# Is gold worth an investment ? a case study of Malaysia

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# Is gold worth an investment ? a case study of Malaysia

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**Abstract:**This paper attempts to test the possible directions of causality of gold price movements in Malaysia with other financial determinants. Additionally, the study wants to prove whether real gold price is cointegrated with other variables for the case of Malaysia. The methods used in this paper are a range of multivariate time series techniques namely the cointegration tests (Johansen and Engle-Granger), vector error correction model (VECM), and one of the recently developed 'long run structural modeling (LRSM)', which imposes the exact identification and over identification restrictions on the cointegrating vectors. It estimates whether they are atheoretical in nature or not. In determining the exogeneity or endogeneity and the relative degree of it, variance decomposition technique is incorporated in this study. Based on the findings through techniques, the results tend to suggest that the real gold price is the leading variable in the case of Malaysia. Gold is indeed worth as an investment as it leads other factors namely inflation, exchange rate, crude oil price and the stock market.

**Keywords***:* real gold price, VECM, VDC, Malaysia

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# 1 INTRODUCTION

The World Gold Council has estimated that there are about 184,000 tons of gold sitting the government reserves, bank vaults and personal collections. The gold has been perceived as a security for any volatility and hedge against various financial hurdles. Countries in the early 1900's have been using gold for protection and some back their currency with gold. When Germany was suffering hyperinflation in 1923, they began the survey of concentration of gold in seawater. The gold standard has become benchmark for economic and financial determinants in the past. When the world faces the subprime crisis, both stock market and the economy crash and panicked investors whom afraid of losing move towards the gold. The demand for gold has rose steadily and peaked in late 2010 when the gold price was quoted at $1,900 per ounce. As the economy turns back to its equilibrium, the bubbles that were created to the gold transition investment burst and lead the price of gold to decline based on the figure, gold is quoted at $1,070 per ounce in December 2015.

The aftermath of the global financial crisis that occurred in 2008 is severe and many countries are still in the recovering stage of such crisis. This has impact consumers in various ways such as their investment decisions based on safety level in order to protect themselves for any unforeseen detrimental events as many innovations through financial engineering has actually created instruments and investments that are used as speculations. People all over the world are commonly taught with investment in stocks and bonds solely but there are numerous type of instruments and investments are giving better prospect than bonds and stocks. Alternatively, investors are opting for property and commodity for their investment decisions. As a commodity, gold is typically viewed as an alternative investment. This kind of alternative investments typically help investors hedge against market volatility. Generally, gold is considered as a safe haven but is it true for the case of Malaysia.

The price of gold has been increasing gradually although after the global financial crisis, the demand for gold in Malaysia has decreased significantly. Based on the statistic of Thomson Reuters, from 2000 to 2015, the demand for gold by the consumers has plunged by half in Malaysia. Do people perceived gold as a bad investment due to slow in stock market or the exchange rate that has experienced significant depreciated is a question yet to be answered.

To resolve mention issues, data particularly related to the financial variables of Malaysia are integrated for this study. The counteraction of the real gold price with other variables such as the exchange rate, crude oil price, inflation and stock market will determine the relationship of these variables and whether there are moving together in the long run. Theoretically, if the financial variables have significant impact on the real gold price, then it is assumed that those variables affect the movement of gold price. Changes in gold price would gives different return from such investment.

The result of this study will help the investors in Malaysia to decide whether gold is worth of an investment and opting for gold or move towards the common investment instruments such as shares and bonds. In order to derive to the empirical result, this paper adopts the multivariate time series method. Contradict to the traditional regression, the relationship of real gold price and other financial variables are not pre determined but rather tested in the causality testing. This causality testing is done via vector error correction model (VECM) and later the relative degree of effect among the variables is tested through variance decompositions technique. The result from these tests would actually determine the lagging and leading variables and useful for investors prospect. If one variable is considered as leading variable, then it can be ascertained that the variable has major or significant impact on others and the effect of other variables have lesser impact on the leading variable.

The result shows that variables of real gold price, inflation, crude oil price, stock market and the exchange rate have a integration in the long run. The result from the VECM explains that real gold price is the leading variable or exogenous variable. This means that the changes in other variables have lesser impact compared to the changes that occur in the real gold price. In the next section of the paper, the study will focus on the past studies that have been done by other researches in relation to gold. Next, the methodology on how the data is tested is discussed as well findings and discussion based on the empirical result. At the end of this paper, the authors discuss future recommendations, limitations and conclusion of the paper.

## 1.1 Objective and Research Questions

The purpose of this research is to identify the extent of influence of real gold price in Malaysia among other financial variables namely inflation, stock market, crude oil price and the exchange rate. It also seeks to find the empirical evidence as to which variables have greater or lesser impact on the movement of gold price in Malaysia. Next, another objective of the study is to find out which variable is the most influential or leading variables in the case of Malaysia.

The following research questions are to be answered for this study, namely:

i. Which variables have the most influence on the real gold price in Malaysia case?
ii. Is the real price of the gold is affected by other financial variables?
iii. How much is the degree of effect of such variables on the real gold price?

## 1.2 Significance of Study

This study highlights the real gold price movement and other financial determinants in Malaysia. Real gold price is calculated by deflating it with the inflation variable of Malaysia. The data that is used incorporated the latest data available dated from 2005 until 2015. In contribution, this article will add more to the current existing literature in relation to gold as the point of discussion. For non major gold exporter country, a study focuses on developing and emerging country like Malaysia could assist investors and public consumers on their decision of gold as an investment. Additionally, the government of Malaysia also can adopt this empirical evidences of this article as Malaysia is one of the countries that keep gold in their reserves.

# 2 LITERATURE REVIEW

Many studies have been conducted to find the evidence of relationship between gold and other economic and financial variables. For instance, Hillier, Frapper and Faff (2006) has implemented a study of comparing gold with other precious metals namely silver and platinum. On the other hand, there are studies that compare the gold and its effect to portfolios of shares and bonds conducted by Sherman (1982).

Gold is typically recognized as an alternative investment vehicle in the commodity market. As an investment, investors are holding the current consumption for future consumption. As

inflation becomes on the factor that decreases the value of any investment, investors are being precaution for this variable in the market by hedging against the inflation. When inflation is high, the value of paper money will fall due to the increment in the general price for goods and services. As stated in Levin and Wright (2006) study, the most common factor used to explain long run gold prices is inflation. Inflation generally affects the aggregate price level for products and services of a country.

Similar to Levin and Wright (2006), Worthington and Pahlavani (2007) along with Beckmann and Czudai (2013) have found the longrun relationship between price for gold and general price level through cointegration tests. The results are arbitrary and varies due to sample horizon and the locale of the investigations.

Gold is considered as a unique financial asset. It stands by it own and different from other commodities for precious metals such as platinum and silver (Batten, Ciner and Lucey, 2010). Due its uniqueness, the commodity which is gold is viewed as the most complicated asset to price. Unlike stocks, currencies or any other commodities, the value for gold is not determined by the fundamental theory of supply and demand. The value of gold is less affected by consumption and largely affected by the status of the economy. Based on the course of history, gold's value has displayed the tendencies counter-cyclical to the strength of the economy.

## 3 DATA AND EMPIRICAL EVIDENCES

### 3.1 Data Source

The monthly data for this empirical study ranges from June 2005 up until October 2015, giving 125 observations for the research. The reason behind this range of data set is due to the policy of Malaysia Central Bank not to peg Ringgit against US Dollar in 2005[1]. Five variables are taken into consideration of the empirical study namely real gold price (GP), stock market (KL), inflation (CP), crude oil price (CO) and the exchange rate (MY).

All data are taken from Thomson Reuters Datastream. For gold price, the real gold price (GP) is calculated by deflating it with the consumer price index (CP). Data for gold price is taken

[1] Life after pegging, http://www.atimes.com/atimes/Southeast_Asia/GH13Ae01.html

from Gold Bullion in US Dollar per troy ounce. The consumer price index for Malaysia is taken into consideration as well for its inflationary effect. Next, the FTSE Bursa Malaysia or KLCI price close is considered as proxy for the stock market. Loss in investment of stock market moves the investors decision to opt for gold. For crude oil price, the historical prices for Crude Oil-Brent are taken in term of US Dollar per barrel. The fifth variable is exchange rate whereby the movement of Malaysian Ringgit against US Dollar is taken after the removal of pegging policy by Malaysia after seven years of pegging.

### 3.2 Data Transformations

The real gold price is considered for this study in which the variable is free from any influence from the inflation rate in Malaysia. The gold price is normalized via deflating the variable with consumer price index for every period of data sample. The logarithmic scale of Kuala Lumpur stock market, the exchange rate, the crude oil and the consumer price index are calculated for this empirical study. Transforming the data into logarithmic scale is to remove the outliers and at the same time normalizing the data.

### 3.3 Methodology

This study aims to identify the dynamic co-movement of gold price in relation to other determinants in a long run such as inflation, crude oil price and the exchange rate and the stock market. These variables are tested in econometric tools for time series such as the cointegration test (Johansen), temporal causality test and long run structured modelling (LRSM). Next, the variables are tested via vector error correction model (VECM) which gives the result for the long term relations among the variables. Consequently, in order to characterize the dynamic behavior of the model, the variables are tested through variance decomposition (VDCs) test. Another two tests that are carried out in the study are impulse response (IR) which traces the response of variables to such shock and lastly, the persistence profiling (PP) function which tests the impact of a system wide shock on mentioned variables.

### 3.4 Findings

For any regression analysis, the variables are tested through stationarity and cointegration properties as the data collected are in time series form. In order to capture the long run relationship of these variables, the original level form of variables is non stationary and this actually is against the assumption of traditional regression method or OLS. For the stationary and non stationary test of the variables, augmented Dickey-Fuller (ADF) test and Phillip Perron

(PP) test are used for the aforementioned testing. It is found out that in the unit root tests, all variables could be assumed as I(0) in ADF test but in PP test, the result is giving I(1). The result of PP unit root test is taken into consideration and weight as PP corrects for both autocorrelation and heteroskedasticity via the Newey-West adjustment. The result from the time series data tells us that all level form of the variables are non stationary and stationary for the first-differenced form.

### 3.4.1 Stationary and Non stationary Tests (ADF and PP)

**Table 1 Unit root test results for logarithmic form (ADF)[2].**

| | Variable | ADF | Value | T-Stat. | C.V. | Result |
|---|---|---|---|---|---|---|
| Log Form | LCP | ADF(1)=AIC | 479.1711 | -3.8192 | -3.4489 | Stationary |
| | | ADF(1)=SBC | 473.6128 | -3.8192 | -3.4489 | Stationary |
| | LKL | ADF(5)=AIC | 226.1632 | -3.4688 | -3.4636 | Stationary |
| | | ADF(2)=SBC | 217.6842 | -2.4316 | -3.4217 | Non-Stationary |
| | LGP | ADF(1)=AIC | 175.8604 | -0.94343 | -3.4489 | Non-Stationary |
| | | ADF(1)=SBC | 170.3022 | -0.94343 | -3.4489 | Non-Stationary |
| | LCO | ADF(2)=AIC | 108.8031 | -2.6118 | -3.4217 | Non-Stationary |
| | | ADF(2)=SBC | 101.8553 | -2.6118 | -3.4217 | Non-Stationary |
| | LMY | ADF(5)=AIC | 285.8028 | 1.3554 | -3.4636 | Non-Stationary |
| | | ADF(1)=SBC | 279.8538 | 1.1706 | -3.4489 | Non-Stationary |

**Table 2 Unit root test results for first-difference (Augmented Dickey-Fuller).**

| | Variable | ADF | Value | T-Stat. | C.V. | Result |
|---|---|---|---|---|---|---|
| First-difference Form | DCP | ADF(4)=AIC | 470.9521 | -6.0377 | -2.888 | Stationary |
| | | ADF(1)=SBC | 473.6128 | -3.8192 | -3.4489 | Stationary |
| | DKL | ADF(2)=AIC | 220.9377 | -4.4398 | -2.8623 | Stationary |
| | | ADF(1)=SBC | 216.7805 | -5.7722 | -2.845 | Stationary |
| | DGP | ADF(1)=AIC | 172.351 | -8.5514 | -2.845 | Stationary |
| | | ADF(1)=SBC | 168.195 | -8.5514 | -2.845 | Stationary |
| | DCO | ADF(1)=AIC | 106.0241 | -5.6261 | -2.845 | Stationary |
| | | ADF(1)=SBC | 101.8681 | -5.6261 | -2.845 | Stationary |
| | DMY | ADF(5)=AIC | 280.804 | -2.204 | -2.8793 | Stationary |
| | | ADF(1)=SBC | 274.9529 | -6.3596 | -2.845 | Stationary |

**Table 3 Unit root test results (Phillips Perron) for logarithmic and first difference form.**

| | Variable | T-Stat. | C.V. | Result |
|---|---|---|---|---|
| Log Form | LCP | -2.2212 | -3.4959 | Non-Stationary |
| | LKL | -1.8945 | -3.4959 | Non-Stationary |
| | LGP | -0.79146 | -3.4959 | Non-Stationary |

[2] $H_0$ : Variables are non stationary

| | | | | |
|---|---|---|---|---|
| First-difference | LCO | -1.222 | -3.4959 | Non-Stationary |
| | LMY | 2.3911 | -3.4959 | Non-Stationary |
| | DCP | -6.9146 | -3.5042 | Stationary |
| | DKL | -9.3378 | -3.5042 | Stationary |
| | DGP | -13.7687 | -3.5042 | Stationary |
| | DCO | -8.5948 | -3.5042 | Stationary |
| | DMY | -10.1061 | -3.5042 | Stationary |

### 3.4.2 Determination of the Order of the VAR Model

**Table 4 VAR results for lag order determination.**

| Order | AIC | SBC | p-Value | C.V. |
|---|---|---|---|---|
| **2** | 1282.4 | 1256.5 | [.085] | 5% |

The optimal order of the VAR is two as the highest value of both AIC and SBC are conflicting and thus, the value of the adjusted LR is taken into account, giving the lag order of two.

### 3.4.3 Cointegration Tests (Engle-Granger and Johansen)

In order to identify the cointegration of variables in the study, the standard Johansen cointegration test and Granger causality test are used and results are as per below. For Engel-Granger cointegration test, it is found that for the highest value of AIC and SBC, it gives lower result than the critical value in which the result is non stationary. This indicates that there is no cointegration for the variables in the study. However, the variables are also tested in for the cointegration in Johansen test. On the basis of Maximal Eigenvalue and Trace statistic, it is found out that there is one cointegrating vector at 95% significance level. Evidently, it gives the proof that there is an existence of theoretical relationship among the variables in which the variables are in equilibrium in the long run. This rejects the assumption of the spurious relationship for these variables.

**Table 5 Cointegration LR Test Based on Maximal Eigenvalue of the Stochastic Matrix**

| Null | Alternative | Statistic | 95% Critical Value | 90% Critical Value |
|---|---|---|---|---|
| **r = 0** | r = 1 | 61.008 | 37.860 | 35.040 |
| **r<=1** | r = 2 | 40.065 | 31.790 | 29.130 |

**Table 6 Cointegration LR Test Based on Trace of the Stochastic Matrix**

| Null | Alternative | Statistic | 95% Critical Value | 90% Critical Value |
|---|---|---|---|---|
| **r = 0** | r>= 1 | 125.447 | 87.170 | 82.880 |
| **r<=1** | r>= 2 | 64.439 | 63.000 | 59.160 |

### 3.4.4 Long Run Structural Modelling (LRSM)

Next, the long run structural modelling is tested in order to make the coefficients of the cointegrating vector consistent with the theoretical information of the economy. The study focuses on the causality of the gold price movement in Malaysia with other economic determinants and to find the direction of the causality, the first run of the test imposed a normalizing restriction for the gold price (LGP) for exact identification (Panel A of Table 7) and the test are continued with other restriction of economic determinants in the overidentification stage (Panel B to D of Table 7). There is no restriction in Panel A and few restrictions on other panels. The result shows in Panel D, all variables are significant on the basis of restriction on the crude oil (LCO) and the stock market (LKL) for the overidentification stage in which it gives the restrictions are correct.

**Table 7 Exact and over identifying restrictions on the cointegrating vector.**

| VRBL | PANEL A | PANEL B | PANEL C | PANEL D |
|---|---|---|---|---|
| **LCO** | -.22703 | 0.00 | -.19156 | -.0000 |
| | ( .29722) | (*NONE*) | (.31759) | (*NONE*) |
| **LCP** | -15.4694 | -16.7298 | -18.266 | -18.7182 |
| | (5.9646) | (6.1922) | -5.5277 | (5.5964) |
| **LGP** | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| | (*NONE*) | (*NONE*) | (*NONE*) | (*NONE*) |
| **LKL** | .29450 | .21542 | 0.00 | -.0000 |
| | (.41268) | (.41731) | (*NONE*) | (*NONE*) |
| **LMY** | 1.8674 | 2.4367 | 1.7337 | 2.2665 |
| | (.94571) | (.55011) | (1.0162) | -0.47498 |
| **Trend** | .021997 | .024636 | .028904 | .029601 |
| | (.012564) | (.013006) | (.010301) | (.010422) |
| **CHSQ(1)** | NONE | .57613[.448] | .44749[.504] | .81894[.664] |

*Note*: Standard error is in parenthesis

The Chi-squared statistic (Panel D of Table 7) shows significant result holds that the restrictions imposed in Panel D are correct. Gold price is statistically found out that it has a long run relationship with the consumer price index and the exchange rate. South Africa has been one of the biggest exporter of gold for the world and after 2006, other countries have surpassed South Africa namely Russia, China and the United States as the biggest gold exporter. Malaysia has to import for gold as this nation does not have the mass gold mining industry and thus, the exchange rate is tied closely with the the gold price movement in the country for the long run. The general price level of Malaysia indeed affects the movement of the precious ore price in the long run as well.

### 3.4.5 Vector Error Correction Model (VECM)

Even though it is found out that there is cointegration of variables in this study but cointegration is unable to give the direction of Granger causality in which variables are exogenous and which variable are endogenous. The leading and lagging variables are determined through the endogeneity or exogeneity in vector error correction model technique.

**Table 8 Vector Error Correctional Model results for five variables.**

| ecm1(-1) | Coefficient | Standard Error | T-Ratio [Prob.][3] | C.V. | Result |
|---|---|---|---|---|---|
| dLCO | .19674 | .030389 | 6.4739[.000] | 5% | Endogenous |
| dLCP | .0028592 | .0016508 | 1.7321[.086] | 5% | Exogenous |
| dLGP | .022632 | .019176 | 1.1802[.240] | 5% | Exogenous |
| dLKL | .061256 | .011847 | 5.1705[.000] | 5% | Endogenous |
| dLMY | -.029941 | .0072314 | -4.1404[.000] | 5% | Endogenous |

Based on statistical data, it is found out that the consumer price index and the gold price are the leading variables. This concludes that these variables do not depend on the deviations of other variables. The exogenous variables or leading variables initially receive the exogenous shocks resulting in deviations from equilibrium and transmit the shocks to other variables. This means that any macro or micro economic impact on consumer price index and the gold price will affect other variables in the study.

In contrast, other variables namely crude oil price, stock market and the exchange rate are endogenous or also considered as lagging variables. This indicates that these three variables respond to both gold price and the consumer price index. The endogeneity implies that these variables depend on the deviations of exogenous variables (gold price and the consumer price index). From the result, the gold price stands on its own despite the movement on other economic determinants. If stock market is slowing down, it does not have major impact of the real gold price. This proves that investing in gold could be a safety net path for any investors in taking advantage of such investment.

### 3.4.6 Variance Decomposition (VDC)

[3] $H_0$ : Variable is endogenous

With the result of the vector error correction model, the variables are classified into its exogeneity and endogeneity class. However, it does not give the relative degree of lagging and leading among the variables. In order to determine said factors, the generalized variance decomposition method is incorporated for the study. The relative degree can be ascertained by the proportion of the variance explained by its own past. The generalized method is preferred than the orthogonalized because in generalized VDC, there is no bias towards the order of variables in the equation specifically the first variable. Generalized VDC is unique and invariant to the ordering of the variables and when testing, one of the variable is shocked and all other variables in the system are not switched off.

**Table 9 Percentage of forecast variance explained in Generalized Variance Decomposition.**

| | HORIZON | LCO | LCP | LGP | LKL | LMY | TOTAL | SELF-DEP | RANKING |
|---|---|---|---|---|---|---|---|---|---|
| **LCO** | 30 | 15.37% | 55.71% | 17.50% | 6.56% | 4.86% | 100.00% | 15.37% | 5 |
| **LCP** | 30 | 1.16% | 83.36% | 4.86% | 6.44% | 4.18% | 100.00% | 83.36% | 2 |
| **LGP** | 30 | 0.14% | 8.12% | 88.40% | 0.27% | 3.07% | 100.00% | 88.40% | 1 |
| **LKL** | 30 | 0.16% | 52.43% | 6.86% | 35.97% | 4.59% | 100.00% | 35.97% | 3 |
| **LMY** | 30 | 0.41% | 46.27% | 28.92% | 1.16% | 23.24% | 100.00% | 23.24% | 4 |

| | HORIZON | LCO | LCP | LGP | LKL | LMY | TOTAL | SELF-DEP | RANKING |
|---|---|---|---|---|---|---|---|---|---|
| **LCO** | 50 | 10.91% | 59.30% | 18.27% | 6.23% | 5.30% | 100.00% | 10.91% | 5 |
| **LCP** | 50 | 0.97% | 78.28% | 7.93% | 6.51% | 6.31% | 100.00% | 78.28% | 2 |
| **LGP** | 50 | 0.17% | 9.68% | 87.42% | 0.20% | 2.53% | 100.00% | 87.42% | 1 |
| **LKL** | 50 | 0.15% | 55.27% | 7.75% | 31.89% | 4.94% | 100.00% | 31.89% | 3 |
| **LMY** | 50 | 0.52% | 51.45% | 29.65% | 1.33% | 17.05% | 100.00% | 17.05% | 4 |

In Table 9, at the end of the forecast horizon number 30, the contributions of own shocks towards explaining the forecast error variance of each variable are as follows: crude oil price variable (15%), consumer price index variable (83%), real gold price variable (88%), stock market variable (36%) and the exchange rate (23%). It shows that the relative exogeneity for gold price variable is the highest in which it is considered as the most exogenous variable. The gold price variable explains 29% of the exchange rate and 18% of the variance of exchange rate and crude oil price variable, whereas both variables only explain less than 1% and about 3% for the exchange rate variable for the forecast horizon number thirty. The same case is implied in the fifty horizon as gold price variable tends still to be the most leading variable for that particular horizon.

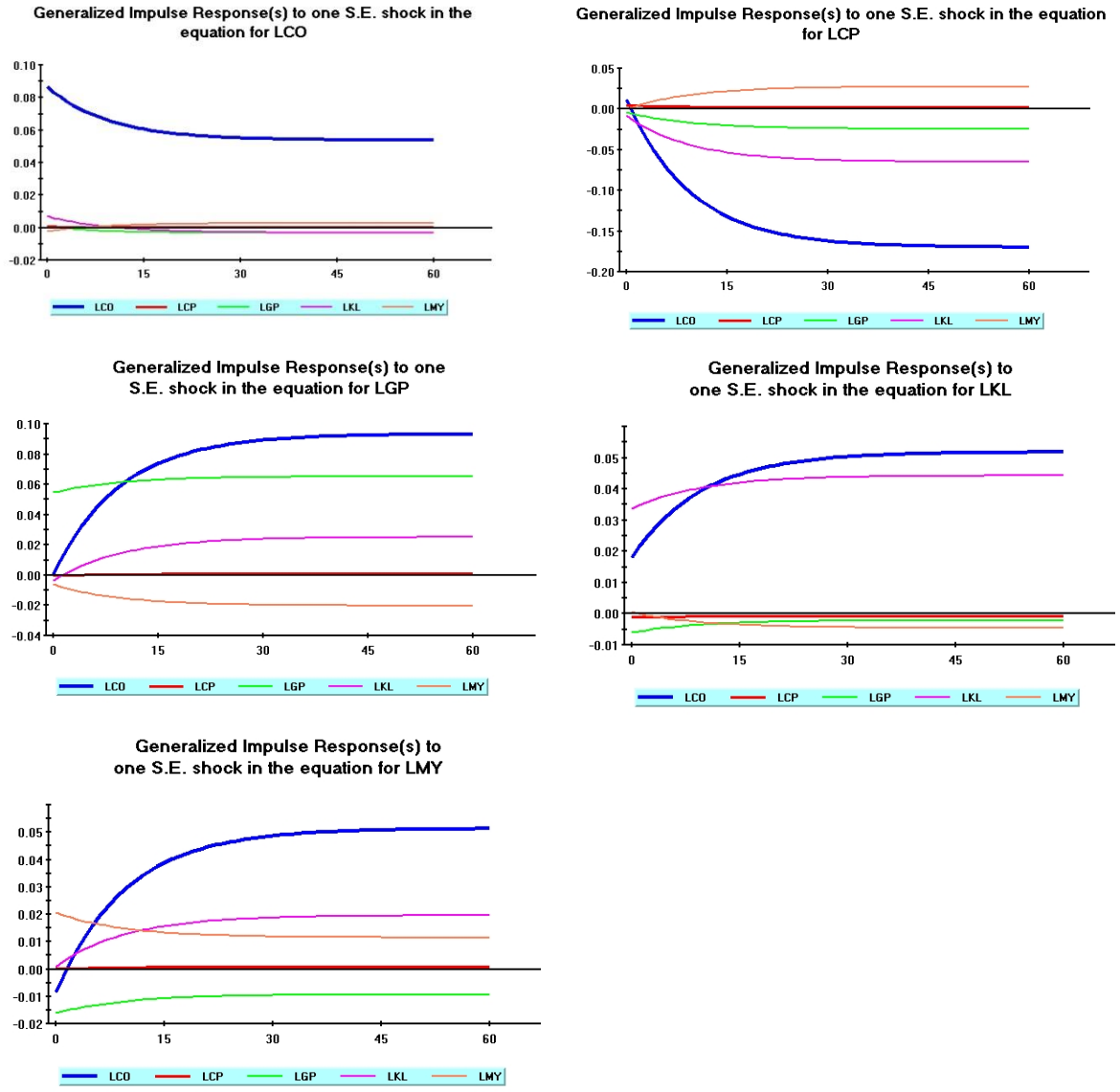
It can be explained that the movement of gold price will move other variables in the long run. When the price of gold changes, it will affect the crude oil price the most and the exchange rate of Malaysian Ringgit against US dollar. The change in stock market, general price level or the

exchange rate in Malaysia has weak impact on the movement of gold price. Whether the economic is in a trough trend, the price of the gold is less impacted compared to other variables. These out-of-sample variances forecast results given by the generalized variance decompositions further strengthen the earlier within-sample results given in the error correction model that gold price actually lead all other economic variables.

### 3.4.7 Impulse Response Functions (IRF)

Graphically, the results from the generalized test can be confirmed through orthogonalized and generalized impulse response test. Generalized test is preferred as the results are better when normalized. The same test generalized test is conducted in the impulse response technique.

**Figure 1 Generalized Impulse Response(s) to one S.E. shock for all variables.**

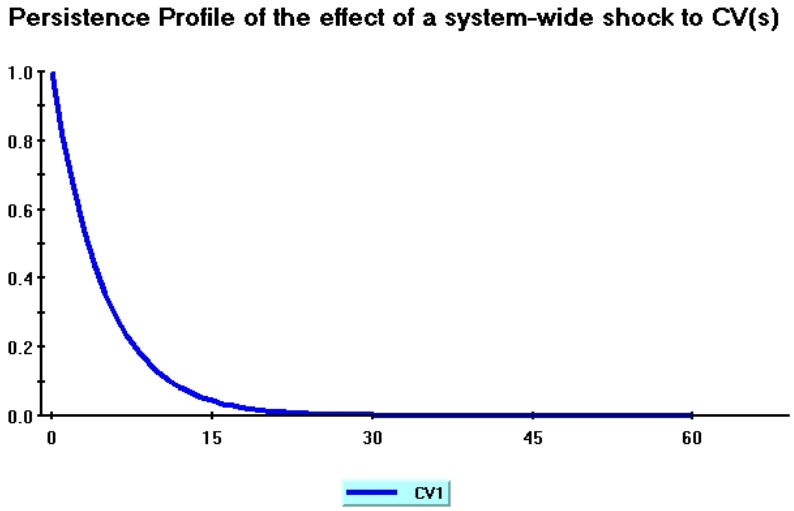


After the application of Impulse Response Function (IRF), it is found out that crude oil is more sensitive to 1% standard deviation shock to the real gold price variable. When one standard deviation shock is applied to the gold price variable, other variables will experience significant changes. From the the charts above, it can be proven that any shock on any other variables other than the gold price, the effect on the gold price is not significant. The fluctuation or the changes the trend is low. This is similar to the VDC test results which conclude that the gold price has lesser impact compared to its impact on other financial variables.

### 3.4.8 Persistence Profile

For persistence profile testing, the data is incorporated and the result is shown graphically. It illustrates when the entire cointegrating is shocked, it gives the time it would take for the relationship to get back to equilibrium. Contradict to the IRF result, in persistence profile, the effect on the entire system is focused rather than shock on one particular variable only.

**Figure 2 Persistence Profile of the effect of a system wide shock.**




*Note:* The above graph shows the persistence profile from a system wide shock. There is sideways persistence in the first 15 months and the system gains back its equilibrium after approximately 25 months or two years.

Figure 2 explains that it would take approximately 25 months for the cointegrating relationship to return to equilibrium following a system-wide shock.

## 4 CONCLUSION AND POLICY IMPLICATIONS

The focus of this article was an attempt to test the possible directions of causality between the real gold price variable and other financial variables namely the stock market, inflation, exchange rate and crude oil price. These variables are the 'control' variables to which extent their relationship towards the movement of gold price in Malaysia. Some of the recently developed time series techniques namely vector error correction model (VECM), variance decomposition and the long run structural modelling technique which advances the common Johansen and Engel-Granger cointegration techniques. Based on these empirical tests, the real gold price is proven as the leading variable which leads other variables in Malaysia. In other words, the empirical result suggests that the causation between real gold price and other financial variables is gold price is major influence to other variables. The major implication for investors based on the findings through extensive econometric analysis, is that gold is really worth as an investment in Malaysia as downturns namely depreciation of ringgit, bearish market and inflation have less impact on the real gold price movement in Malaysia. Additionally, through the lens of macroeconomic perspective, the government holds substantial amount of gold in the reserve as this gold backs the paper money that is circulating in the economy. Now that which variable that has larger and lesser impact on the real gold

price is known through this study. Once more money is printed and circulated into the economy and such decision does not backed by the amount of gold, this will lead the loss in va

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