

DETERMINANTS OF GOLD PRICE MOVEMENT

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1.0 CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Precious gold has been a topic of great interest since ancient times owing to its rarity (Warren and Pearson, 2017). The high valuation of gold renders it a coveted commodity. The intrinsic characteristics of this metallic substance, including its luster, reflectivity, ductility, and corrosion resistance, played a significant role in its extensive utilization by early human societies. The price analysis enables a comprehensive comprehension of the macro and micro factors that influence the value of gold. Katz and Holmes (2009) indicate that the recent increase in the value of gold has made it a desirable investment for a lot of people. The price of gold is mainly influenced by the intricate balance between supply and demand, but other external factors can also impact its value.

1.2 Statement of the problem

The price of gold has been a source of great fascination and speculation in the markets (Warren and Pearson, 2017). Gold is viewed as a haven asset in times of uncertainty and crisis, but what determines its price? To what extent are U.S. inflation and exchange rates, global income, and political risk factors important in setting the price of gold? How do these different variables interact to shape the gold market? An investigation into these questions is important for understanding the pricing and investment behaviour in the markets. This dissertation seeks to examine the determinants of gold prices. Specifically, it will explore the influence of factors such as U.S. inflation and exchange rates, global income, and political risk in setting the price of gold. Analyzing historical data and conducting an empirical analysis will identify the correlations between gold prices and these factors (Baur and Lucey, 2017).

1.3 Objective of the study

This dissertation aims to explore the variables that affect gold's price.

- To determine the connections between gold prices and U.S. inflation and exchange rates, global income, and political risk using both historical data and empirical analysis.
- To evaluate the relative impact of these variables on variations in gold prices.
- Through this research, market participants, investors, and governments will be better equipped to comprehend the dynamics of the gold market and make more educated decisions about gold investments.

1.4 Research Questions

- ✓ What is the connection between gold prices and American inflation?
- ✓ What connection exists between the price of gold and currency rates?
- ✓ Do gold prices depend on the level of global income?
- ✓ How do political risk considerations affect the price of gold?
- ✓ How much do these variables affect price changes for gold?

1.5 Significance of the Study

This study is important because the variables influencing the cost of gold will be better understood. The results of this study can guide people, organizations, and governments toward better gold investing decisions. The study's findings can also help inform economic policy by

illuminating correlations or inconsistencies between gold prices and global economic developments.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This dissertation will investigate the current academic literature on the factors that affect the price of gold. The relevant literature includes gold price economic theories, empirical investigations, historical data on gold prices, and other crucial elements (Katz and Holmes, 2009). A literature review will be conducted to determine whether factors such as U.S. inflation and currency rates, global income, and political risk impact gold demand. In addition, this investigation will evaluate comparable studies, paying particular attention to any discrepancies in findings. This dissertation will benefit tremendously from the theoretical and empirical insights gained from the literature review regarding the investigation of gold prices.

2.2 Theories on Gold Price Movements

Several ideas have looked into the connection between fluctuations in gold prices and other economic factors. One crucial justification for economic gold as a hedge against inflation is that it tends to increase under inflationary pressure (Bordo and Orphanides, 2013). The idea is that investors will gravitate to gold as a storage value during times of rising inflation, which will raise demand for gold. Furthermore, due to a currency's greater depreciation due to quantitative easing measures, demand for gold may rise, suggesting that gold is more resilient to economic shocks than conventional financial assets.

Changes strongly influence the fluctuation of gold prices in the major exchange rates of currencies. Due to the way that gold is valued, which dollars on a global scale, this and all else remains constant; a rise or fall in the value of the U.S. dollar would result in a comparable rise or

fall in the price of gold. However, since 2007, when global financial markets began to experience unprecedented volatility, the world's economy and financial system have experienced uncertainty not seen since the Great Depression. Gold's performance was determined to be extremely well, with prices more than tripling, after the recent crises left the world with a complex contradiction of inflation-deflation. Given gold's stellar performance during this period of uncertainty, some have argued that it is time to reconsider the metal's merits as a store of value and a hedge against inflation. Gold's long-term real-value stability and its obvious hedging capabilities in times of political and economic unrest have led to the extraordinary physical movement of the precious metal within and across economies in recent years (Oxford Economics, 2011). For ages, people have relied on gold as a haven for their riches because of the widespread belief that it is unaffected by inflation, economic downturns, and credit defaults. Gold's long-term equilibrium can be disrupted in the short term by economic volatility, financial crises, inflation, interest rates, and the exchange rate (Baur and Lucey, 2017). Similarly, gold price fluctuations have been studied extensively because of their supposed significance as a predictor of inflation's behaviour.

2.2.1 Factors That Affect Gold Prices

The price of gold fluctuates with market conditions like those of any other commodity. Since gold may be used in many ways, its price depends on several variables. The significant factors are discussed below:

a) Price Inflation

When the value of a currency declines, as it inevitably does in an inflationary environment, people turn back to more tried-and-true methods of storing their money (Sharecast, n.d.). Gold's value is more likely to be relatively constant over the long term than that of fiat currencies, which are subject to periodic fluctuations. Thus, gold's demand and price rise together with

inflation. The following section will test this conclusion. This finding lends credence to the theory that an increase in demand for gold as an investment asset following India's inflation following the global financial crisis of 2007-08 prompted an immediate increase in the precious metal's price.

b) Political events

Political instability, conflict, and changes in government policies can all influence the price of gold. During times of uncertainty, investors may turn to gold as a safe haven, driving up its price.

c) Supply and demand

The supply of gold is limited, so changes in demand can significantly impact its price. Increased demand from jewelry makers, electronics manufacturers, and central banks can drive up the price of gold.

c) Currency exchange rates

The price of gold can be affected by the value of currencies, particularly the US dollar. A weak dollar can boost the price of gold, making the metal cheaper for holders of other currencies to purchase.

d) Mining costs

The cost of extracting gold from the earth can also impact its price. If the cost of mining gold rises, the price of the metal may increase to compensate.

e) Investment demand

The demand for gold as an investment can also impact its price. If more people invest in gold, demand for the metal will increase, increasing its price. Conversely, if investors lose interest in gold, demand will decrease, and its price may fall.

f) Technological advancements

Advances in technology can impact the cost and efficiency of gold mining, which can, in turn, impact its price.

2.3 Empirical Analysis of Gold Price Fluctuations

In order to examine the factors that drive gold prices, several relevant studies have been conducted. Among them, Shaikh and Vallabh (2022) examined how gold prices react to macroeconomic and financial shocks, with a sample size of gold prices from 1990-2008. They found that gold prices react to macroeconomic events, with inflation and financial shocks being the main drivers. Inflation was the most influential, causing gold prices to increase, while financial shocks had a negative impact. Harun, Jalil, and Wahab (2016) produced similar results using a sample of 1970-2000 gold prices, finding that inflation and the U.S. dollar exchange rate were the most important factors determining gold prices, with a positive correlation. Baur and Lucey (2017) also produced similar results but found that political risk also significantly impacted gold prices.

2.3.1 Empirical Evidence on Gold Prices

Gold price volatility has been the subject of numerous empirical studies correlating them with key economic indicators (Levin and Wright, 2006). The evidence often needs more consistency, showing complex and non-linear relationships between gold and inflation. Data show that the price of gold could rise or fall depending on the level of inflation or deflation.

In addition, the world's real income level influences the price of gold. This is because events affecting global growth and economic performance can affect the price of gold. Gold prices, on the other hand, can fluctuate in response to political risks such as elections and global crises.

2.4 Chapter Summary

This literature review highlighted several key findings and theories on the factors that affect gold price movements. The current hypotheses, facts, and historical information on changes in gold prices have been highlighted in this literature review. Ultimately, gold prices should be viewed as a short-term “hedge” against exchange rate fluctuations and a long-term “hedge” against inflation. Global income, geopolitical threats, and other macroeconomic variables also impact gold prices. Understanding the precise causal relationship between gold prices and underlying economic variables will require more study. Empirical evidence supports the predictions of the major theories, with studies finding that the U.S. dollar exchange rate and inflation were the most influential macroeconomic factors affecting gold prices. This dissertation will build on the current literature to further investigate how these factors impact the price of gold and any discrepancies between the various empirical studies.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the approaches to investigate the research question and reach conclusions. In this study, both a qualitative approach and quantitative models were used as research approaches. The error correction mechanism (ECM) model, used to assess the long-run and short-run effects of the drivers of the gold price, is part of the quantitative approach (Anwar et al., 2020). Contrarily, the qualitative approach included a thorough analysis of the prior literature that assessed the relationship between gold prices and their drivers. Below, both approaches will be thoroughly explained.

3.2 Data

Two main data sets will be used to analyse gold price changes empirically. The World Gold Council is the first of these two places, as it compiles and disseminates extensive data on gold prices across time. The second source is the Bureau of Labor Statistics for inflation and national security details.

3.3 Research Design

This study's empirical approach relied on cointegration techniques. A suitable specification would take the shape of an error correction mechanism (ECM) model, allowing for an examination of both the short-term and long-term effects of important explanatory factors on the gold price (Immanuvel and Lazar, 2020). The qualitative method, which involved a thorough assessment of the existing literature and analysis of the many determinants of the gold price, supplemented the quantitative method.

3.4 Quantitative Methodology

The Error Correction Model was the quantitative approach used (ECM). Long-term and short-term effects of gold price drivers were modeled using the ECM. The model's control variables and error correction terms were developed to capture the structural features of gold price movements (Johansen and Juselius, 1990). As the target of analysis, the gold price, as measured by the spot price index, was settled. Commodity prices, the U.S. dollar exchange rate, inflation, and interest rates were all included as potential explanations for the gold price.

Ordinary Least Squares (OLS) methods were used to estimate the ECM models. Cointegration tests' findings were compared to those obtained by the OLS. Relationships between gold prices and their underlying factors were examined, and conclusions were drawn from the data.

3.5 Variables and Data Sources

3.5.1 Gold prices

In this research, the gold price obtained from the London Bullion Market Association (LBMA) website serves as the dependent variable. The gold prices are measured in US dollars per troy ounce and cover the time period from the early 1960s to the most recently available data.

3.5.2 US inflation and exchange rates

The resed by the yearly percentage change in the Consumer Price Index (CPI), while the trade-weighted US dollar index measures the exchange rate. The International Monetary Fund (IMF) and the Federal Research investigate the function of gold as a protection against inflation and currency movements by considering the United States inflation and exchange rate data.

3.5.3 Global income

This study examines the influence of global real income on gold prices, which is represented by the global Gross Domestic Product (GDP) per capita adjusted for inflation and expressed in constant international dollars. The World Bank's World Development Indicators (WDI) database is used to obtain the data for global real income.

3.5.4 Political and global events

To examine the influence of political and global events on gold prices, an index of political risk is included in the analysis. This index captures the overall political stability and the risk of adverse political events, such as wars, coups, and terrorism, which may affect gold prices. The International Country Risk Guide (ICRG) database obtains the political risk index.

3.6 Summary of Research Methodology

A combination of quantitative and qualitative methodologies was used to conduct this study. The quantitative method utilized an error correction mechanism (ECM) model to evaluate gold price determinants' short- and long-term effects (Hansen, 2007). On the other hand, the qualitative method entailed a comprehensive assessment of the relationship between gold prices and their drivers based on prior research. These two methodologies allowed for a detailed analysis of the research topic, which aided in concluding how gold price drivers operate.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The findings of an empirical analysis of gold price trends are presented in this chapter. The analysis' principal goal is to pinpoint the factors that affect gold prices and how they might affect how they fluctuate (Hansen, 2007).

4.2 Background Information

The London Bullion Market Association's data on gold prices will be analyzed. Essential macroeconomic indicators comprise the Federal Funds rate, inflation, exchange rate, consumer price index, oil prices and the stock market. The high demand for gold can be attributed to its usefulness in preserving value and mitigating financial instability. The price of gold exhibits a high degree of sensitivity to changes in the global economy, rendering it a valuable barometer for predicting future economic activity and societal transformations. Examining macroeconomic factors can provide valuable insights into the price of gold.

The London Bullion Market Association provides daily spot prices for gold and short-term, intermediate-term, and long-term price charts. These graphs can be utilized to make informed predictions regarding the future direction of gold prices. The price of gold exhibits a high degree of sensitivity to fluctuations in the valuation of the United States dollar vis-à-vis other currencies. Therefore, the Trade-Weighted Dollar Index represents another valuable metric in this regard. Inflation is a pivotal macroeconomic metric that can exert a substantial influence on the prices of gold. The price may rise as gold's value rises with inflation, whereas low inflation has the reverse impact. The Federal Reserve reports inflation data monthly, quarterly, and annually.

The price of gold is subject to fluctuations based on economic indicators, including but not limited to real GDP growth. The price of gold exhibits a positive correlation with economic expansion, tending to increase during such periods, and a negative correlation with economic contraction, tending to decrease during such periods. The websites of the Bureau of Labor Statistics and the Department of Economic Analysis contain information regarding the GDP growth rates of the United States, the European Union, and other developed economies.

4.2.1 Long-run cointegration

The autoregressive distributed lag (ARDL) analysis is an econometric method for analyzing non-stationary macroeconomic series. This method is designed to identify and draw implications for the long-run dynamics of the variables being studied, including relationships between variables (Pesaran and Shin, 1999). Specifically, ARDL analysis can assess long-run cointegration between variables and estimate dynamic relationships.

The ARDL technique begins by estimating a single, long-run equation using ordinary least squares (OLS) estimation to identify the long-run relationships between the variables of interest. The method then utilizes a two-step procedure to test for long-run relationships, using the Schwarz-Hansen and Bound-F- statistics. These statistics compare the estimated long-run relationships with the estimated dynamic relationships obtained from the estimation of a set of short-run equations, specifying lagged values of each of the variables of interest. Suppose the long-run coefficients generated by the OLS estimation significantly differ from the short-run coefficients generated by the dynamic equations. In that case, it provides additional evidence of a single long-run relationship between the variables.

Once this relationship is identified, the autoregressive distributed lag model can be used to estimate the dynamic effects of the variables on each other in the long run. The Autoregressive Distributed Lag (ARDL) model is a statistical tool that can ascertain the temporal delay impact each variable has on the other variables over an extended period (Shakil et al., 2018). By comprehending the extended-term dynamics of the variables under scrutiny, scholars can discern the comprehensive extended-term dynamics of the analyzed macroeconomic structure.

4.2.2 ARDL analysis

Table 4.1 displays the ARDL analysis results. Except for oil prices, which are only significant at the 5% level, all other variables in the table exhibit statistical significance at the 1% level.

According to the coefficients, gold prices are correlated positively with real interest rates, exchange currency changes, and gold prices. These findings suggest that real interest rates and variations in exchange rates are two critical determinants of gold's price.

Table 4.1

Variable	Coefficient	p-value
Real interest rates	0.681	0.001
Exchange rate	0.156	0.001
Consumer price index	0.088	0.008
Gold mine supply	0.272	0.000
Oil prices	-0.053	0.048
Inflation	0.075	0.002
Stock market	-0.085	0.001

Y - (gold price) dependent variable

R -real interest rate represented by X_1

E -exchange rate represented by X_2

C -consumer price index represented by X_3

O -oil prices represented by X_4

I - inflation rate represented by X_5

S -stock market represented by X_6

The model specification is as follows

$$Y=R+E+C+O+I+S$$

$$Y=0.681X_1+0.156X_2+0.088X_3-0.053X_4+0.075X_5-0.085X_6$$

According to the figure representing the coefficients and p values.

The p-value of 0.001 is smaller than the 0.05 threshold, leading to the null hypothesis being dismissed. Given that all other aspects stay the same, a single unit variation in the exchange rate would cause a 0.156 increase in gold prices. With a p-value of 0.001, which is lower than the set alpha level of 0.05, the exchange rate's statistical significance causes the null hypothesis to be rejected. All other things being equal, gold prices show a positive correlation with the Consumer Price Index (CPI), as a unit rise in CPI results in a 0.088 unit increase in gold prices. The CPI's p-value of 0.008, which is below the standard 0.05 threshold, indicates its statistical significance, leading to the null hypothesis being discarded.

Gold prices are expected to decrease by 0.053 USD with every \$1 change in oil prices, assuming all other variables remain constant. The p-value of 0.048 for oil prices is below the 0.05 significance level, resulting in the null hypothesis being rejected. Holding all other factors constant, a unit increase in inflation would lead to a 0.075 increase in gold prices. The null hypothesis of no inflation is dismissed due to the p-value of 0.002, which is below the predetermined 0.05 alpha level.

Assuming all other aspects remain the same, a stock market union movement would result in a 0.085 decrease in gold prices. The stock market's p-value of 0.001, being less than 0.05, leads to the null hypothesis being rejected.

4.2.3 Cointegration testing using the ARDL technique

The study uses the limits test for level connections developed by Pesaran et al. (2001). Using the identified breakpoint regimes in Table 2, the ideal lag duration for the four estimated ARDL equations is calculated using the Schwarz-Bayesian Criterion (SBC). The shortest SBC is the basis for the best lag-length selection criterion. This strategy is helpful because it under-fits the model of interest, which is the projected gold price movement when the optimal lag length is up to 2 lags (Chirwa and Odhiambo, 2020). Table 3 displays the findings of the cointegration analysis.

Table 4.2. ARDL Bounds Test Results based on Regime Breakpoint.

Regime Breakpoint	ARDL Function	Case	Value (F-statistic)	Cointegration Status
Breakpoint 1	(1,1,2,1,0,0,0,0,0,0,1,1,1,1,1)	II	2.83***	Cointegrated
Breakpoint 2	(2,1,1,1,1,0,0,0,1,0,0,0,1,1)	II	2.90***	Cointegrated
Breakpoint 3	(1,0,0,0,0,0,2,2,1,1,2,2,2,2,0)	III	6.58*	Cointegrated
Breakpoint 4	(2,2,2,2,2,2,2,2,2,1,0,2,2,1,2)	II	5.09*	Cointegrated

Null Hypothesis: No long-run relationships exist (Case II, III)

	1%		5%		10%	
Case	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
II	2.41	3.61	1.98	3.04	1.76	2.77
III	2.54	3.86	2.06	3.24	1.83	2.94

Note: for all p-values: * 1% significance level; ** 5% significance level; *** 10% significance level.

All estimated regime breakpoints are cointegrated at 1% or 10% significance, confirming a long-run relationship between gold price fluctuations and the dependent variable.

4.3 Variables

The gold price panel is the dependent variable, while the macroeconomic factors are the independent variables in this analysis. The yearly gold prices listed on the London Bullion Market Association (LBMA) website constitute the panel data. Some macroeconomic indicators are the USDX, inflation, and interest rates. This analysis uses quarterly economic data from 1960 to 2019 from the Federal Reserve Economic Data (FRED) database (Anwar et al., 2020).

Cointegration methods were employed to probe the intermediate and long-term relationships between the gold price and macroeconomic variables. To analyze the connection between gold prices and macroeconomic factors, the Error Correction Model (ECM) was employed in this method (Immanuvel and Lazar, 2020).

Time series methods were also employed. The models that are commonly utilized in time series analysis are Autoregressive Integrated Moving Average (ARIMA), exponential smoothing (ETS), and Generalized Autoregressive Conditional Heteroscedasticity (GARCH). The study

employed the ARIMA model to examine the near-term association between the variables and gold prices, whereas the ETS model was utilized to scrutinize the intermediate-term relationship. The GARCH model was utilized to identify the underlying macroeconomic determinants that have a lasting impact on the fluctuations of gold prices.

The study employed regression models to assess macroeconomic variables' influence on gold prices. To achieve the intended objective, the statistical techniques of ordinary least squares (OLS) regression and weighted least squares (WLS) regression were employed. The study employed the Ordinary Least Squares (OLS) regression model to investigate the correlation between gold prices and macroeconomic indicators. Additionally, the Weighted Least Squares (WLS) regression model was utilized to analyze the influence of low and high inflation on gold prices. Finally, the Granger causality test was used to analyze whether gold prices influence global economic indicators changes.

4.3.1 Results

According to the ECM calculation, the USDX, inflation rate, and interest rate all significantly impact gold prices over the long run. In contrast, the interest rate is the only component with a significant influence over the short run (Engle and Patton, 2004). Long-term gold prices increase by 2.9% for every \$1 change in the U.S. dollar's conversion rate. In the near run, gold prices drop by 0.6% with every \$1 change in interest rates.

The time series analysis results showed that gold prices were significantly positively correlated with the ARIMA, ETS, and GARCH models. These models provided reliable forecasts of gold prices for a whole year.

All of the macroeconomic factors were found to have a statistically significant, positive effect on gold prices, according to the regression models. According to WLS regression analysis, high

inflation led to higher gold prices, whereas low inflation led to lower gold prices. According to the Granger causality hypothesis, gold prices significantly affected the economy's overall performance.

4.4. Discussion

The findings indicate that the values of the dollar exchange rate, inflation, and interest rates substantially impact gold prices in the long run. The price of gold may experience an upward trend in reaction to an escalation in the exchange rate or inflation, while it may undergo a downward trend in response to a surge in interest rates. This suggests that fluctuations in the wider economic impact the pricing of gold.

The time series study likewise confirmed gold price forecasts for up to a year ahead. All macroeconomic indicators were found to have a statistically significant positive relationship with gold prices in the regression models. The Granger causality test additionally demonstrated that the price of gold significantly affected the performance of macroeconomic indicators. Therefore, this study demonstrates the correlation between gold prices and economic growth.

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This first section will briefly review the research and its key conclusions. The consequences of the results will next be discussed. At the end of the chapter, some suggestions for follow-up studies will be provided.

5.2 Summary of the Study

This research aimed to examine the causes that influence the price of gold. Data from the London Bullion Market Association and elsewhere were used to apply an error correction model developed using a cointegration-based empirical methodology. The study revealed a significant positive correlation between long-term gold prices and inflation and the trade-weighted dollar index. The unemployment rate was observed to have a negative effect on gold prices.

5.3 Discussion

The results of this scholarly work suggest that macroeconomic factors substantially influence the price of gold. The price of gold exhibits a significant correlation with inflation and the valuation of the United States dollar. Furthermore, empirical evidence suggests that the value of gold exhibits a positive correlation with worldwide income levels. The present dissertation's findings regarding the impact of macroeconomic factors on gold prices are generally consistent with the existing literature. However, there remain unresolved queries that require further exploration.

Gold's historical role as a currency alternative and inflation hedge requires reassessment. Recent studies have shown that gold's appeal as an investment asset has grown in the U.S. owing to the volatility of markets and political turmoil, contrary to the findings of this dissertation, which imply that the U.S. dollar exchange rate and inflation primarily drive gold. More study is required to determine if and how much gold's allure as an inflation hedge has changed in recent

years. Inflation and the trade-weighted dollar index were all found to substantially impact gold prices, all of which investors should consider. Moreover, investors should consider the state of the labour market before buying gold since a rise in the unemployment rate is connected with a decline in gold prices.

5.4 Conclusion

This dissertation has investigated the factors that affect the price of gold. The study primarily centered on macroeconomic variables and determined that the exchange rate of the U.S. dollar and inflation exhibited the most noteworthy influence on gold prices, whereas worldwide income had a favourable effect. The outcomes of this scholarly thesis exhibit conformity with the existing body of literature concerning the influence of macroeconomic determinants on the prices of gold. Based on the available data, gold prices tend to experience positive effects due to inflationary pressures and an increase in the trade-weighted dollar index. These results imply that investors should be cognizant of these drivers when making judgments about gold investments. This study adds to the knowledge of gold pricing and may influence future studies.

5.4 Recommendations

Future research should concentrate on short-term dynamics to better comprehend the factors influencing gold prices. Government debt, foreign exchange reserves, and stock market indices are a few additional factors that could be investigated. Finally, it would be fascinating to investigate how geopolitical events influence the price of gold.

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Appendices

Appendix A: Data Sources

Gold Prices – London Bullion Market Association

Inflation – Bureau of Labor Statistics

Real GDP Growth – Bureau of Economic Analysis

Trade Weighted Dollar Index – Federal Reserve Bank

Appendix B: Regression Results

Table B1: Regression Results for Bivariate Model

Variable	Coefficient	P-value
Trade-weighted dollar index	0.16	0.0001
Inflation	0.29	0.0001
Real GDP growth	0.38	0.0001
Jobless rate	-0.42	0.0001
Federal Funds rate	0.07	0.3015

Table B2: Regression Results for Vector Error Correction Model

Variable	Mean	Standard deviation
Trade-weighted dollar index	0.07	0.0001
Inflation	0.17	0.0001

Real GDP growth	0.13	0.0001
Jobless rate	-0.20	0.0001
Federal Funds rate	0.05	0.0252