

ABSTRACT

The re-emergence of Resource Nationalism (RN) arising from the perception of the non-receipt of adequate economic benefits from mineral development, the evolving subject of sustainable development, declining performance of commodity prices and their volatility thereof, coupled with the declining terms of trade for raw minerals in comparison to refined mineral products in recent years, have caused governments of mineral-rich States to begin re-assessing policy changes on mineral development in their States. These issues have made many of these governments realize that concentrating on one highly volatile sector can have detrimental effects on their steady economic development. Hence, many of local governments are pushing for more optimal mineral use and management of mineral rents that will result in more economic linkages from their non-renewable resources sector to other economic sectors. This drive for economic diversification, which would reduce the exposure of mineral economies to mineral price volatility presents a more pragmatic long-term approach to facilitating national economic development of their States.

Hitherto, many of these governments are exploring the use of various policy instruments (such as fiscal instruments) to foster such resource-based economic linkages to stimulate industrial and economic growth and development. South Africa is a case in point, with her government putting in place such resource-based economic diversification policies. One of such policy instruments is the Mineral and Petroleum Resources Royalty Act (MPRRA), which was enacted in 2008. Apart from the compensatory revenue-collection objective of this instrument, its formula provisions also allow for a reduction of the royalty rate for refined minerals. This allowance is for the purpose of aligning the mineral sector with the government's objective of promoting local beneficiation of South Africa's minerals for maximum economic benefit.

The results of a previous study that was carried out to assess the effectiveness of this instrument in realizing the beneficiation objective of the MPRRA using the platinum sector as a case study, led to the need for this current study. The previous study found that platinum miners were unlikely to become refiners based on the current parameters/provisions of the MPRRA. Hence, to further investigate this result, it was deemed important to extend the study to other commodity sectors to ascertain the

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 effectiveness of the MPRRA's beneficiation objective before proposing a way-forward i.e. tweaking the parameters of the royalty regime to facilitate the achievement of SA's policy objectives. The purpose of this research was to assess the major mineral producers in SA, in order to propose improvements to the current royalty system. Four major commodity sectors (Gold, Platinum, Iron and Coal sub-sectors) were selected to facilitate the investigation of this study. To realize the purpose of this study, the methodology used involved econometric analysis carried out in two phases, which used models created through IBM SPSS Statistics and Microsoft Excel software.

From the econometric evaluations, five different policy options (econometric models) were proposed for tweaking the royalty formulae. After testing these different policy options, the deductions obtained from the five models were compared against each other and two main beneficial options for the government were realized. The most desirable option (Model 2) was tweaking the X-factor of the current royalty formula for Refined minerals (See Cawood (2010)) and its F-factor. Hitherto, Model 2's parameters specifies that: $R\% = 0.5\% + \left(\frac{30}{F} - 1\right) \times 0.5\%$; Where, maximum profitability ratio (X-factor) is changed from 56.3% (~ 60%) to 30%, and F-factor for refined minerals is changed from 12.5 to 12. This will result in the minimum and maximum royalty rates to be fixed at 0.5% and 3% respectively.

In this era where SA government is highly concerned with achieving more mineral beneficiation locally, Model 2 (referred to as "**Ideal Beneficiation model**") was recommended to be the most optimal. With the Ideal Beneficiation model, SA government had the potential of actually achieving a win-win situation if it planned on keeping all three main objectives of the MPRRA. The outplay of how this policy option can be used is outlined in a proposed implementation plan in this study.