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The Role of Macroeconomic Variables in the Islamic Real Estate Investment Trusts (I-REIT) Market in Malaysia

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Abstract

This research aims to analyse the presence of short and long term relationships between Islamic real estate investment (I-REIT) return and macroeconomic variables in Malaysia. To conduct this study, the research model adopted an estimation of Vector Auto Regression (VAR) method. The analysis employs monthly data from January 2007 to December 2013. The result shows that there is a significant positive relationship between the Islamic real estate investment trust and Industrial Production Index variable, but significant negative relationship with Islamic Inter Bank Rate and Exchange Rate of Malaysian Ringgit - United State Dollar variables. On the other hand, the I-REIT shows an insignificant negative relationship with the Consumer Production Index, FTSE Bursa Malaysia Emas Shariah Index, and M3 variables. The Granger causality analysis shows that there is a causal relationship between the variables of Consumer Production Index, Industrial Production Index, M3, and I-REIT.

Keywords: Vector Error Correction Mode (VECM), Islamic Real Estate Investment Trusts, Macroeconomic Variables, Malaysia

Introduction

The relationship between real estate investment trust returns and the macroeconomic variables has attracted a great deal of attention from researchers and practitioners in recent times. Previous studies have demonstrated the existence of a significant relationship between these two factors. Incontrovertibly, economic conditions can affect the stability of the real estate market. Therefore, the inability to predict these economic conditions creates uncertainty impact to several parties.

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Islamic real estate investment trusts (I-REITs) is one of the most recent components of Islamic financial products. Other Islamic financial products most commonly offered in Malaysia include equities, *sukuk*, unit trusts, Islamic exchange traded fund, Islamic structured products, and derivatives products. As revealed in the report of Security Commission of Malaysia, about 16 REITs listed on Bursa Malaysia as of December 31, 2012, had a total market capitalization of RM17.9 billion. This represents a significant improvement when compared to RM 3.7 billion capitalization reported in 2007.

Even though I-REIT has witnessed a significant increase in terms of market capitalization, the percentage share of the I-REIT relative to overall industry levels has been continuously decreasing. In 2008, I-REIT enjoyed approximately 31 percent of the total share of this industry but the percentage has continued decreasing year after year. Its share of the industry significantly reduced to 22 percent in 2010 after experiencing a positive growth of 35 percent in 2009. The percentage of I-REIT share in terms of the total industry in 2011 drastically shrunk to 17.8 percent, and continued to decline to 14.2 percent in 2012. The number of I-REITs is also experiencing slower growth than that of conventional REITs. In 2007, there were two I-REITs and thirteen REITs. The number of I-REITs increased to three in 2009, after AXIS REIT was reclassified as I-REIT. The number of I-REIT did not change until 2012. Unlike I-REIT, conventional REITs have experienced tremendous growth each year. The number of conventional REITs in 2009 reached a total of thirteen REITs, further increasing to sixteen in 2012.

Much research has been conducted to investigate the relationship between REITs return and macroeconomic variables. However, less focus has been placed on Islamic REITs despite its significant role in the industry. This study is therefore aimed at filling this gap by examining the relationship between Islamic REITs and six macroeconomic variables by employing the Johansen Cointegration Test.

This paper is organized as follows: section two discusses the overview of Islamic Real Estate Investment Trust in Malaysia, while section three is the literature review of previous studies regarding the relationships between REITs and macroeconomic variables. In section four, the data used in this study is discussed. The methodology and results are discussed in section five and six, respectively. The paper finally discusses the conclusion in section seven.

Islamic Real Estate Investment Trusts (I-REITs)

The capital market is one of the components of the financial system (Ngadimon, 2009). Capital market plays vital role in the economic growth of any country. It plays a significant role through its intermediary activities between those with surplus funds and deficit units of the economy system, facilitating the effective use of funds for productive activities (Yusof and Bakar, 2005). Hence, the stability of capital market depends greatly on macroeconomic stability (Wahid *et al*., 2009).

The capital market system in Malaysia is unique due to the parallel operation of both Islamic and conventional capital market. The platform for the Islamic capital market facilitates an alternative investment avenue for investors, particularly those interested in Shariah compliant investment which prohibits activities such as usury, gambling and ambiguity (Bakar, 2009).

Following its introduction in 1995, the Islamic capital market has recorded tremendous progress and further widened the breath of all capital in Malaysia. Indeed, the total capitalization of the Islamic capital market in the country increased from RM249 billion in 2003 to 1.4 trillion as at the end of 2012, representing 78.57 percent of the country's total capital market (Securities Commission, 2013).

Islamic Real Estate Investment Trust can be traced back to November 2005, following the introduction of the Guidelines for Islamic Real Estate Investment Trust (I-REITs Guidelines) as outlined by the Shariah Advisory Council (SAC) of the Securities Commission of Malaysia. This is to facilitate the smooth operation of the Islamic Real Estate Investment Trust. It is therefore mandatory for all market participants to strictly adhere to the Guidelines of Real Estate Investment Trust (Securities Commission, 2005). Being the first country to come up with such regulation on I-REIT, Malaysia has been praised for developing such an initiative. Unlike the conventional REIT bound by the capital market law, Islamic REIT must abide by both the capital market law and the principles of Shariah.

As indicated by Dusuki (2010), Islamic REIT differs from conventional property funds mainly in terms of the requirement stipulating a strict adherence to Islamic investment guidelines and Shariah principle. Al-'Aqar KPJ REIT which focusing on hospital and healthcare facilities is the first Islamic REIT in Malaysia and the entire world. Al-Hadharah Boustead REIT is considered the second Islamic REIT listed on Bursa Malaysia, and the first Islamic plantation REIT mainly concentrating on palm oil plantations. The latest listed Islamic REITs is AXIS, which was transformed from its previous conventional structure in December 2008. AXIS is mainly involved in diversified investments which incorporate both office and industrial assets.

Literature Review

The relationship between macroeconomic variables and REITs return has received a great deal of attention from researchers and other stakeholders in recent years. Most such studies are based on the proposition indicating that share prices of real estate can be written as expected discounted cash flow. It follows that real estate prices can be explained in term of the required rate of return and expected cash flows. As economic variables have various impacts on future cash flows and required returns, the real estate price is therefore expected to be affected by these variables. Based on previous studies, a stable relationship between I-REITs and related macroeconomics variables has been established.

Extant literatures tend to indicate a positive relationship between real estate prices and real GDP. Studies such as that of Yunus (2012) have indicated that an increase in the real GDP has the potential to affect the price of a stock, consequently affecting corporate profit. As explained in this article, any increase in real GDP could potentially lead to an increase in both expected cash flow and the stock price.

Various studies have attempted to explore the relationship between inflation and real estate price. Glascock *et al*. (2002), for instance, found a negative relationship between inflation and real estate price. According to them, inflation may lead to an increase in the cost of production while caused

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a decrease in the expected future cash flow and profit of the company. In a related study, Mukherjee & Naka (1995) found a negative relationship between inflation and real estate price. Based on their explanation, an increase in the inflation rate may lead to a strict economic policy. This could consequently lead to an increase in the risk free nominal rate and rate of discount. In turn, this may result in an increase in stock price. However, to the contrary, other researchers have found positive relationship between inflation and real estate price. For instance, Simpson, Ramchander, and Webb (2007) indicated a negative relationship based on the concept of protection of value. They argued that inflation may have a positive relationship with real estate because equities serve as a hedge against inflation. Hence, it may not have any negative effect on real estate price. Based on the extant literature, the relationship between inflation and real estate price remains inconclusive.

The relationship between money supply aggregate and real estate price is inconclusive. As such, their relationship may be either positive or negative. The relationship between money supply and real estate price has been widely discussed in the literature. For instance, Yunus (2012) indicated that this positive relationship may occur through economic encouragement. As indicated in the article, money supply may lead to an increase in corporate profit which consequently results in an increase of the future cash flow and the real estate price. The negative relationship that exists in this instance may be demonstrated through the direct relationship (positive) between money supply and inflation. Specifically, the money supply's increase itself increases the discount rate, and potentially then leads to a decrease in the price of the stock market (Fama, 1981). Hence, the relationship between money supply aggregate and real estate prices remains blurred.

Studies on the relationship between interest rate and real estate price abound in the literature. An increase in interest rate may lead to an increase in the free risk nominal rate while increasing the discount rate (Mueller, Pauley and Keith, 1995). This would consequently result in a decrease in the price of a given stock (Mukherjee and Naka, 1995). In a related study, Ito (2013) and Abdullah and Hayworth (1993) indicate that it is possible for interest rate to influence corporate profit due to the future expectations of investors. Furthermore, since most companies take out loans to support their equipment and inventory, they also pay more to maintain those loans. Reducing the interest rate decreases borrowing costs while incentivizing the company to expand their operations. Thus, the company's future expected value will increase. Based on the finding of various literatures, negative relationship exists between the interest rate and real estate price.

A lot of studies equally attempt to explore the relationship between foreign exchange rate and real estate prices. It is highly indicated in the literature that any changes in the value of exchange rate will result in a big impact on the price of the stock. Maysami and Koh (2000) and Ibrahim and Aziz (2003) for instance found a positive relationship between foreign exchange rate and real estate prices. A typical analysis of the situation shows that a decrease in value of a currency serves as an explanation. Any fall in the value of a country's currency would make the exported product from that country cheaper in the international market. Consequently, if the products undergo demand elasticity, the country's export volume will most likely increase. Cash flow increases in line with the profit and local stock prices. Hence, the relationship between foreign exchange rate and real estate prices remains inconclusive.

Contrary to the above findings, Hussin (2012), and Ibrahim and Wan (2001) have indicated a negative relationship between foreign exchange rate and real estate prices. They believed that a country export-dependence would be likely experience a decrease in its currency value, which would consequently lead to an increase in the growth of exports. Despite this, a decrease in currency value increases production impact costs and increases domestic price. This may therefore result in a decrease in the profit margins of a company.

Previous study about the relationship between real estate prices and stock prices are mainly focusing on the case of the United Kingdom or United States by trying to assess the correlations between the return of the two assets (Ibbotson & Siegel, 1984 and Worzala & Vandell, 1993). Most of these studies have found a negative correlation between housing prices and stock returns. Nevertheless, none of these studies indicate whether credit-price or wealth effects are in effect as no inference is made as to the direction of causation. However, Okunev *et al*. (2000) indicated the existence of a uni-directional causality of E-REIT to the stock market in the US.

Data Description

Monthly data from January 2007 to December 2013 are employed in this study. The data are obtained from Bloomberg and Bank Negara Malaysia. Table 1 shows the variables' description and the time-series transformation.

Table 1: Definition and Time-Series Transformation

No	Variable	Description	Duration	Time Series Data Transformation Variable
1	IPI	Industrial Production Index used as a proxy of the Gross National Product (GNP) of Malaysia.	January 2007 - December 2013 Base year = 2005	$\Delta IPI = Log\left[\frac{IPI_{(t)}}{IPI_{(t-1)}}\right]$
2	CPI	Consumer Price Index used as a proxy of inflation rate in Malaysia	January 2007 - December 2013 Base year =2005	$\Delta CPI = Log\left[\frac{CPI_{(t)}}{CPI_{(t-1)}}\right]$
3	M3	M3 used as a proxy of money supply in Malaysia	January 2007 - December 2013	$\Delta M3 = Log\left[\frac{M3_{(t)}}{M3_{(t-1)}}\right]$
4	IIR	Islamic Interbank Rate used as a proxy of interest rate in	January 2007 - December 2013	

		Islamic Finance System in Malaysia		$\Delta IIR = Log\left[\frac{IIR_{(t)}}{IIR_{(t-1)}}\right]$
5	MYR	Malaysian Ringgit/ United States Dollar Currency Exchange used as the benchmark for foreign exchange in Malaysia.	January 2007 - December 2013	$\Delta MYR = Log\left[\frac{MYR_{(t)}}{MYR_{(t-1)}}\right]$
6	FBMES	FTSE Bursa Malaysia Emas Shariah Index as a proxy of Islamic Stock Market in Malaysia	January 2007 - December 2013	$\Delta FBMES = Log\left[\frac{FBMES_{(t)}}{FBMES_{(t-1)}}\right]$
7	AXIS	AXIS used as a proxy of Islamic Real estate Investment Trust.	January 2007 - December 2013	$\Delta AXIS = Log\left[\frac{AXIS_{(t)}}{AXIS_{(t-1)}}\right]$

Methodology

This study employed Vector Autoregressive (VAR) model to analyse the relationship between Islamic real estate investment trust (I-REIT) and macroeconomic variables which is written as follows:

$$AXIS_t = \alpha_0 + \alpha_1 IPI_t + \alpha_2 CPI_t + \alpha_3 M3_t + \alpha_4 IIR_t + \alpha_5 MYR_t + \alpha_6 FBMES_t + \mu_t$$

Therefore, following the standard VAR estimation methods, the model of equation contains seven variables as indicated below:

$$\begin{bmatrix} AXIS_t \\ IPI_t \\ CPI_t \\ M3_t \\ IIR_t \\ MYR_t \\ FBMES_t \end{bmatrix} = \begin{bmatrix} A_1 \\ A_2 \\ A_3 \\ A_4 \\ A_5 \\ A_6 \\ A_7 \end{bmatrix} + R(L) \begin{bmatrix} AXIS_{t-1} \\ IPI_{t-1} \\ CPI_{t-1} \\ M3_{t-1} \\ IIR_{t-1} \\ MYR_{t-1} \\ FBMES_{t-1} \end{bmatrix} + \begin{bmatrix} et_1 \\ et_2 \\ et_3 \\ et_4 \\ et_5 \\ et_6 \\ et_7 \end{bmatrix}$$

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where R is 7x7 matrix polynomial parameter estimators, (L) is the lag length operators, A is an intercept, *et* is a Gaussian error vector with mean zero, and Ω is a Varian matrix. In order to specify the VAR model, this study employs the standard procedure of time series analyses. First, the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests are used to determine the stationary properties or the variables' integration order. A variable is integrated of order d, written 1(d), if it requires differencing by d times to achieve stationary. Thus, the variable is non-stationary if it is integrated of order 1 or higher. Classifying the variables into stationary and non-stationary variables is important as standard statistical procedures can only take stationary series. Moreover, there is also a potential long-run co-movement, termed cointegration, among non-stationary variables which have the same integration order. In this study, the lag was determined through the Akaike Information Criterion (AIC), which is commonly used for the VAR model.

Secondly, in order to analyse the long run relationships between the variables, this study applied the VAR-based approach of the cointegration test based on the maximum likelihood estimation (Johansen and Juselius, 1990). A Granger causality test is applied if those variables cointegrated; otherwise, the standard Granger causality test is applied on the first difference of these variables (Granger, 1986) to identify the existence of the variables' causality relationship.

Empirical Results

Table 2 shows the results of Augmented Dickey-Fuller (ADF) and Phillip Perron (PP) tests for all variables. The null hypothesis is found to be non-stationary for the ADF while the PP tests are accepted for all variables. This result indicates that all the variables are non-stationary at level but stationary at first differencing. Thus, they are integrated of order 1, or I(1).

Table 2: Unit Root Test

Test	ADF				PP			
Variables	Level		First Difference		Level		First Difference	
	Trend	Trend & Intercept	Trend	Trend & Intercept	Trend	Trend & Intercept	Trend	Trend & Intercept
LNAXIS	- 0.853	-2.139 (1)	-7.348 (0)	- 7.296* (0)	-0.893 (2)	-1.967 (3)	-7.348* (0)	-7.305* (1)
LNCPI	-1.027 (1)	-3.294*** (1)	-5.474 (0)	-5.445* (0)	-0.814 (3)	-2.535 (3)	-5.402* (4)	-5.368* (4)
LNEXC	-1.893 (0)	-1.841 (0)	-8.904 (0)	-8.915* (0)	-1.911 (1)	-1.833 (2)	-8.904* (1)	-8.915* (1)
LNFBMES	-0.875 (2)	-2.976 (7)	-7.406* (0)	-7.406* (0)	-0.929 (5)	-1.885 (5)	-7.579* (4)	-7.564* (4)
LNIIIR	-1.997 (2)	-1.908 (2)	-4.527 (1)	-4.558* (1)	-1.751 (4)	-1.639 (4)	-7.335* (3)	-7.354* (3)
LNIPI	-0.127 (11)	-1.704 (11)	-2.603 (11)	-3.561** (11)	-3.576* (5)	-5.038* (5)	-18.661* (2)	-18.572* (2)
LNM3	-0.243 (0)	-2.384 (0)	-8.662* (0)	-8.601* (0)	-0.243 (0)	-2.555 (2)	-8.662* (0)	-8.601* (0)

Note: *denote significant at 1%
**denote significant at 5%
***denote significant at 10%
( ) lag

Following the two tests, the Johansen Multivariate Co-integration test is employed for the cointegration test. Table 4 shows the results of the Johansen's Trace and Max Eigen-value tests. Three of the variables are found to be co-integrated. Based on the 5% significant level, the Trace test suggested that the variable are cointegrated with r = 2, while the Max Eigenvalue

test revealed that the variable is cointegrated with r = 1 equation for all analyses. According to Harris (1995), it is possible for the estimated test statistics to have different results. Therefore, Cheung and Lai (1993) suggested the use of the Trace test results because the Trace test has shown more robustness in term of both skewness and excess kurtosis in the residual. Hence, this result suggested that there are at least 3 cointegration vectors (r = 2) in this model.

Table 3: Johansen Test of Cointegration

Model	Null Hypothesis	Statistical Trace	Critical Value (5%)	Maximum Eigen Statistical Trace	Critical Value (5%)	Results
Lag Length= 2#	r ≤ 0	193.012*	125.615	67.319*	46.231	Statistical Trace showed a 3 cointegration vectors
	r ≤ 1	125.693*	95.753	53.694*	40.077	
	r ≤ 2	8.507*	15.494	6.074	14.264	
	r ≤ 3	36.335	47.856	20.208	27.584	
	r ≤ 4	16.126	29.797	7.619	21.131	
	r ≤ 5	2.432	3.841	2.432	3.841	
	r ≤ 6	71.998	69.818	35.663	33.876	

* :Denote significance at 5% respectively
: Critical Value obtained from Osterwald-Lenum (1992)
#: lag length based on Akaike Information Criterion (AIC)

As suggested by the Johansen and Juselius Cointegration test, the first normalized co-integrated vector towards lagged AXIS variable as proposed by AIC indicated long run relationship between macroeconomic and expected return of AXIS which is shown in Table 3. Based on Table 4, variables of AXIS, CPI, IPI, FBMES, IIR, M3 and EXC are measured as long-term elasticity in terms of logarithms.

Table 4: Cointegration Relationship

Dependent Variable (AXIS)	Independent Variable						
	LNCPI	LNIPI	LNFBMES	LNIIR	LNM3	LNEXC	C
Coefficient	-2.713	12.531*	-0.196	-2.399*	-1.537	-8.947*	-9.070
Value *t*	-0.492	5.361	-0.366	-6.705	-0.939	-6.145	

Based on Table 4, the AXIS values are significantly positive correlated with economic growth. This finding is parallel to the share analysis theory and the discounted cash flow model which suggest that economic growth have a positive relationship with firm's expected future cash flow. This may then be interpreted to mean that, a favorable economic condition can potentially boost the expected return of AXIS. These findings are in line with those of Yunus (2012).

Similarly, the long-term equation suggests that the inflation rate variable is insignificantly negative correlated with the AXIS which is in line with the findings of Glascock *et al*. (2002) who equally found a negative relationship between these two variables. Extant literature has shown that any increase in inflation rate may lead to an increase in the firm's production costs. This in turn may consequently decrease future cash flow, decrease the share value of real estate, production and profit of that particular firm.

The finding similarly revealed an insignificant negative relationship between AXIS and FBMES. These findings are consistent with the findings of Subrahmanyam (2006), who indicated a negative relationship with market share of real estate investment trust. The result of the present study revealed that real estate market have the potential to replace the stock market and capable of reducing the money in the stock market and increase in the real estate market.

Regarding the relationship between AXIS and M3 money supply, the finding similarly indicated an insignificant negative relationship. This is equally in line with the findings of Thorbecke (1997). This negative relationship can be explained in term of the inflationary effect of excessive money supply which consequently leads to increase in discount rate fall in the prices of real estate share.

Interestingly, the present study found a significant negative relationship between the I-REIT with Islamic interbank rate. This result may due to the rise in interest rates, which probably brought the share prices of real estate down through the decrease in future corporate profit that is the consequence of increasing borrowing and production costs (Ito, 2013). Based

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on the explanation of this finding, any increase in the IIR might result in the reduction the Islamic share price of real estate.

Regarding the relationship between foreign rate (EXC) variable with I-REIT, the findings reveal that the two variables has a long term significant negative relationship. This might be due to the negative value of the EXC coefficient. As suggested by Hussin (2012) and Ibrahim and Wan (2001), this negative relationship may be due to factors such as the status of the international trade of a particular country. For instance, any decline in the value of the currency would result in higher exports. A decline in currency value could lead to high production costs due to increases in domestic prices for the acquisition of capital goods and imported mediators. This would in turn mount downward pressure on the profit margin of the firm and consequently cause a firm's share price to decrease.

This negative relationship can also be explained from the investors' point of view in term of country's currency value (Ibrahim and Aziz, 2003). According to popular opinion, any decrease in a currency value is an indication that the country is in economic recession which drive investors to withdraw their investments from the country. Consequently, the firm's profits may be negatively affected due to the capital loss which would decrease the returns and share prices of real estate.

Table 5 presents the results of the long term Granger causal relationship test based on the value of Ect-1 for every variable. Based on the results of the VECM test, it has been revealed that the value of Ect-1 for each I-REIT variable is significant. As such, it is revealed that the variables of CPI, EXC, FBMES, IIR, IPI, and M3 are the long term Granger cause for I-REITs. In other words, I-REIT variable in the equation bears the burden of dispersed error correction of short term balance to achieve long term balance as much as 10 percent in three months. Specifically, this demonstrates endogeneity in the model.

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Table 5: Vector Error Correction Model (VECM)

Dependent Variable	Independent Variable Statistic Value Chi-Square (Wald test)							Statistic Value t
	AXIS	CPI	EXC	FBMES	IIR	IPI	M3	Ect-1
AXIS		25.875* (0.000)	6.488 (0.165)	1.094 (0.895)	4.427 (0.351)	12.467** (0.014)	10.228** (0.0367)	-0.105* [-2.680]
CPI	1.787 (0.774)		10.634** (0.031)	12.157** (0.016)	2.752 (0.600)	7.4023 (0.116)	1.741 (0.7832)	-0.006 [-1.906]
EXC	3.640 (0.456)	6.299 (0.177)		8.553*** (0.073)	5.610 (0.2302)	8.277*** (0.081)	8.0876*** (0.0884)	0.0243 [1.602]
FBMES	4.602 (0.330)	14.378* (0.006)	0.720 (0.948)		11.169** (0.024)	2.968 (0.563)	1.785 (0.7752)	0.0065 [0.247]
IIR	7.005 (0.135)	1.142 (0.887)	6.357 (0.174)	21.257* (0.0003)		27.778* (0.000)	16.193* (0.0003)	-0.085* [-3.02]
IPI	7.222 (0.124)	13.503* (0.009)	9.7571** (0.0447)	10.905** (0.027)	8.798*** (0.066)		13.393* (0.0095)	0.0690* [3.280]
M3	0.328 (0.988)	8.018*** (0.090)	2.590 (0.628)	4.350 (0.360)	1.553 (0.817)	5.517 (0.238)		-0.0176* [-2.295]

Note: * significant at 1% **significant at 5% *** significant at 10%

A Wald test (Chi-square statistics) has been employed to test for the short term Granger causal relationship which can be observed with the aid of Wald test on a group of the related coefficients. Table 5 reveals that only variables of CPI, IPI and M3 could affect I-REIT in the short term. This suggests that Islamic real estate investment trust return in the short term is mainly influenced by inflation, economic growth, and foreign exchange rate; other variables do not show any significant relationship. Figure 1 shows the short term Granger causal relationship pattern.

Conclusions

The study mainly aims to investigate the relationship between AXIS real estate investment trust and related macroeconomic variables in Malaysia. The results show that the AXIS real estate investment trust (AXIS) is cointegrated with macroeconomic variables. AXIS has been reported to have a positive relationship with the economic growth rate, but a negative relationship with inflation, money supply, Islamic investment rate, foreign exchange rate, and FTSE Bursa Malaysia Emas Shariah. In addition, the findings reveal that CPI, IPI, and M3 variables to be Granger cause for AXIS in the short term. This means that Islamic real estate investment trust

return in the short term is influenced by inflation, economic growth, and money supply, while other variables do not exhibit a significant relationship.

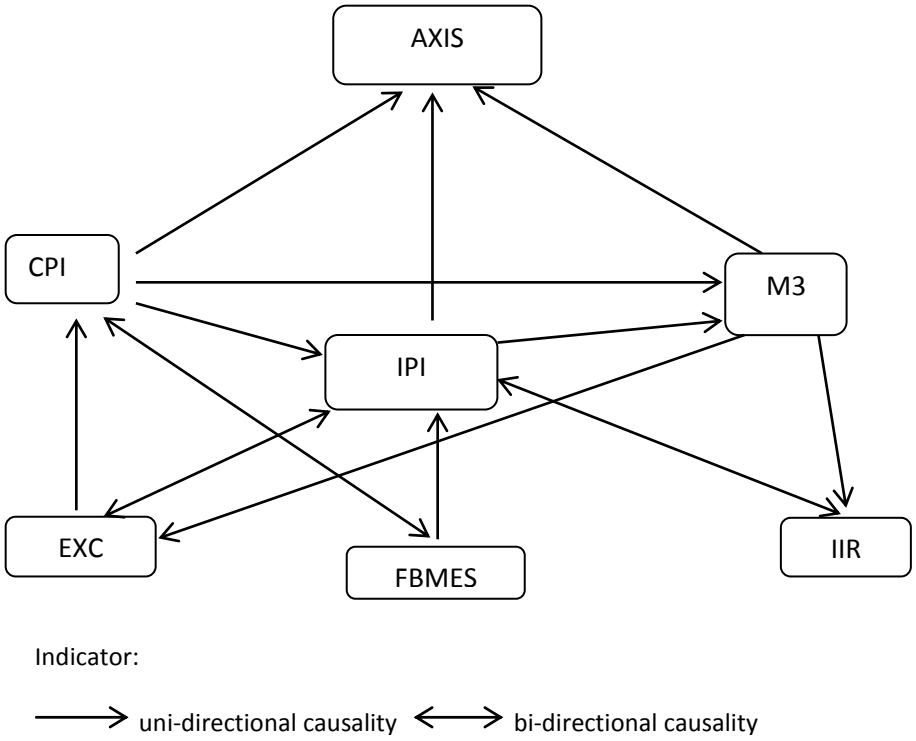

Figure 1: Analysis on Short Term Granger Causal Relationship

The findings of the present study provide preliminary insights about linkages between IREITs and macroeconomic variables in making suitable investment decisions in Malaysia. It is also valuable for the investors in financial risk forecasting and developing hedging strategies. Moreover, such results may be useful for policy makers in monitoring the stability of Islamic capital market. For Islamic REITs to be truly successful, it is advisable for those concerned on the development in the economic and Islamic capital market to observe the fluctuations of the M3, IPI and CPI.

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