 percent and ranking decided base on higher percentage gain.

Table 9 : Generalized VDC

GENERALIZED APPROACH					
Horizon 12 months	Variable	LIL	LGD	LKL	LBR
	LIL	80.77%	11.35%	4.28%	3.60%
	LGD	14.78%	83.76%	0.75%	0.72%
	LKL	3.93%	3.58%	88.96%	3.54%
	LBR	1.15%	10.16%	1.06%	87.63%
	Exogeneity	80.77%	83.76%	88.96%	87.63%
	Ranking	4	3	1	2
Horizon 24 months	Variable	LIL	LGD	LKL	LBR
	LIL	80.77%	11.35%	4.28%	3.60%
	LGD	14.78%	83.76%	0.75%	0.72%
	LKL	3.93%	3.58%	88.96%	3.54%
	LBR	1.15%	10.16%	1.06%	87.63%
	Exogeneity	80.77%	83.76%	88.96%	87.63%
	Ranking	4	3	1	2
Horizon 36 months	Variable	LIL	LGD	LKL	LBR
	LIL	80.77%	11.35%	4.28%	3.60%
	LGD	14.78%	83.76%	0.75%	0.72%
	LKL	3.93%	3.58%	88.96%	3.54%
	LBR	1.15%	10.16%	1.06%	87.63%
	Exogeneity	80.77%	83.76%	88.96%	87.63%
	Ranking	4	3	1	2

In Table 9, at the end of the forecast horizon both in 36 months, the contributions of own shocks towards explaining the forecast error variance of each variable are as follows: KLCI variable (88.96%), BLR variable (87.63%) and GDP variable (83.76%). The variable that is explained mostly by its own shocks and depends relatively less on other variables is the leading variable. These results tend to indicate that the KLCI variable is the most exogenous of all whereas the Islamic financing is the most endogenous.

Meanwhile, at the end of the forecast horizon 24 months, the contributions of own shocks towards explaining the forecast error variance of each variable are as follows: KLCI (88.96%), BLR (87.63%), GDP (83.76%).and Islamic Financing (80.77%). Simultaneously, in a short run of 12 months horizon, result seems no difference with long run effects which the most KLCI variable is the most exogenous compare with Islamic financing is the most endogenous.

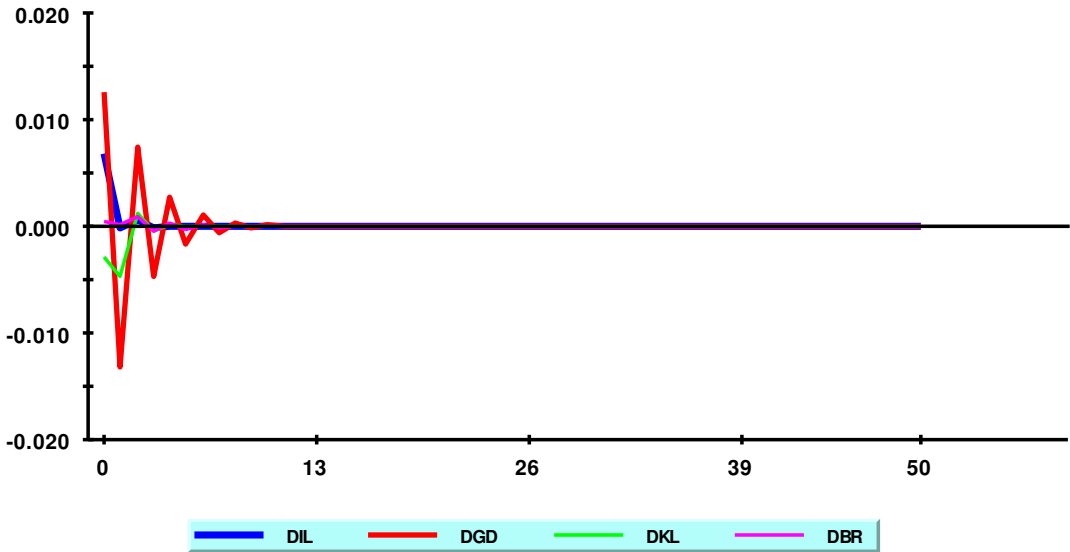
With regards to the KLCI, which indicates growth and alternative funding source from capital market of investor, and act as core indicator of economic growth, will bring justification impact on the financing growth of Islamic bank in Malaysia. Theory postulates that sustainable growing in stock index increases Islamic financing (Ibrahim 2006). Our finding reveals that this theory is applicable for Islamic financing customers as well. In considering the majority of Islamic financing client consist of individual consumer, concurrently the corporate customer, whether large corporation or SME financing, which frequent acquired funding source from capital market might require further justification carry out in product differentiate details.

Previous study and theory has ambiguous different result about the effect of GDP on bank financing. Literature show that higher growth (GDP) led to higher financing activities due to optimistic of future development expansion. (Rondorf, 2012), (Uddin, Shahbaz et al. 2014), (Samargandi, Fidrmuc et al. 2014). This finding show contradict point of view of Islamic financing as most of the Islamic financing as mentioned get along by individual consumer which not much seen any significant in economic output of emerging market like Malaysia, which the main GDP output contribute by large export activities and government fiscal spending on mega project development. Likewise, the lending cost, BLR also unable to see any significant impact to the Islamic financing as the small size of lending amount by most individual consumer unable to consequence the large impact in long tenure, thus, most consumer omit the slight incremental of borrowing cost as it not compelling compare to large financing by corporate.

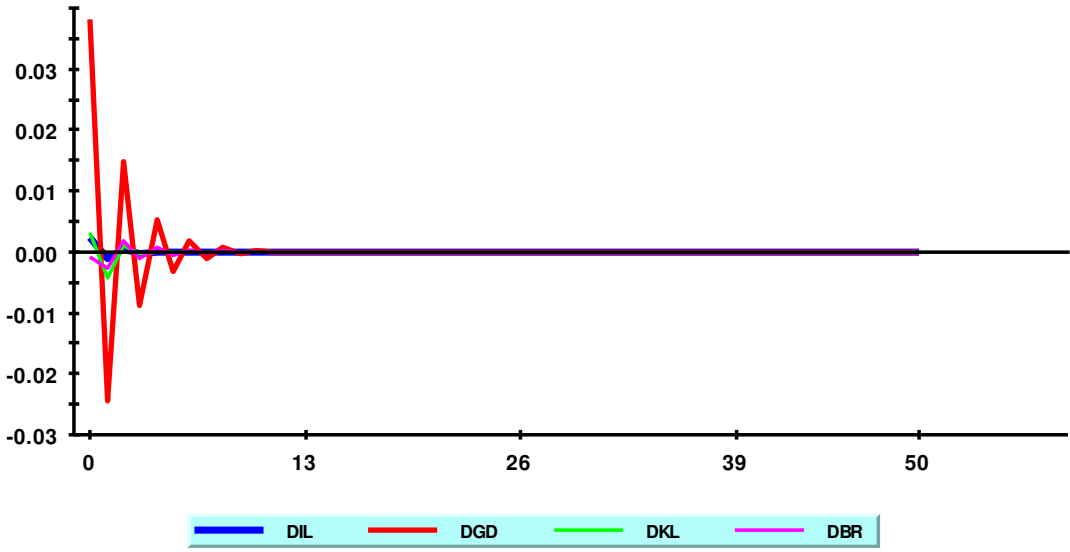
Impulse Response Functions

The impulse response functions (IRFs) essentially produce the same information as the VDCs, except that they can be presented in graphical form. We started out applying generalized IRF and obtained the following results.

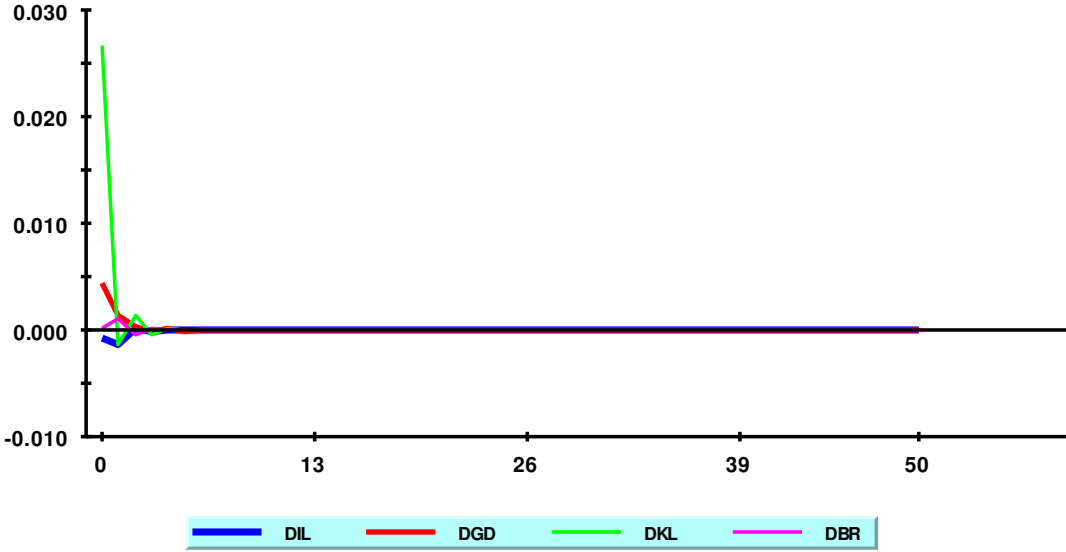
Generalised Impulse Responses to one SE shock in the equation for DIL



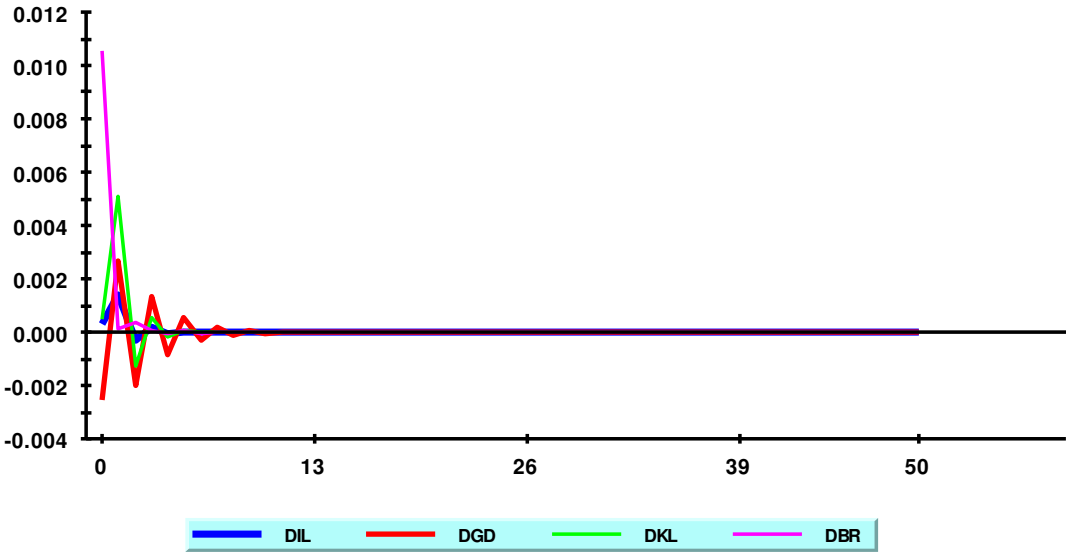
Generalised Impulse Responses to one SE shock in the equation for DGD



Generalised Impulse Responses to one SE shock in the equation for DKL



Generalised Impulse Responses to one SE shock in the equation for DBR



Figures present the generalized responses of dependent variables to shocks on their independent variables. It can be seen in Figure above that the Islamic financing of Islamic bank responds are not that much significant when shocks are introduced in KLCI, and GDP. However, BLR responded negatively to a shock from IL. Overall, the responses are small and tend to start to dampen after ten months before dying out in six or seven months we can conclude that variable responded immediately but in a small magnitude.

Concluding Remarks and Policy Implications

In conclusion, a stability of capital market growth is the core determinant of Islamic financial growth and empirical evidence in this article found there was a significant contribution to the Islamic financing provided by Islamic banking sector in Malaysia especially after the crisis. In order to maintain sustainable development in Islamic financing growth, the policy makers should continue their efforts in scaling the capital market development in promoting the same level of resilience enchantment of Islamic financial growth. For instance, the Malaysia governments should further enhance the regulation and governance framework in the capital market, offering the tax incentives, flexibilities of foreign ownership rules, and talent development require taking place in enabling to deliver the benefits of a large, mature market.

Although there are a few attempts made to analyze these variables in a simultaneous equation framework, the relatively GDP, KLCI and BLR towards the financing development growth, however, majority of articles in the literature so far have analyzed the financial growth proxy macroeconomics by combining conventional and Islamic bank. Only limited attempts empirically analyze these variables in a simultaneous equation framework with GDP, KLCI and BLR simultaneous, that core focus in capital market, in contribution to Islamic financing.

The result of GDP and BLR which found not solid relevant to the financial growth especially after the crisis implies that the development of Islamic bank products relatively not significant influence by overall economic growth and money market, rather than capital market development. This also contribute to the methodological employed namely ARDL, and cointegration existence within these tested variables although result show opposes of few approaches applied in cointegration relation test. Nonetheless, with the current commitment of Malaysia government to continue ambitious become global hub for Islamic finance, a stability and sustainable capital market are essential in ensuring the boost of expansion in developing of Islamic finance. More importantly, the recent financial crisis draws a lesson from an over leverages in providing financing may harm the stability of whole financial eco system, financial

regulators, such as the BNM and Securities Commission (SC) in Malaysia play a significant role in oversee the capital markets in their designated jurisdictions to ensure that careful and progressive development in this sector and the efforts directly contributes to ethical financing activities, such as Islamic financing offer.

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