

## DOCTORAL THESIS

### The economics of gold price

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## **ABSTRACT**

The gold price has a widespread influence on industry practitioners and country reserve managers. The market view on the gold price is also an integral part of the hedging programmes of mining companies and jewellers. Similarly, many studies have explored the roles of gold as an alternative asset for tactical trading or portfolio diversification and as a strategic asset in country reserve. In this thesis, the understanding of the economics of gold's return is advanced by studying the effects of monetary policy stance, macroeconomic, and financial variables on the gold price.

Some empirical studies have investigated the determinants of the gold price by modelling its changes in relation to the changes in macroeconomic and financial variables; these studies have generated mixed results, depending on the variables and sample periods chosen. Their divergence may also suggest the omission of other critical driving factors for the gold price.

Monetary conditions are considered as one of the gold price drivers. Most studies on the relationship between monetary policy and the gold price have used US interest rates as an indicator of monetary policy stance; however, interest rates may not be representative of money supply shocks in the post-crisis period. In the past, central banks that adopted standard monetary policy would increase the money supply by lowering interest rates; the gold price thus reacts positively due to increased market liquidity. However, during the past 9 years, compared with standard monetary policy, “unconventional monetary policy” has applied even

greater influence on asset prices. In response to the lingering influence of the global financial crisis, the US Federal Reserve (US Fed) began implementing two unconventional monetary tools, namely forward guidance and quantitative easing (QE). QE is designed to be implemented when overnight interest rates are near zero and involves the US Fed buying long-term assets from commercial banks. This raises the money supply and asset prices and suppresses long-term yield. In the past few years, other major economies such as the United Kingdom, Eurozone, China, and Japan have also undertaken similar QE programmes. Therefore, whether and to what extent these unconventional monetary policy tools which are currently in effect may affect the gold price warrants examination.

The focuses and objectives of empirical studies have been varied; no studies have specifically examined the influence of international money supply. At the macro level, parameters have been heavily focused on data from the United States and European countries. Thus, previous studies may have been prone to a narrow focus on the United States or other factors. This thesis addresses these gaps in the literature.

In this study, an econometric analysis is performed to identify the determinants of the gold price. US dollar exchange rate is identified as the key variable for most of the sample period before the implementation of QE, among other factors. However, after the introduction of the unconventional monetary policy, international money supply became the most dominant factor. This study reveals that at times when there are drivers in force that would lead to a change in inflation or inflation expectation, the store of value property of gold is triggered

and these price determinants dominate; as in the case of international money supply in the post-crisis period.

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