The Impact of British Pound/American Dollar Parity on Global Gold Prices (1792-2020)[1]

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ARTICLE INFO	ABSTRACT
	Purpose – In that study, the goal is to unravel the effect of British Pound / US dollar parity from 1792-2020 on global gold prices. **Design/methodology/approach** Robust-M test, VAR impulse response analysis, Johansen cointegration method, Markov regime switching method, least squares with breaks method, filtered regime probability methods were applied. Not only data were analyzed for the aggregate period(1792-2020); data were also analyzed for different periods. For each different period, econometrical methods were implemented. **Findings –** Pound / USD parity had an adverse effect on the fluctuations in global gold prices, according to the Robust-M test. In least squares with breaks method and Markov switching regression model, in each state, the Pound/USD parity impact on global gold prices are different. For after the Bretton Woods period, filtered regime probability analysis unearthed that there was a regime change during the 2008 global financial crisis. It can be indicated that the Pound/USD parity regime's impact on global gold prices has not changed until the 2008 global financial crisis. Moreover, VAR based impulse response analysis result is similar to the least squares with breaks results for after the Bretton Woods period. After the Bretton Woods regime, no long term relationship was found between Pound/USD parity and global gold prices that are priced by USD. With the flow of time, the positive impact of Pound/USD parity grew from 1974-2020 as global gold prices shifted. Between 2009-2020, the parity had a significant positive influence on global gold prices. It can be indicated that appreciation of Pound against USD led global gold prices to increase fast after the 2008 global financial crisis. **Discussion –** The research results correspond with Sjaastad (2008)'s theoretical approach. Since global gold prices are priced in USD, Pound had significant importance on USD priced global gold prices. Stability between Pound and USD is significant to have a sustainable global economy. If that stability does not exist in the global economic system, gold prices can rise fast, and that can lead to inflation rates to increase across the world. Moreover, in the future, new steady bitcoins can be used as hedging tools.

1.INTRODUCTION

Gold is a precious metal with monetary assets that can be bought and sold for centuries. Gold, which functions like a fortune and a currency, has properties similar to money (Tully and Lucey, 2007: 317). Charles de Gaulle once said, "There can be no other criterion, no other standard than gold. Yes, gold, which never changes, which can be shaped into ingots, bars, coins, which has no nationality and which is externally and universally accepted as the unalterable fiduciary value par excellence". Not only was gold crucial for purchasing power for a very long time, but also gold was important for value standardization. It was also durable and divisible (Capiea et al., 2005: 343-344). The classic gold standard has attracted the attention of economists, economic historians, and policymakers since 1870. After the first and second world wars, exchange rates became unstable, and the gold standard among politicians came to the fore. From the mid-1870s to the late 1890s, commitment to gold was fully discussed (Bordo and MacDonald, 2005: 308). A safe haven is an asset that does not correlate inversely with any asset or portfolio if the market is not in good shape. This property does not mean that the correlation is on average positive or negative but that it is only zero or negative in specific periods. Hence, the link may be favorable or negative in normal periods or in unfavorable business situations

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(Baur and Lucey, 2010).Gold, the basis of the money system, has long been used as a hedging tool. There were areas where silver was used, and indirectly the British pound attached to the gold shook most of the empire. However, gold was still the standard most countries desire, Australia, after tying the currency to gold (Capie et al., 2005: 344-345). The Bretton Woods system was the latest experiment with a fixed exchange rate regime. Although initially designed as a flexible peg, it has evolved into a temporary fixed exchange rate system. The system ended on 15 August 1971 by President Nixon. A past glance at the Bretton Woods system is timely 20 years after that crucial decision (Bordo, 1993). The aim was to create a new international monetary policy following the rapidly changing exchange rates after the First World War, the collapse of the gold-exchange standard, global deflation, bilateral trade, and exchange restrictions (Bordo, 1993). The leading members of the international monetary system, the United States and Britain, as well as Western Europe and Japan to realize a robust economic structure, the balance of payments surplus, increased efficiency, increasing trade competition and the economic dependence of these countries to each other, increased exchange rates made an inevitable crisis that could not be solved within the system. When the robustness of the dollar became dubious, there was no gold to cover the emerging dollars, and the major economies did not want to hold the dollar as they used to. In 1971 (August 15), the conversion to gold was stopped. In December of the same year, the Smlitonsion Institute agreed to devaluate 9% of the dollar and re-adjust the significant currencies (Turkcan, 1980: 100).

On the other hand, these institutions served a system in which humanity, who had left the two major wars behind, was in great desperation and established by the developed countries, especially the USA, by taking into account both the immediate and long-term economic interests of them (Altınay and Akıncı, 2018: 2). According to economists, uncertainties in the world monetary system and especially in currencies, are among the leading causes of imbalances in the world economy. The Triffin Dilemma plays an essential role in explaining the fundamental problem of the Bretton Woods System. According to Belgian economist Robert Triffin, the US's attempt to close the balance of payments deficits leads to liquidity shortages in the world and deflationary pressures in the world economy. If the US fails to close the gap, the system can not fulfill its commitment to convert the dollar into gold, and a crisis of confidence arises. Therefore, the system can't survive in the long term, and the system will collapse due to the trust problem (Al, 2011: 131).

Although there are numerous studies about the relationship between parity and gold relationship, there are no studies about the impact of British Pound/American Dollar parity on the change of global prices for very long time. One of the main objectives of that research is to unearth the relationship between Pound/USD parity and global gold prices for a very long time. In that research, another main objective is to find out the relationship between Pound/USD parity and gold prices for different time periods such as the period between 1792-2020, Bretton Woods period, and post-Bretton Woods period.

2. LITERATURE REVIEW

In the literature, numerous studies focused on the relationship between gold prices and exchange rates.

Sjasstad and Scacciavillani (1996); studied exchange rates and internationally traded commodity prices. By using forecast error data was analyzed in the case of gold, it was found out that the exchange rate value or depreciation had substantial effects on the gold price.

Capie et al. (2005); evaluated how gold is affected by exchange rate risk using data on weekly gold prices and pound-dollar and yen-dollar rates for thirty years. A typically inelastic relationship is established between gold and exchange rates, but the strength of this relationship has changed over time.

Tully and Lucey (2007); developed an APGARCH model to investigate the shocks that macroeconomics bring to the gold spot and futures markets, and have also found that the US Dollar is an important macroeconomic variable that will affect gold price volatility.

Baur and Lucey (2010); investigated the fixed and time-varying relationships between stock and bond yields and gold returns in the US, UK, and Germany. Research results have shown that gold is a safe haven for stocks, but gold is often not a safe zone for bonds.

Shafiee and Topal (2010); investigated gold market demand, availability, and quality. The analysis found that over the last four years, the association between gold price increase and average inflation has been about 9 percent, so there is no primary connection between the gold price and inflation.

Joy (2011) researched the relationship between the price of gold and the USD dollar. Twenty-five years of change of USD dollar and the price of gold was also examined. By using 23 years of weekly data for 16 major-dollar-paired exchange rates, it was found that gold can be used as a hedging instrument against the dollar.

Samanta and Zadeh (2012) researched the co-movements of US stock price, world gold price, word oil price. By using daily data for 20 years, it was unearthed that common trend, Granger causality, and volatility spillover exists between those variables.

Omag (2012) researched the relationship between chosen financial indicators and gold prices between the period of January 2002-December 2011. By using the regression model, the results showed that there was a positive relationship between the national gold prices, Istanbul Stock Exchange 100 Index, and the USD/TL parity.

By using quarterly and daily data, Apergis (2014) researched about the relationship with the Australian dollar/US Dollar nominal and real exchange rates. From 2000 to 2012 years, it was founded that gold price information enhances the Australian dollar/US dollar exchange rate forecast.

Srinivasan (2014); investigated the causality between gold prices, stock prices, and exchange rates in India between June 1990 and April 2014. ARDL bounds test and Granger causality test was implemented. It was revealed that that gold prices have a long term relationship with the exchange rate in India.

Giannellis and Koukouritakis (2019) analyzed domestic and global macroeconomic results on gold prices. They used annual data from the G7 countries for the duration between 1980–2016. They found that gold can be used as a hedging tool if when financial risk is very probable.

Contrary to previous studies, Beckmann et al. (2015) showed the dollar's particular position in the partnership between the gold and exchange rates. It was found that the dollar exchange rate fluctuations more often lead to robust hedging features of gold prices. Besides, they have reported that the gold price denominated in the US dollar rose despite dollar value decreased.

By implementing wavelets at multiple time horizons, Qureshi, S. et al., (2018) found that gold act as a consistent short-run hedge against the exchange rate between 1992-2015. That finding confirmed the exchange rate destruction hypothesis.

3.THEORETICAL FRAMEWORK

Sjaastad (2008) used the following equation to describe the relationship between foreign exchange rates and commodity prices.

$$P_r = \sum \theta \cdot E_r + K(X) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 1$$

K(X) can be defined as global fundamentals where $E_r \equiv E + P_j{}^* - P_i{}^*$ is the purchasing power parity (real exchange rate between blocks one and j. θ_J is the elasticity of the nominal price in block 1 for the nominal exchange rate (or price level) of block j, the "theta" in the equation is essential for the analysis. Since theta will track the relative trading forces, every nation has on the global market. Given that currency 1 's low depreciation against all other currencies (holding both P*j constant) occurred; the influence of that diminishing value of currency on P_1 is $\sum \theta_j = 1 - \theta_1$. If currency block 1 is a consumer and does not have a significant position in the global gold sector, that depreciation will have no impact on the price of gold in other currencies. In that scenario, $\theta_1 = 0$. In other terms, on the world gold market, currency bloc 1 is the classic "small" economy. On the other side, if block 1 is a leading player and price determiner on the global gold market, that depreciation will have no influence on the price of gold in currency 1 as that bloc is a major price determiner in the global gold market, so $\theta_1 = 1$. Major currency exchange rates have had high variability since 1973. The mathematical expression $\sum \theta_j \cdot (E_{1j} + P_j)$ is a big determinant of shocks to gold values. Accordingly, it may be beneficial to estimate θ_j. Such information can help identify price shocks encountered by consumers and gold

producers; to the extent that exchange rates can be predicted, the influence of volatility on gold prices can be predicted (Sjaastad, 2008).

In the literature, there is no research about the influence of Pound/USD parity on USD based global gold prices for a very long time. Due to the asymmetric impact, Pound change against USD may have an influence on global gold prices that are priced by USD.

Thus following hypotheses are formed.

H1: Pound/USD parity can have a significant impact on global gold prices between the period of 1792-2020.

Although in current times, Pound/USD parity is not very volatile compare to past periods, there is still volatility. After the Bretton Woods period, USD did not move in the same direction as gold prices. In addition, the volatility of major currencies increased. Thus, the second hypothesis can be written as follows.

H2: Pound/USD parity can have different impacts on global gold prices between the period of 1792-2020.

Moreover, long term relationship between Pound/USD parity and global gold prices are also unknown. By using the yearly data for after Bretton Woods period, the following hypothesis can be formed.

H3: There can be a long term relationship between Pound/USD parity and global gold prices.

4. METHODOLOGY

In the methodology section, in all analyses, yearly data between 1792-2020 was analyzed. Global financial development database, St.Louis Fed database, and Macrotrends database were used.

4.1.Robust Regression

Robust regression, is to use a fitting criterion that is not as vulnerable as least squares to unusual data. This class of estimators can be regarded as a generalization of maximum-likelihood estimation, hence the term "M"-estimate (Fox and Weisberg, 2013).

$$y_i = \alpha + \beta 1 x_{i1} + \beta 2 x_{i2} + \cdots + \beta k x_{ik} + \varepsilon_i \dots\dots\dots 1$$

$$y_i = x' \beta + \varepsilon_i \dots\dots\dots 2$$

Given an estimator b for β, the fitted model is

$$k_i = a + b1 x_{i1} + b2 x_{i2} + \cdots + bk x_{ik} + e_i = x_i'b \dots\dots\dots 3$$

the residuals are given by

$$e_i = y_i - k_i \dots\dots\dots 4$$

With M-estimation, the estimates b are determined by minimizing a particular objective function over all b

$$\Sigma_Q(e_i) = \Sigma\rho(y_i - x'_i b) \dots\dots\dots 5$$

where the function ϱ gives the contribution of each residual to the objective function (Fox and Weisberg, 2013)

In that research, unusual data can be found in global gold prices and Pound/USD parity because an extended period (1792-2020) will be measured. Robust-M least square test was implemented for the period between 1792-2020.

Table 1. Robust-M Least Square Test (1792-2020)

Dependent Variable: GOLD				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	54.51713	0.877236	62.14652	0.0000
POUNDUSD	-6.925170	0.208451	-33.22199	0.0000
Robust Statistics				
R-squared	0.674440	Adjusted R- squared	0.673006	

According to Table 1(Robust-M least square test), Pound/USD parity had a significant negative impact on the change of global gold prices between 1792-2020. Since prob R-squared is less than 0.05; analysis can be implemented. Moreover, R square was found as 67.44%, which means Pound/USD parity can explain the change of global gold prices by 67.44%.

4.2. Least Squares with Breaks

Least squares with breaks analysis was applied for the period between 1792-2020. Least squares with breaks method is efficient in measuring the impacts in different periods. In other words, that analysis separates the data for different time breaks. With the implementation of that analysis, the impact trend will be unearthed. Least squares with breaks can be shown as follow.

$$\Delta Gold = -C + A1 * \Delta \frac{\text{Pound}}{\text{USD}} + A2 * \left(\Delta \frac{\text{Pound}}{\text{USD}} - \Delta \frac{Pound*}{USD*} \right) * D \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 6$$

D is a dummy variable. D will get 1 for each break separately. For example, for the time between 1792-1918, the dummy variable will be one, and other periods will be zero. The same equations can be constructed for other breaks.

Table 2. Least Squares with Breaks (1792-2020)

Dependent Variable: GOLD

Variable	Coefficient	Std. Error	t-Statistic	Prob.
1792 -1918 -- 127 obs				
C	3.575913	2.527034	1.415063	0.1585
POUNDUSD	3.538791	0.526493	6.721442	0.0000
1919 -1952 -- 34 obs				
C	54.66499	9.927041	5.506675	0.0000
POUNDUSD	-5.818365	2.451910	-2.372993	0.0185
1953 -1986 -- 34 obs				
C	720.2805	101.5890	7.090140	0.0000
POUNDUSD	-245.7401	34.41662	-7.140157	0.0000
1987-2020 -- 34 obs				
C	2756.030	697.8622	3.949247	0.0001
POUNDUSD	-1258.918	408.1866	-3.084174	0.0023
R-squared	0.735238			

Table 2. shows the result of least squares with breaks analysis. It was found that between 1792-1918 and 1919-1952, Pound/USD parity had a significant favorable influence on global gold prices. Between 1953-1986 and 1987-2020, Pound/USD parity had a significant negative impact on global prices. The effect became more intense with the break of 1953-1986. When time passes, the Pound/USD impact intensity increases in a negative direction. In that model, R squared was found as 73.52%. Since Prob(F-statistic) is less than 0.05, the analysis can be implemented. Moreover, another critical measurement period is after the Bretton Woods period. Table 3 indicates the least square with breaks results for the period between 1974-2020.

Table 3. Least Squares with Breaks (1974-2020)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
1974-2001 -- 28 obs				
POUNDUSD	-126.7774	112.4467	-1.127444	0.2658
2002-2008 -- 7 obs				
POUNDUSD	11.61343	112.0786	0.103619	0.9180
2009-2020 -- 12 obs				
POUNDUSD	533.3402	135.3031	3.941818	0.0003
Non-Breaking Variables				
C	556.5005	192.2076	2.895310	0.0059
R-squared	0.877543	Mean dependent var	628.8113	

Least squares with breaks method (Table 3) unearthed that the positive intensity impact increases when time passes. First, Pound/USD parity had a critical negative impact on global gold prices between the period of 1974-2001. Between 2002-2008, Pound/USD parity had a positive impact on global gold prices. Nevertheless, no significant effect was found. After the global financial crisis, the Pound/USD parity impact on global gold prices was more intense. It was unearthed that Pound/USD parity had a significant positive influence on global gold prices that are priced by USD.

4.3. Markov Switching Regression(1792-2020)

Markov Switching Regression analysis separates data for different regimes. In aggregate data, different regimes can be available. When time passes, economic conditions are not the same. It is highly probable that different regimes can exist. Markov Switching Regression can be shown as follows (Sanchez, 2016).

$$Y_t = \mu_S + x_t \alpha + z_t \beta_S \dots\dots\dots 7$$

Y_t indicates the dependent variable, which is global gold prices. μ_S is state-dependent intercept. In each state, μ_S can be different. X_t is a vector of exogenous variables with state invariant coefficients. Z_t is a vector of exogenous variables with state-dependent coefficients (Sanchez, 2016).

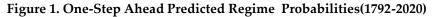$$P\,(S_t = j | S_{t-1} = i, S_{t-2} = k, S_{t-3} = w\dots) = P\,(S_t = j | S_{t-1} = i) = p_{ij} \dots\dots 8$$

Equation 8 indicates that the probability of the current state only depends on the previous state.

$$p1 + p2 = 1 \dots\dots 9$$

p1 and p2 are probabilities for 2 regimes. Sum of 2 regimes probability equals to 1.

Table 4. Markov Switching Regression (1792-2020)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
Regime 1				
POUNDUSD	-166.1279	10.14322	-16.37821	0.0000
LOG(SIGMA)	5.437112	0.056664	95.95404	0.0000
Regime 2				
POUNDUSD	-307.3830	20.17411	-15.23651	0.0000
LOG(SIGMA)	4.312672	0.124648	34.59888	0.0000
Common				
C	859.2988	45.46453	18.90042	0.0000

Markov Switching Regression(Table 4) indicates that Pound/USD parity had a significant negative influence on two regimes. It can be stated that Robust-M test results correspond with Markov switching regression analysis. Moreover, one-step ahead predicted regime probability test was implemented.

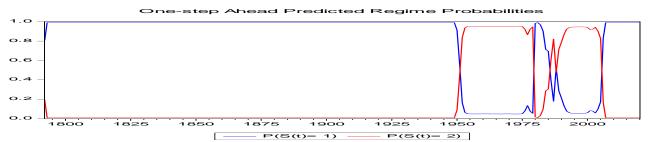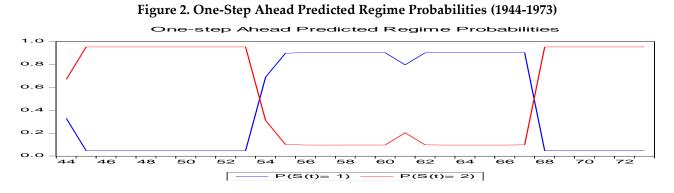### Figure 1. One-Step Ahead Predicted Regime Probabilities(1792-2020)

Figure 1 shows that regime 1 is more dominant than regime 2. In other words, when one-step-ahead predicted regime probabilities applied, the transition probability from regime 2 to regime 1 is more than transition probability from regime 1 to regime 2. Moreover, the Markov switching regression test was applied for the Bretton Woods period (1944-1973).

Table 5. Markov Switching Regression (1944-1973)

Dependent Variable: GOLD

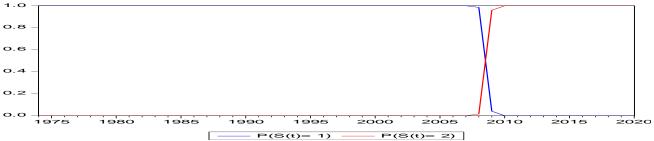| Variable	Coefficient	Std. Error	z-Statistic		Prob.
Regime 1					
POUNDUSD	12.64765	0.039253	322.2066		0.0000
LOG(SIGMA)	-1.007873	0.213770	-4.714765		0.0000
Regime 2					
POUNDUSD	14.10727	2.023958	6.970140		0.0000
LOG(SIGMA)	3.101676	0.197424	15.71069		0.0000
Transition Matrix Parameters					
P11-C	2.267632	0.967424		2.343991	0.0191
P21-C	-3.030272	1.240697		-2.442395	0.0146

It was found that Pound/USD parity had a significant positive influence on global gold prices during the Bretton Woods period. Two regimes were found for the Bretton Woods period. Regime 2 impact was more than the Regime 1 impact. In addition to that analysis, Figure 2 explains the one-step-ahead predicted regime probabilities.

Figure 2. One-Step Ahead Predicted Regime Probabilities (1944-1973)

It was unearthed that there are regime changes during Bretton Woods period. Moreover, filtered regime probabilities were applied for the post-Bretton Woods period. It was unearthed that there is a regime change during the 2008 global financial crisis. Figure 3 shows that there is no regime change for the impact of Pound/USD parity on global gold prices until the 2008 global financial crisis. After the global financial crisis, a new regime emerged. In 2010, regime one is wholly ended, and regime two began. That research result also corresponds with least squares with break test.

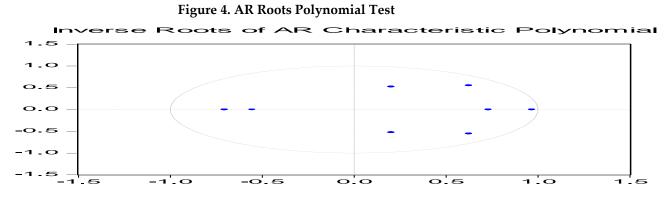**Figure 3. Filtered Regime Probabilities (1974-2020)**

4.4.Impulse Response Analysis

Impulse Response Analysis was implemented with the VAR test. After implementing the VAR test, the optimal lag length was determined. Since the period is between 1974-2020, AIC was chosen. According to AIC criteria, the optimal lag length was chosen as 2.
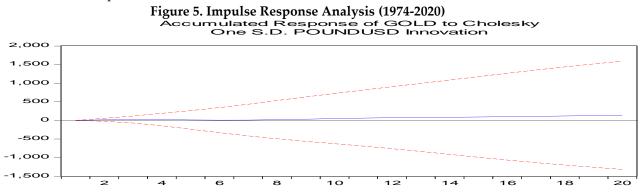
Table 6.VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-317.7958	NA	9882.150	14.87422	14.95614	14.90443
1	-241.5231	141.9028*	342.8867	11.51270	11.75845*	11.60332*
2	-236.6139	8.676631	329.2356*	11.47041*	11.88000	11.62146
3	-234.7477	3.124817	364.9468	11.56966	12.14307	11.78112
4	-229.2912	8.628803	343.3401	11.50192	12.23917	11.77379

After using VAR based lag order selection criteria, AR Roots Polynomial Test was implemented.

Figure 4. AR Roots Polynomial Test

Since dots are inside the circle, there is no stability problem of the model with given AIC-based lag length. Moreover, impulse response analysis was applied for the period between 1974-2020. Accumulated response model was chosen in impulse response analysis. Pound/USD innovation impact on global gold prices were measured for the period between 1974-2020.

Figure 5. Impulse Response Analysis (1974-2020)

According to the impulse response analysis result (Figure 5), when one standard deviation shock applied to Pound/USD parity, global gold prices increased. That research result also corresponds with least squares with breaks test.

4.5. The Long Term Relationship Between Pound/USD Parity and Global Gold Prices

Johansen cointegration test can be applied to find the long term relationship between Pound/USD parity and global gold prices. Before implementing the Johansen cointegration test, unit root analyses have to be done.

Table 7. Unit Root Analysis of Gold (I (0))

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		0.141827	0.9656

ADF test was applied for Gold(I(0)). ADF test unearthed there is unit root problem for non-differenced gold prices. Moreover, unit root analysis of first differenced gold (I(1)) was implemented with the ADF test.

Table 8. Unit Root Analysis of First Differenced Gold (I (1))

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.30070	0.0000

It was found that Gold(I(1)) has no unit root problem.

Table 9. Unit Root Analysis of Pound/USD Parity (I (0))

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.717625	0.0788

ADF test was applied for Pound/USD parity (I(0)). According to ADF test, Pound/USD parity (I(0)) is non-stationary. Moreover, unit root analysis of first differenced Pound/USD Parity (I(1)) was applied. Non-stationary data were converted to the first differenced series.

Table 10. Unit Root Analysis of First Differenced Pound/USD Parity (I (1))

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.738033	0.0000

It was found that Pound/USD parity (I (1)) do not have a unit root problem. It can be indicated that global gold prices and Pound/USD parities are stationary at the same order. Both series are non-stationary at I (0). To remove the linear combination problem, the Johansen cointegration test will be applied with the I (0) series. If I (1) series are used, the result will be spurious.

Table 11. Johansen Cointegration Test with Linear Deterministic Trend

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.245800	12.70612	15.49471	0.1260
At most 1	0.000261	0.011743	3.841466	0.9135

Johansen cointegration test with linear deterministic trend unearthed that there is no long term relationship between Pound/USD parity and global gold prices. Moreover, analyses were also done with all trends.

Table 12. Johansen Cointegration Test with All Trends

Data Trend:	None	None	Linear	Linear	Quadratic
Test Type	No Intercept	Intercept	Intercept	Intercept	Intercept
	No Trend	No Trend	No Trend	Trend	Trend
Trace	0	0	0	0	0
Max-Eig	0	0	0	0	0

Johansen cointegration test with all trends unearthed that there is no long term relationship between Pound/USD parity and global gold prices for I (0) series.

5.CONCLUSION AND DISCUSSION

In that research, the relationship between global gold prices and Pound/USD parity was revealed between the period of 1792-2020. It was unearthed that the impact of Pound/USD parity had a significant negative influence on global gold prices between 1792-2020. It was found that the Pound/USD parity positive impact on global prices increased fast after the 2008 global financial crisis. It can be mentioned that Pound/USD parity change became more critical to predict the shift of global gold prices after the 2008 global financial crisis. After the global financial crisis, gold prices rose very fast. That research shows that one of the fundamental reasons for fast global gold prices increase is the appreciation of Pound against USD.

Besides, the Markov Regime Switching test revealed that Pound/USD parity had a significant positive impact on global gold prices during the Bretton Woods period (1944-1973). It can be mentioned that the Pound/USD parity had a substantial role in the pricing of USD based global gold prices, and the Pound/USD parity impact is different for different regimes. According to empirical results, hypothesis 1 and hypothesis 2 is accepted. Acceptance of hypotheses showed that research results correspond with Sjaastad (2008)' theoretical approach, which is about the relationship between foreign exchange rates and commodity prices. The research result showed that two major big economies' currency parity is significant for pricing global gold prices that are priced by USD. Moreover, the research result also corresponds with Giannellis and Koukouritakis (2019) and Beckmann et al. (2015)' indications. They mentioned that gold can used as strong hedging function for thwarting the financial risks.

Moreover, in that research filtered regime probabilities were implemented after the Bretton Woods period (1974-2020). The filtered regime probabilities unearthed that the regime impact of Pound/USD parity changed for the first time after the global financial crisis. VAR impulse response analysis was also implemented for the period between 1974-2020. When one positive standard deviation shock is given to Pound/USD parity, global gold prices increased for the periods between 1974-2020. It can be indicated that the VAR impulse response research result corresponds with least squares with breaks method. Moreover, the Johansen cointegration method was implemented to find the long term relationship between Pound/USD parity and global gold prices. According to that analysis, there is no long term relationship between Pound/USD parity and global gold prices. Therefore, Hypothesis 3 is not accepted.

Gold has an indispensable significant role in the global financial system. Increasing global gold prices can have a crucial inflationary impact on both developed and developing countries. Business analysts and central bank research departments can observe the change of Pound/USD parity, and they can also follow the impact of that parity on global gold prices. Fast increases in gold prices can trigger a global financial crisis. Stability of western countries' currencies parity is essential to minimize the risk of another global financial crisis.

Besides, that research can be expanded by observing the comparative influence of other exchange rates on the change of global gold prices. High-frequency models can also be implemented to unearth the relationship between Pound/USD parity and global gold prices that are based on USD. With high-frequency models, the determinants of gold price jumps can be detected. If there are continuous jumps of global gold prices, Poisson based jump models can be used. For example, via implementing Poisson based jumps models, researchers can can unearth the relationship between Pound/USD parity and global gold prices (USD) in a high-frequency domain. Also, that research can be expanded by observing the comparative influence of other exchange rates on the change of global gold prices. Pound/Swiss Franc, Pound/Euro, and Pound/Yen can also be used to have comparative analysis with Pound/USD parity in high and low-frequency domain.

Moreover, the convertibility of gold, which has an indispensable role in the economy, can be created. Gold-like commodities can be used as a hedging tool against the dollar and other world currencies. The purchasing power of these convertible commodities should be close to gold even if they are not equivalent to gold. With the pandemic effect, the relationship between gold and dollar is changing in the markets. Therefore, a different hedge tool comparable to gold would be very reasonable for economic balances. In the future, a separate hedge tool can be blockchain-based bitcoins. In current times, due to its high volatility, bitcoins alone are not able to be used as world currencies such as Pound and USD. In the future, if new bitcoins models are derived in new blockchain models, that bitcoin models can be used as the world currency. Assuming, Pound appreciation against USD increases global gold prices again. Increased global gold prices may lead to inflation rates to expand across the world. If the households can use stable bitcoins as the world currency, appreciation of steady bitcoins return can be more than actual inflation. In that circumstance, stable global bitcoins can be used to overwhelm the inflationary influence of global gold prices on households.

Besides, central banks worldwide can create new cryptocurrencies, and those currencies can also be traded in global financial markets. Monetary market authorities can also open new derivative markets that are based on cryptocurrencies. Investors can also invest in those new cryptocurrencies. If bitcoins volatilities are not high in global financial markets, smart contracts can also be based on new cryptocurrencies. If business to business models across the world can use new bitcoins in smart contracts, those bitcoins values can rise fast, and those bitcoins can be used as a hedging tool.

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