

https://dspace.org/

A study of the relationship between mineral commodity prices and exchange traded mining stock prices

Nangolo, Charlotte

2012-02-13
http://hdl.handle.net/10539/11299

Downloaded from a DSpace repository. https://dspace.org/

ABSTRACT

Investors consider commodity prices to be one of the major criteria critical in the selection of stocks of mining companies. This is done as part of the net present value (NPV) valuation of mining companies. It is believed that one of the three sets of mineral commodities prices, which are: spot price, forward price and long term price, has a greater impact on the share valuation processes used by investors. This research study investigated the extent to which each set of commodity prices influences the valuation process in order to provide investors of mining stocks with a greater understanding of how fluctuations of commodity prices over time affect prices of the mining stocks they hold, intend to sell or buy.

A literature review conducted identified different valuation methods employed in valuing share prices. The literature study also revealed price cycles experienced in the commodity sector. Emerging from the literature review was the prominent role of commodity prices in valuing stocks of mining companies. Three mineral commodities namely, gold, silver and copper were used as case studies because stock market data on these commodities is readily available in the public domain. Nine market indices covering all three mineral commodities were selected based on defined criteria that ruled out any ambiguity and tested for correlation with the three sets of mineral commodity prices. An equal number of stocks of individual mining companies, which were not the primary drivers of the indices, were used to validate the results obtained from the indices in order to avoid duplication of the same correlation during cross – checking. Each mineral commodity price was adjusted for operating costs. For market indices, an average operating cost for each index was calculated from the companies in its basket, while for stocks of individual companies, the company's annual operating costs were used. The data was collected for the period January 2004 to October 2010. This period was further split up into three sub – periods to account for the Global Financial Crisis (GFC) period that started in mid – 2008.

This research study concluded that mining stock prices are correlated with mineral commodity prices, but with spot and forward prices exhibiting stronger correlations than long – term price. This finding is useful to mineral stock evaluators and any evaluator of a mineral asset in that where cash flow approach methods are to be used and the commodity price is required to estimate future cash flows, spot price forecasts of that mineral commodity should be used and not the long – term price.