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Determinants of Loss Reserve Errors: Evidence from South Africa

Kudzai Chigiji Abdul Latif Alhassan

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¹ **Note:** The findings from this working paper does not in any way reflect the views of the Development Finance Centre (DEFIC). The views are only representative of the authors.









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Abstract

A loss reserve is the estimated liability for unpaid claims on all losses that occurred prior to the balance sheet date. The loss reserve is the most significant liability on the balance sheet of a general insurance company, often driving its overall financial performance. This study examines the loss reserve errors in the South African general insurance industry. The study estimates the loss reserve errors using annual firm level data on 79 general insurance companies from 2007 to 2014. The study then proceeds to examine the hypothesised effect of firm level characteristics on the estimated loss reserve errors within a panel data framework. The panel data regression models are estimated using the ordinary least squares technique, the random effects technique and the fixed effects technique.

The findings suggest that South African general insurance industry is characterised by over-reserving. Specifically, approximately two-thirds of the sample reported incidence of over-reserving. The results of the panel data regression analysis indicate that tax shield, financial weakness and premium growth are the significant drivers of reserve errors in the market. Tax shield was found to have a positive relationship with loss reserve errors, whereas financial weakness and growth were found to have an inverse relationship with loss reserve errors. Business line diversification and reinsurance were not found to be significant variables in the model.

The management of South African general insurers and regulation of the industry should be directed towards ensuring that general insurers do not manipulate reserves to defer taxes, fund growth through more competitive premiums, or manipulate the perceived financial strength. Additionally, this study identified issues relating to the quality of loss reserve information supplied to the regulator. There is scope for improving the quality and consistency of the loss reserve data supplied to the regulator by the general insurers.

Keywords: Loss Reserve Errors | Earnings Management | Non-life insurance | South Africa |