Comments on de Jong et al: Measuring Background and Systemic Risk Using Financial Time Series

1. The idea of using put values rather than expected values strikes me as interesting and useful, as does the idea of decomposing stress into systemic and background.
2. System stress is defined as linear in firm specific distress. This breaks down when the first large bank fails, because all the large banks have major exposures to each other. Also, the recovery efforts of one bank, such as a rush to realise collateral, can drag down the others.
3. Page 3. The justification for using the four Australian major banks also would apply to the five major Canadian banks, and the three major Singapore banks. Expanding the empirics to three countries would not (I think) take much effort, and would materially generalise the Australian findings.

Section 2) Section 2 needs cleaning up. The capital definition given in equation (1) is I think incorrect. Bank capital requirements are largely determined by applying risk weights to credit exposures, plus some operational, market, and interest rate risk capital. As a rough rule of thumb, the 8 per cent Basel figure quoted throughout this paper is wrong, if quoted as a proportion of accounting assets. The 8 per cent figure applies to book assets, not risk assets. For Australian banks the ratio of risk to book assets is about 50 per cent, so the critical factor on book assets would be more like 4 per cent. Which means, I suspect, that the default probabilities discussed in this paper are materially overstated, as are the put values. Furthermore, the 8 per cent capital figure was never critical and post Basel III is obsolete. Tangible equity is far more important than total regulatory capital, particularly in a crisis. The critical element today is core equity tier 1 (CET1), for which the practical minimum value is probably 7 per cent, but arguably 5.125 per cent. The 2008/09 figure would have been around 6 per cent. Finally, defining a given Basel capital cutoff as a “default” ignores the ability of banks to raise equity, cut risks, or seek public assistance. This is a critical point. What is being modelled in this paper is not the put value of default or stress, but the implicit value of bailout equity that must come from either private or public sector recapitalisation.

Section 8) The assumption of a normal distribution on stressors is too sanguine. Regrettably, they are much more broadly distributed than normal.

Section 17) This is a more accurate representation of the way bank capital requirements are calculated.