**Abstract**

**Introduction**

Gold has long been a popular topic in the investment world.

In 2013 $31 billion (22 million ounces) of gold was cleared daily (LBMA), compared to $6 billion (14.9 million ounces) in 2004, it was a whopping 516% surge in merely 9 years.

More people have come to the realization of the value of gold, not only as jewelry, but also as an asset that preserves its value.

Previous studies have examined the particular role of gold among investments, more specifically, whether it is a hedge or a safe haven. With regard to stock markets, Baur and Lucey (2010), Baur and McDermott (2010) found that gold acted as a safe haven against stock markets, although conditions varied for different markets. The results were further verified by Joy (2013), where the conclusion was made that in times of market stress, no evidence was discovered to suggest that the safe haven status were effective.

Apart from gold, other precious metals including platinum and silver have also been found to possess the ability to play the role as diversifiers in portfolios and exhibit hedging capability especially during periods of high market volatility. (Hillier et al., 2006). Another study pointed out that unlike gold, platinum and silver act as neither hedge nor safe haven for the US stock market (Hood and Malik, 2013).

**Rare earth ver**

As for rare earths, a concept that might be slightly foreign to the public compared to precious metals mentioned before, have incredibly wide application across various industries and products, including phosphors, batteries, and permanent magnets. Their value in industrial use as well as ability to promote green economy has placed them under the spotlight.

The rare earth elements (REEs) are a group of 17 chemical elements including 15 lanthanides, with the addition of yttrium (Y) and scandium (Sc), due to the reason that they exhibit similar physical and chemical properties. While given the name of rare earth, the elements are not necessarily rare in existence, as a matter of fact, they can be found in almost all massive rock formations. However, REEs are scarce as a mineable resource. The limited availability of rare earth ores reflects a number of factors including the geological controls that affect not only their distribution but underlie technical mining and processing constraints (Golev et al., 2014).

The rare earths ETF, which debuted in 2010, …..

**Gems ver**

Another asset that is just as valuable as gold in the make of jewelry are diamonds.

In contrast to gold, it is hard to obtain a uniformed price on diamonds.

With declining production in gem quality diamonds and rising demand, particularly in China,

There are few papers examining the quality of diamonds as an investment and its diversification potential. Auer and Schuhmacher (2013) concluded that diversified portfolios that contain diamonds can outperform diversified portfolios that solely composed of stocks when stock markets are weak. Low time-varying correlations to traditional assets provide indications of their diversifying qualities, however the potential can only be reached with rather high proportion of diamond in the portfolio.

Our paper aims to investigate the hedge or safe haven status of all major precious metals and additionally, rare earth elements. We aim to ….