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Determinants of Gold Reserves: An Empirical Analysis for G-7 Countries

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Abstract

In this article, we explore the determinants of gold reserves by central banks of Group of Seven (G-7) countries. They are also the suppliers of key currencies. We analyse a sample spanning 24 years period from 1990 to 2014, using panel regression model. Firstly, we compare the patterns of gold reserves in the central banks of G7 with the determinants of their central banks' total reserves, and also with non-gold international reserves. We find that the factors that affect gold reserves are utterly different from other two models. Secondly, we show that an increase in G-7 countries' GDP, and also in their exports of goods and services, have positive and significant effects on gold reserves, while Population, Net FDI Liabilities, and Current Account Balance have negative effects on it. Finally, we predict that high economic growth and rising exports and services of G-7 are more likely to lead to an increase in their gold reserves which are effecting 64% of net global wealth.

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Keywords: Gold Reserve; G-7; Panel Regression; Central Banks; international reserves.

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1. Introduction

Historically gold is accepted as safe haven by investors, households and governments during the economic crises. According to the World Gold Council, there are multiple different reasons why central banks invest in gold: (1) Gold acts as a hedge against inflation. (2) Central banks get income from leasing gold. (3) Gold offers worldwide confidence. (4) Gold offers a diversification benefit. (5) Changes in the world monetary system do not affect gold. (6) Gold provides physical safety in case other assets are blocked on accounts. (7) The price of gold is unaffected by bad government decisions, unlike currencies that are prone to bad decisions made by governments (Bernard Dierinck, 2012) (https://www.gold.org/sites/default/files/documents/gold-investment-research/liquidity_in_the_global_gold_market.pdf)

In the aftermath of global crisis, the focus shifts into financial assets those can be considered as safe heavens. In 2015, the United States' central bank kept almost 72 percent of its total monetary holdings as gold reserves. (http://www.statista.com/statistics/216086/gold-reserve-percentage-in-central-banks-worldwide/). Gold could help investors to suffer losses from inflation (Bolgorian & Gharli, 2010). Gold reserve positions come into light in those traumatic times. According to Parisi and Diaz (2007), gold had proved to be the most effective commodity for cash return during the stock exchange crisis in year 1987 and Asian Crisis in 1997. From the perspective of investors and central banks gold positions and gold reserves are still significant and debatable issues. Yet, it is commonly seen that after the critical phases of crisis, gold prices are affected negatively - it falls. This issue brings up some questions: "Do central banks affect gold prices?", "Are they hidden actors**?"**

Central banks do some interventions in the financial markets since 1990s by gold sales and gold lending to manipulate gold prices (Speck 2013). Beside the fact that gold reserve levels increase and existence of various studies about the factors affecting gold reserve, there is still a gap of agreement about those mentioned factors. Still, it is a common acceptance that, at the times of global turbulence, gold is seen as a safe investment, a potential hedge. (Aizenman and Inoue 2013) Many from Marx and Nietzsche to Jack Kemp and Ronald Reagan have seen gold as a secure anchor and insisted on its role as a foundation of a stable economy. Furthermore Marx had a fear if gold disappears and money loses weight, there would be destabilizing effect on economy (Taylor 2008).

There are many studies analysing the factors affecting the demand for the international reserves for many different sample of countries and for many different time periods. Literature review section aims to create an empirical perspective to the subject. With the light of all these past literature, it is aimed to analyse the factors affecting gold reserve levels of central banks of the G-7 (Group 7 countries).

2. Literature Review

The increase in the gold reserve positions of key economies is an ongoing and crucial debate. Some economies have a tendency to make gold stocks either openly or in strict confidence. The numbers given in the literature about the gold reserve holdings of central banks are corroborative in this content. Kazakhstan's gold moves, Germany's recall for its gold reserves abroad, Mexico's and Thailand's action to buy gold are all worth to take attention. Gold is considered as a very strong competitor to the euro and dollar for being the second biggest reserve instrument.

While the gold is gaining that much importance, there is little consensus in the literature on what factors affects the countries' gold reserves. Most of the studies are related with the international reserve levels in general. According to Cheung, financial crisis is another significant determinant that affects of international reserves (Cheung and Ito 2009)