

Bank's Risk Indicators – How can they identify Unhealthy Banks?

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In this paper we examine the power of several accounting and regulatory (or prudential) risk indicators to identify healthy and unhealthy banks.

Using an international sample of 586 banks from 21 European Union countries in the period between 2000 and 2012, we find evidence in favour of the predictive power of some bank accounting and regulatory (or prudential) risk measures in identifying potential problems in a bank. Namely the indicators with good performance are return on equity, bank size, the solvency ratio, the leverage ratio and the non-performing ratio, which represent the main risks that a bank incurs in its activity. The identification of these early warning indicators is particularly relevant at both a macro- and a micro-prudential level.

At a macro-prudential level our results support the recent introduction of capital buffers in regulation, particularly the “Conservation Buffer”, the “Countercyclical Capital Buffer” and the “Capital Buffer for Global and Other Systemically Important Institutions”, and are useful to determine/calibrate the capital buffer of global and other systemically important institutions.

At a micro-prudential level, these results are important because the indicators are useful in highlighting institutions that should be submitted to a tightened supervision by the regulators. Furthermore the results also brought to the literature de importance of the leverage ratio as an early warning indicator, which shows a higher impact on a bank's probability of default than the solvency ratio.

Finally, considering that the model used in this paper has proved a significant predictive power, it could be used also to compute the probability of default for unlisted banks since the current models available request market data, leaving room for further research on comparing the results obtained from this type of model and from models that use market data.

Keywords: risk; banks, banking problems, micro-prudential analysis, macro-prudential analysis, early warning indicators