

## **Predicting bank financial distress**

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**Investigators: Richard Heaney, Professor Malick Sy, Professor Tony Naughton, Associate Professor Terrance Hallahan (RMIT University) and Dr Dirk Hollaender (zeb)**

### **Project objectives**

This project focuses on bank financial distress and the study period will include the global financial crisis (GFC). It is often suggested that banks cannot fail but some banks did fail during the GFC (US: Lehman Bros, Washington Mutual). Other banks, while not actually being allowed to fail, did require nationalization, considerable cash injections or other forms of government protection or support (Europe: Fortis, Glitnir, Dexia, Hypo Real Estate, Landsbanki, Anglo Irish Bank, UK: Northern Rock, Bradford and Bingley, Royal bank of Scotland, Lloyds TSB, HBOS, US: Fannie Mae, Freddie Mac, Bank of America, AUS: Government guarantee for banks). Finally, in some instances government sanctioned takeovers of weaker banks by stronger banks took place (UK: HBOS, US: Bears Stearns, Merrill Lynch, Wachovia).

The GFC has changed government and regulator attitude to bank regulation. There is greater focus on monitoring and regulation. Yet, while banks report to regulators and society relies on regulators to oversee the financial system, regulators are often inadequately resourced. There is need for a variety of bank risk measures and a measure of financial distress would seem useful at this juncture, both for regulators and for the banks themselves as part of longer term risk assessment (Distinguish

et al. 2006). There is little evidence of financial distress measures being used by regulators or analysts in bank risk analysis even though these measures are commonly used in analysis of corporations.

The objective of this project is to develop an international model of bank risk that might be used in a similar way to the Altman measure that has been so widely adopted in practise though with an emphasis on banking. One project objective of particular importance is an assessment of Australian bank risk within the international risk model that we will develop.

### **Ultimate relevance to the finance industry**

The relevance of this project comes from its focus on financial distress for a large sample of banks drawn from across the world. There is little research of bank financial distress with researchers generally avoiding banks and the finance industry, yet there is evidence of finance industry effects with respect to bankruptcy prediction (Chava & Jarrow 2004). A critical feature of this application is the development of alternative measures of risk that draw on the approaches commonly found in analysis of financial distress in the very corporations that the banks deal with (John 1993). This includes the measures based on statistical models (Altman 1968; Altman et al. 1977; Altman 2000; Altman & Sabato 2005) and those based on economic theory (Merton 1974; Benos & Papanastasopoulos 2007).

The global financial crisis has drawn attention to the considerable variation in bank risk that actually exists and it expected that this project will lead to the development of more accurate financial distress prediction models, specifically targeted at the financial sector and the banks in particular. This project focuses attention on individual bank level risk with hope that we will be

able to better understand why some banks required bailing out and others did not in the GFC, and why credit ratings adjustments might vary across banks.

Perhaps the issue of most relevance to the Australian finance sector will be the development of models that could be used in analysis of Australian bank financial distress, within the world banking sector, to gain further insight into the robustness of the Australian banking system.

### **Opportunities for private sector involvement**

Private sector involvement could range from acting as partners in ARC linkage grants where the private sector partner and the ARC both contribute funding to allow extension of the project to providing feedback on the more contentious issues that will inevitably arise in the course of the research.

Private sector comment through out the project would also be most welcome as this will help to ensure that the project remains relevant and focused. We would also value the chance to present in public forums to allow discussion of issues that might be of importance to the finance industry.

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