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# Is gold a safe haven against equity market investment in emerging and developing countries? ☆

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The hedge and safe haven properties of gold in advanced economies' financial markets are well documented in the literature. Studies of how this issue relates to emerging markets and developing countries are, however, very limited. This paper aims to fill this gap by empirically analyzing the hedge and safe haven properties of gold against equity market investment for a large group of emerging and developing countries from the perspective of both domestic and foreign investors. We also check whether our findings differ in the post-global crisis period. Our results show that for domestic investors, gold is both a hedge and a safe haven in most of these countries. This result also holds in the post-2008 crisis period. In addition, when falls in equity markets become more severe, gold acts as a safe haven in a larger set of countries for both domestic and foreign investors.



## 1. Introduction

Since the beginning of the global financial crisis in 2008 there has been a renewed interest in understanding the properties of gold as an investment tool. This is due to the general belief that gold

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is a good investment choice to limit losses in times of market turbulence. Although this so called "safe haven" property of gold in developed financial markets is well documented in the literature, little is known about the properties of gold in emerging and developing financial markets. This paper attempts to fill this gap by empirically analyzing the hedge and safe haven properties of gold against equity market investment for 28 emerging and developing countries' financial markets.

Even though gold has been considered a safe haven for a long time, this hypothesis has not been formally tested until recently. Baur and Lucey (2010) make clear definitions of hedge and safe haven and test if gold is a hedge and/or a safe haven by using daily data from 1995 to 2005. They report that gold is a safe haven for equities in the US, the UK and Germany on average, but not for bonds in any of the markets. According to their findings gold acts as a safe haven for a limited time, around 15 trading days, suggesting that investors hold gold during extreme equity market conditions. Baur and McDermott (2010) further examine the role of gold by testing the hypotheses that gold represents a safe haven against equities of developed and major emerging markets. Using data from 1979 to 2009, they show that gold is both a safe haven and a hedge for major European equity markets and the US but not for Australia, Canada, Japan or major emerging markets such as the BRIC countries (Brazil, Russia, India and China). They also show that during the peak of the recent financial crisis gold demonstrated safe haven properties in most developed markets, but this is not the case for the Asian crisis. Ciner et al. (2013) examine return relations between five financial asset classes to determine whether these assets can be considered as a hedge or safe haven against each other. Using daily data from the US and the UK for the period of January 1990 and June 2010, they find that gold can be considered as a safe haven against exchange rates in both countries, highlighting its monetary asset role.

In this paper, following the methodology of Baur and McDermott (2010) and using daily data, we test the hedge and safe haven properties of gold against 28 emerging and developing countries' equity markets. Since emerging financial markets attract significant amount of foreign capital, we consider not only the perspective of domestic investors but also that of foreign investors. In doing so, we assume that domestic investors care only about returns in domestic currency and foreign investors care only about returns in US dollar. In addition, we repeat our analysis for the September 2008–September 2013 period in order to investigate whether the relation between gold and equity returns changed after the global financial crisis.

Our main findings are as follows: First, gold is a hedge and/or a safe haven for domestic investors in particular. Second, the safe haven property of gold is stronger during extreme losses in equity markets both for domestic and foreign investors. Third, results are mixed for major gold producing countries.

The remainder of this paper is organized as follows: Section 2 describes the data and reports the summary statistics. Section 3 presents the methodology and the results of our analysis, and finally Section 4 concludes.

## 2. Data

Our data set includes all emerging market countries in the MSCI emerging markets index[1] as of April 2014. We have further extended this data set by including 9 other newly developing financial markets: Bahrain, Bulgaria, Jordan, Kenya, Morocco, Qatar, Romania, United Arab Emirates (UAE) and Vietnam.

We use daily data because, as demonstrated in Baur and Lucey (2010), investors seek a safe haven for a short period of time. Data samples change for each country depending on the availability of the equity market index data.[2] We collect gold, equity market and foreign exchange data from Bloomberg. Equity returns are in daily percentage changes of the relevant country's equity market index and gold returns are daily percentage changes of gold prices.

[1] Countries included in this index are selected in terms of their economic development, size, liquidity and market accessibility. We exclude Greece, South Korea and Taiwan since they are considered as developed countries according to the IMF classification. For the selection criteria of MSCI emerging markets index see: http://www.msci.com/products/indexes/country_and_regional/em/. The countries that are not in MSCI emerging markets index are selected in terms of their GDP and data availability.

[2] We report more information about our data set in Appendix A.