Literature Review

Gold has always been a fundamental element in the development of human history. With applications not only in jewlery, medicine and electronics, it has starting to play an important role in the investment area. Its ability to diversify portfolios makes it a valuable choice for many investors. In 2013 $31 billion (22 million ounces) of gold cleared daily (LBMA). The increase in the figure is significant compared to $6 billion(14.9 million ounces) in 2004 (LBMA), indicating that more investors have came to the realization of the value of gold, furthermore, from the rapid increase in value, it is clear that the gold price has experienced a boom during the past decade.

When inspecting the particular role in investments, more specifically, whether it is a hedge or a safe haven, Baur and Lucey(2010) concluded that gold is a safe haven, although the effect is short-lived for stocks but not for bonds in any market. Research conducted by Baur and McDermott(2010) showed that the role of gold is inconsistent between developed and emerging markets. While acting as a safe haven for most major developed world stock markets, there was no clear evidence that gold plays the same role in developing countries. Those results were further verified by Joy(2013), where the conclusion was made that gold does not act as an safe haven from market stress, no evidence was discovered to suggest that gold has acted as an effective safe haven. As for US dollars in particular, it was found that gold has been an valuable hedge against currency risks associated with the US dollar. The finding was extended to UK market by Ciner et al.(2013), who found the evidences to support the role of gold as a consistent safe haven in US market as well as UK market. A research carried out by Reboredo(2013) reached a similar conclusion, that apart from serving as hedge, it is also an effective safe haven against extreme USD rate movements. When comparing different instruments as investment in gold, it was established that both gold bullion and gold ETFs show support for the safe haven property as opposed to gold stocks and gold mutual funds, which display very little evidence of the safe haven characteristic(Pullen et al., 2014).

In the study performed by Baur and McDermott(2010), the assumption was made that the gold price was dependent on changes in the stock market, and that the relationship was not constant but was instead influenced by specific, extreme, market conditions. Three equations were formulated in the analysis. Six indices and more than ten markets across the globe, both developed and emerging were included in the study. As results showed, in terms of daily, weekly and monthly frequencies, gold tended to provide a safe haven for developed markets in times of extreme market conditions with a few exceptions. However, it was not the case for emerging markets. In the case of indices, gold was not a hedge for most indices except North America due to the reason that reginal indices are denominated in US dollar terms, which led to the exposure to exchange rate fluctuations. Markets, on the other hand, displayed a different outcome where gold acted as a hedge as well as a safe haven for developed markets, but not emerging markets in times of extreme market conditions. In another model examining explicit crisis periods, a similar result was reached that gold was a safe haven during the peak of the financial crisis, however the effect was exclusive to most developed markets.

The flaw in the previous approach was pointed out by another study conducted by Joy(2011), who mentioned that the method failed to consider feedback, that is, time path of the dependent variable in the principle regression model. Taking the feedback into account using the multivariate GARCH model of dynamic conditional correlations, it was further confirmed that gold had behaved as a hedge against the US dollar for the past two decades, with its effects increasing in recent years. On the contrary, gold's role as a safe haven against US dollar movements was proved to be negligible.

In short, the discrepancy occurs mainly on whether gold is a strong or weak safe haven against US stock market. While the strong safe haven conclusion was reached by Baur and Lucey(2010), Baur and McDermott(2010) and Reboredo(2013), the opposite view was presented by Hood and Malik(2011), claiming that the safe haven effect was actually weak. However, when looking at exchange rate movements, a unified opinion was achieved that gold is a useful hedge when facing exchange rate fluctuations.