Department of Economics

Group for Economic Analysis at Reading (GEAR)

Financial stability surveillance tools: Evaluating the performance of stress indices

By Kaelo Ntwaepelo and Grivas Chiyaba

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Department of Economics, University of Reading, Whiteknights, Reading, RG6 6EL, UK
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Non-Technical Summary

- This paper addresses the emerging debate on whether financial stress indices constructed using advanced statistical methods perform better than those aggregated using simple averaging, for the case of South Africa.
- The empirical analysis reveals that the banking sector and the money market play a significant role in the South African financial system and effectively reflect the presence of stress in the financial sector.
- This aligns with the finding that the financial stress indices based on sophisticated methods such as the principal component analysis (PCA) and the dynamic factor model (FAM) load heavily on the banking sector and the money market, respectively. Thus, they have a comparative advantage in predicting a financial crisis and estimating the effect of external monetary policy shocks.
- We also find that the benefits of the index aggregated using simple averaging, which allocates equal weights across the different markets in the financial system, are limited to forecasting financial stress.
- The results confirm the hypothesis that the performance of the financial stress indices is closely linked to the weights allocated to the different segments in the financial sector.
- This study provides new empirical evidence by constructing a financial soundness indicator to capture stress in the South African banking sector. It is believed to be the first to include the vulnerability of the financial stress indices of external monetary policy shocks, specifically shocks from South Africa's major trading partners.

You can read the full paper here.