

ABSTRACT

One of the consequences of globalisation in the extractive industries is the necessity to apply uniform accounting and valuation standards that are clearly understood and consistently applied by the global stakeholder community. At the beginning of the 20th century it was realised, mainly by the major mining countries that the extractive industries is one of the biggest sectors globally. In the extractive industries the single most important asset is the Mineral Resources and Mineral Reserves, yet this is not reflected anywhere in the financial statements. The major mining countries, through their mining institutes, realised that there was a need to develop standards and guidelines to align and standardise the definitions of Exploration Results, Mineral Resources and Mineral Reserves, which was achieved through the CRIRSCO template. From the accounting fraternity, several organisations also realised the need for an accounting standard specific to the extractive industries, specifically for financial reporting. Attempts by the IVSC and IASB to develop a global accounting standard for the extractive industry attests to the global requirement to develop internationally recognised valuation guidelines or a global framework for the valuation of mineral assets. Both the mining institutions and accounting standards setting boards have been working in isolation to develop a globally acceptable standard or guideline for the extractive industries, and neither has been successful due to the inherent complexities.

The harmonisation of the national codes for reporting of Mineral Resources and Mineral Reserves through the CRIRSCO template, provides global common understanding. However, the national mineral asset valuation (MAV) codes, are needed to develop a similar international template. The CRIRSCO template provided a strong foundation on which the IMVAL template was developed. As part of this research a framework was developed to harmonise the national MAV Codes. Various authors have argued that there is no globally accepted standard or guideline for the valuation of extractive industries assets, nor is there a specific accounting standard for extractive industries. MAV is still an emerging discipline, coupled with the fact that financial reporting in the mineral industry is not yet fully developed, as IFRS 6 appears to be the only mineral specific financial reporting standard. This is supported by the fact that currently there is a lack of a comprehensive accounting standard for the extractive industries to guide the accounting, recognising and presenting these assets in the primary financial statements.

This thesis argues that there is a gap between reflecting and accounting for Mineral Resources and Mineral Reserves in the financial reporting systems, and how these mineral assets are valued and reported. These identified gaps between MAV methodologies and financial reporting requirements formed the basis of this work. Hence this thesis develops a framework to harmonise the existing and emerging financial reporting requirements and MAV methodologies. This framework is applicable to developmental projects and operating mines, and was validated by applying the framework to a real life case study.

Turquoise Hill Resources (Turquoise), which owns Oyu Tolgoi copper-gold mine in Mongolia, was selected as a good case study, due to the fact that Turquoise owns and operates this single multi-commodity mineral asset, with information available in the public domain. Hence the value of Turquoise on the stock exchange is driven by the fundamental value of the mineral asset only. The results of the proposed framework showed the highest correlation coefficient of 0.77, meaning that there is a strong correlation between proposed framework and the proxy company value selected.

It is concluded that the proposed framework to harmonise MAV methodologies and the emerging financial reporting requirements can be applied to estimate values for companies in the mineral industries.