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Alternative Variables Drive the Price of Gold

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Abstract

The price of gold in Malaysia has risen since the beginning of 2019, as investors seek safe havens against oncoming economic instability. Investors believe of gold is a financial asset that can hedge its value against inflation, therefore it's crucial for them to be mindful of recent changes in the gold price.

This study aims to investigate the new variables that may affect the price of gold in Malaysia. The variables included in this study are consumer price, commodity price, housing price, and stock price. Due to the addition of two additional factors which are housing prices and commodity prices that are important to gold prices, this study varies from previous ones. In this study, the correlation coefficient was utilised to examine the relationship between variables, and multiple linear regression was performed to identify the factors influencing the price of gold. E-Views 6.0 was used to analyse the data. The findings indicated that consumer price, commodity price, and housing price in Malaysia were significantly correlated with the gold price. Stock price, however, indicated differently. Future studies should ideally have a broader scope and consider the importance of housing and commodities prices as independent variables or causes. To aid investors in estimating their expected returns, future research should examine the gold price across both short-term and long-term time horizons.

Keywords: Gold Price, Commodity Price, Stock Price, Housing Price, Consumer Price.

Introduction

Gold, silver, and platinum are precious metals people value and tendered to choose as a currency. Due to its scarcity, it is the most valuable real asset and one of the most sought-after investment portfolio instruments for a variety of reasons. According to a report from the Edge Market in December 2020, the price of gold reached US\$1,971 from US\$1944 before inclining by US\$27. According to Gold Sachs analysts, the gold price will explode in 2021 as the Covid-19 recession drives up inflation. The demand for gold among investors who have switched to gold investment portfolios will impacted by this increase in the price of gold (The Edge Market, 2020). The price of gold would affected in times of stress and financial markets crisis. Thestar.com.my in August 2020 reported Malaysians were still flocking to jewellery shops when the price of gold had breached the RM8,363 per ounce threshold for the first time in global history. One of the primary motives for purchasing and selling gold in Malaysia

is an investment, as gold offers a promising future return in the long run. Due to this circumstance, it is crucial for Malaysians, particularly investors and members of the public involved in buying and selling gold, to be vigilant and to pay attention to the volatility of gold prices and their responsibilities in the diversification of investment portfolios (Lear Capital, 2020).

According to Bishnoi and Lan (2014), gold is a popular investment and hedging instrument in the market. The price of gold continues to climb throughout time. It is regarded as reliable and investing in gold is becoming more and more beneficial. Hanif, Nabilah, Salwani, and Wan Mansor (2015) discovered that despite gold's tendency to vary in price, it is feasible for its price to remain stable. This will make it challenging to forecast future price changes. These days, gold is utilised as a short-term and long-term investment to safeguard investment portfolios. Mamcarz (2015) asserts that it's crucial to consider short-term factors while deciding whether to buy low and sell high. Although it's important for investors to have long-term plans to invest in gold because, for a very long time, gold served as the foundation of all economies. Nonetheless, gold has its own worth that cannot be compared to the value of money, and it has always offered ample rewards to investors.

Literature Review

Gold is regarded as a viable alternative to the stock market. Due to dividends and share capital growth, purchasing shares can result in a better return. The current economic recession causes the share value to generally decline. Investors might then sell their shares and acquire gold. The association between the price of gold and the stock market has been identified by Smith (2002 in both the short and long terms). He revealed that when the economic condition is viewed as uncertain, investors will choose to invest in gold due to the value of other instruments may fall in the future. The price of gold will increase if the stock price falls. Bhunia & Das (2012) revealed that by having the history data of the stock market when it crashes or declines, gold continues to be a safe haven investment because gold prices rise in such circumstances. As a result, the following hypothesis was created:

H₁: There is a significant relationship between stock price and gold price.

The Consumer Price Index (CPI) is a broad indicator of price changes in the economy. It is well-known as a method for calculating the typical change in pricing over time in a market for consumer goods and services. Gold is seen as a hedge against inflation because it holds its value over time. Gold prices will eventually increase if the CPI continues to grow. Investors typically invest in gold to protect and expand their wealth. According to Rudrakanchana (2013), the return on gold and the CPI movement are positively correlated. Sharma (2016) revealed there is relatively strong evidence that CPI predicts gold price returns. The future movements in CPI inflation and changes in commodity prices can provide a time for several reasons. Commodity prices are a sensitive leading indication of changes in global demand circumstances. According to Cutler, Chan, and Li (2005), the dependability of commodity prices as demand pressure signals is determined by the relative importance of demand over supply shocks in pricing. While Amira (2013) found that unpredictable economic conditions cause investors to take the initiative to make gold their asset. Thus, the following hypothesis was developed:

H₂: There is a significant relationship between consumer price and gold price.

According to Norhafiza et al (2014), the exchange rate on the performance of the Malaysian stock market is correlated with commodity prices, such as the price of palm oil, the price of oil, and the price of gold. Commodities are things that have a distinct market demand and may be supplied with no qualitative market distinction. It must be the same product regardless of who produces it, such as petroleum, gold, silver, rubber, and others. According to Nangolo and Musingwini (2011), commodity prices are important factors for investment decisions since they are available in three forms: forward pricing, long-term prices, and spot prices. The returns on investments in gold and oil are higher. In addition, gold is regarded as advantageous since its price, like that of oil, might rise significantly from week to week or even monthly and yearly. This is consistent with the findings of Pindyck (2004), who discovered that commodity prices are volatile and can fluctuate at any time. This led to the development of the following hypothesis,

H₃: There is a significant relationship between commodity price and gold price.

The housing development is slowed for a variety of reasons, including laws, regulations, and building procedures. However, the demand is still rising daily. It occurs due to a buyer-seller imbalance. However, no research on the association between house prices and gold prices has been conducted in Malaysia. The Malaysian housing market's investment performance can be evaluated using the house price index. The ratio of gold to real estate demonstrates how valuable each is in comparison to the other. It can be used to quickly determine which of the two is currently most advantageous. In the United Kingdom, it refers to the average ounce of gold required to purchase a house. As physical assets that can replace stocks, gold and real estate are popular choices. Both offer real investment options. However, gold typically outperforms real estate, making it a considerably more stressful investment alternative. In contrast to rising trends in house prices, gold is still in demand and has a high value. During financial crises, gold typically performs well while home prices typically decline. According to Ong (2013), rising housing prices cause investors to be concerned about the state of the property market. This is because other commodities, including gold and crude palm oil, would be affected by the increase in housing prices. The house is one of the consumption goods. In addition, the house is a viable alternative to gold, bonds, and stocks as an investment asset. According to Leung et al (2013), neither the overall economy nor the global commodity market will be impacted by local housing prices. Therefore, it is important to draw meaningful conclusions from the gold to real-estate ratio or by having an outcome on the relationship between these two variables. As a result, this hypothesis was developed:

H₄: There is a significant relationship between housing price and gold price

By using secondary data from various sources, this study was conducted using data collected from the period 2006 until 2015 with the purpose to investigate the determinants that may affect the price of gold in Malaysia and exploring the most influential one on Kijang Emas as a gold price proxy.

Methodology

This study is conducted to investigate determinants of gold price in Malaysia by considering influencing factors such as stock price, consumer price, commodity price and housing price. The secondary data used was technically extracted from various sources such as Bank Negara Malaysia (BNM), National Property Information Centre (NAPIC), Malaysian Department of Statistics, Index Mundi, Federal Reserve Bank of ST. Louis (FRED) and others. Quarterly data

collected covers from the year 2006 until 2015 consisting of one dependent variable and 4 independent variables. To achieve the objectives of the study time series data and Least Square Method are used to conduct the analysis. All data are transformed into natural logs and regressed using the Econometric Views Software (E-Views 6.0).

The model has been created with the log equation as follows:

$$\ln GP = \beta_0 + \beta_1 \ln(SP) + \beta_2 \ln(CP) + \beta_3 \ln(COMM) + \beta_4 \ln(HP) + \epsilon$$

Equation 1

Where:

- GP = Gold price
- SP = Stock price
- CP = Consumer price
- COMM = Commodity price
- HP = Housing price
- β = Coefficient for the dependent variables
- ϵ = Error terms

Findings and Arguments

Table 1 represents the descriptive statistics for the data of this study. The dependent variable is gold price, and four independent variables are stock price (SP), consumer price (CP), commodity price (COMM) and housing price (HP). CV (Standard deviation/mean) describes the dispersion of variables. The higher the CV the higher the dispersion in the variable and vice versa. CP has the lowest CV of 0.008712 percent, which indicates it has less variability and hence produces greater consistency and stability. Correlation analysis reveals that GP has a positive association with all variables investigated, including SP, CP, COMM, and HP. With a correlation coefficient of 0.766173, HP and GP have the strongest association. There is no multicollinearity among the variables because none of the correlation values exceeds 0.8.

Table 1
Descriptive and Correlation Analysis

	GP	SP	CP	COMM	HP
Mean	8.261295	7.243267	4.673251	5.017751	5.054768
Median	8.368328	7.299485	4.666263	5.021949	4.998205
Maximum	8.636397	7.536828	4.74293	5.313649	5.435031
Minimum	7.689371	6.767147	4.599152	4.576976	4.768139
Std. Dev.	0.29109	0.228943	0.040715	0.221209	0.220618
CV	0.035235	0.031608	0.008712	0.004082	0.043646
Correlation	1	0.743059	0.030967	0.472051	0.766173

In Table 2, the coefficient determination of adjusted R Square is 0.699778. It shows that up to 70 percent of the price of gold has been influenced by stock price, consumer price, commodity price, and housing price. On the other hand, another 30 percent could be attributed to additional factors not examined in this study. According to the coefficients in Table 2, there is no significant association between stock price and gold price. The data of $p=0.1878$, $t=1.343241$, and $\beta=-0.407315$ demonstrated no relationship between these two variables. However, it is discovered that three more variables (COMM, HP, and CP) are significant in explaining gold price. Consumer prices significantly affect gold prices in a

negative ($p=0.0519$, $t=2.012167$, $\beta=-1.562778$). It indicates that a 1 percent increase in consumer prices results in a 0.1562778% decrease in the price of gold. The hypothesis related to this variable can be concluded as there is a relationship between consumer price and gold price. Additionally, there is a strong positive correlation between commodity prices and gold prices. The data revealed $p=0.0035$, $t=3.131959$, and $\beta=0.480686$. The price of gold will rise by 0.480686 percent for every one percent increase in the price of a commodity. It clearly demonstrates the existence of a relationship between commodity prices and gold prices. According to recent results, commodity prices have a considerable association with gold prices. Last independent variable tested likewise has a substantial positive relationship with the gold price. Observed data indicate that $p=0.0001$, $t=4.583607$, and $\beta=1.382755$ respectively. According to this interpretation, the price of gold will rise by 1.382755 percent for every percent increase in housing prices. Housing price ($t=4.583607$) is revealed as the dominant and strongest value of factors that influence gold price followed by commodity price ($t=3.131959$) and consumer price ($t=2.012167$). Except for H_1 , the value examined only supports three of the four hypotheses, which are H_2 , H_3 and H_4 .

Table 2
Regression Coefficients ^a

	Adjusted R ² = 0.699778	Sig = 0.000	
Model	Standardized Coefficients (β)	t	Sig.
C	9.113369	2.384428	0.0227
SP	-0.407315	1.343241	0.1878
CP	-1.562778	2.012167	**0.0519
COMM	0.480686	3.131959	***0.0035
HP	1.382755	4.583607	***0.0001

^a Dependent Variable: GP; Note: Indicate significance: ***1% Level, **5% Level

Conclusions

The significance of this study was brought about by determining how various factors affected the price of gold. The results of this analysis made it abundantly evident that, except for stock price, all independent variables, including consumer price, commodity price, and housing price, significantly influence the price of gold. Housing price becomes the most dominant variable related to the gold price. Stock prices, however, do not significantly affect gold prices. Following are the findings' conclusions:

Firstly, Malaysia has no impact between stock price and gold price. The direction, however, suggests that a rise in stock prices could result in a fall in the price of gold. Besides that, the correlation shows a positive correlation for this study. Inverse substantial relationships between stock price and gold price have been found in earlier studies by (Bhunia & Mukhuti, 2013; Omag, 2012). Even Bhunia & Das (2012) revealed that when the stock market crashes or declines, gold continues to be a safe haven investment, but it is not necessary for investors will choose to invest in gold.

Second, the regression analysis shows a substantial negative and significant relationship between consumer prices and the price of gold. The findings are consistent with a prior study

by Nurulhuda, Izzat, and Rahayu (2014), which found an inverse relationship between the rate of inflation (consumer price) and the price of gold.

Thirdly, the costs of housing and the price of commodities in Malaysia are positively and significantly correlated with the price of gold. However, because these two variables are novel, there is no solid evidence from past research to support the findings. It signifies that there was a new discovery for these two independent variables. It shows that both variables were influenced by the gold price. According to the findings of this study, consumer prices, commodity prices, and housing prices, all have an impact on the gold price. However, stock prices do not have an impact on the gold price. In conclusion, the objective of this study has been met since consumer prices, commodity prices and housing prices have influenced gold prices in Malaysia.

This study has successfully demonstrated that housing and commodity prices are two novel factors that affect gold prices but have not yet been thoroughly investigated by other scholars. Future research should ideally have a broader focus and consider housing and commodity prices as independent variables or causes. These elements might be able to produce more writing. Future studies ought to investigate the gold price over both short and long-time horizons to help investors predict their expected returns.

References

- Amira, N. E. (2013). The Relationship between Macroeconomic Variables and Gold Price in Malaysia. *Prosiding Perkem VIII, Jilid 3 (1413-1421)*.
- Bhunja, Amalendu., and Das, A. (2012). Association between Gold Prices and Stock Market Returns: Empirical Evidence from NSE. *Journal of Exclusive Management Science, Vol. 1(2)*.
- Bishnoi, R., and Lan, J. (2014). An Empirical Analysis of Factor Affecting Gold Prices. *International Journal of Hepatobiliary and Pancreatic Diseases, Vol. 3(2)*.
- Cutler, J., Chan, C., and Li, U. (2005). The Relationship between Commodity and Consumer Prices in Mainland China and Hong Kong. *Hong Kong Monetary Authority Quarterly Bulletin, 16-31*.
- Habibu, S. (2020). Gold in Demand Despite Record Price. <https://www.thestar.com.my>. August,8.
- Hanif, Z., Nabilah, A. S., Salwani, A., and Mansor, W. M. (2015). Factors Affecting the Price of Gold in Malaysia. *Journal of Basic and Applied Scientific Research, 5(7), 41-46*.
- Lee, E. (2020). Jewellers Shine Amid Gold Rush. <https://www.theedgemarkets.com>. August 12.
- Leung, C. K. Y., Shi, S., and Tang, E. (2013). Commodity House Prices. *Federal Reserve Bank of Dallas Globalization and Monetary Policy Institute. Working Paper, No. 154*.
- Mamcarz, K. (2015). Determinants of the Price of Gold in Short Term. *Finanse, Rynki Finansowe, Ubezpieczenia, N.74. pp.1-11*
- Nangolo, C., and Musingwini, C. (2011). Empirical Correlation of Mineral Commodity Prices with Exchange-Traded Mining Stock Prices. *The Journal of the Southern African Institute of Mining and Metallurgy, Vol. 111*.
- Norhafiza, N., Sabariah, N., and Rusmawati, I. (2014). The Impact of Commodity Prices, Interest Rate and Exchange Rate on Stock Market Performance: An Empirical Analysis from Malaysia. *Malaysian Management Journal, Vol. 18, pp. 39-52*.

- Omag, A. (2012). An Observation of The Relationship Between Gold Prices and Selected Financial Variables in Turkey.
- Ong, T. S. (2013). Factors Affecting the Price of Housing in Malaysia. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, Vol.1, No. 5 (May., 2013).
- Pindyck, R. S. (2004). Volatility and Commodity Price Dynamics. *The Journal of Futures Markets*, Vol. 24, No. 11, pp. 1029–1047.
- Rudrakanchana, N. (2013). Connection between US interest rate and gold prices is looser, and less important than investors think. World gold council. <http://www.ibtimes.com/connection-between-us-interest-rates-gold-prices-looser-less-important-investors-1366691>.
- Smith, G. (2002). London Gold Prices and Stock Price Indices in Europe and Japan.
- Sharma, S. S. (2016). Can the consumer price index predict gold price returns? *Economic Modelling*, Elsevier, vol. 55(C), pages 269-278.