Comments on "International Integration, Common Exposure and Systemic Risk in the Banking Sector: An Empirical Investigation."

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Questions

- This paper aims to answer the following questions:

- 1) Has international integration had an impact on bank's common exposure to shocks between 1993 and 2006.?

- 2) What is the impact of international integration on systemic risk of the international banking sector between 1993 and 2006.?

- 3) Is there a reliable link between common exposure and systemic risk.?

Methodology

- Estimate banks' asset-to-debt (AD) ratios using a time varying approach.
- Using those AD ratios, they study the evolution of:
  - bank’s common exposure to shocks,
  - systemic risk index Lehar (2005).

Conclusions

- 1) The average correlation between banks' AD decreases before 2000 and increases thereafter suggesting different behavior of banks before and after 2000.

- 2) In contrast to the correlation analysis, the authors did not find any clear trend over time in the systemic risk index.

- 3) Accordingly, correlations between banks' AD are not reliable measures of systemic risk. Rather, distance- to-default is the main driver of the systemic risk index.

Main comment

- From a conceptual point of view, the distinction between common exposure and systemic risk is arbitrary.

- At the statistical level, both Lehar's (2005) measure of systemic risk index and common exposure variable use a common set of variables i.e. asset-to-debt ratios.

Main comment

We know that Lehar's systemic risk index depends on:

- 1) The percentage of banks that have to default to trigger a crisis. In the paper 10% and 20% are used to calculate the index.

- 2) Weight of each financial institution in the index. In the paper they are assumed to be equal.

- 3) We know from Lehar (2005, p. 2589) that the time horizon over which the bankruptcy might occur clearly affects the level of the systemic risk indicator.

Main comment

Let us suppose the following DGP:

$$X_t = X_{t-1} - 0.2 \quad if \quad t > 0 \quad and \quad t < \frac{T}{2}$$

$$X_t = X_{t-1} + \quad 0.2 \quad if \quad t > \frac{T}{2} 0 \quad and \quad t < T$$

$$Y_t = \begin{cases} 1 & if \quad X_{1_t} < \bar{X} \\ 0 & if \quad X_{1_t} \geq \bar{X} \end{cases}$$

$$X_{1_t} = 2 + 0.25X_t + \mu_t \qquad with \quad \mu_t - N(\mu, \sigma)$$

with $\mu = 0$, $\sigma = 0.25$ and $X = 2.3$ with $X_1 = 3$

Main comment

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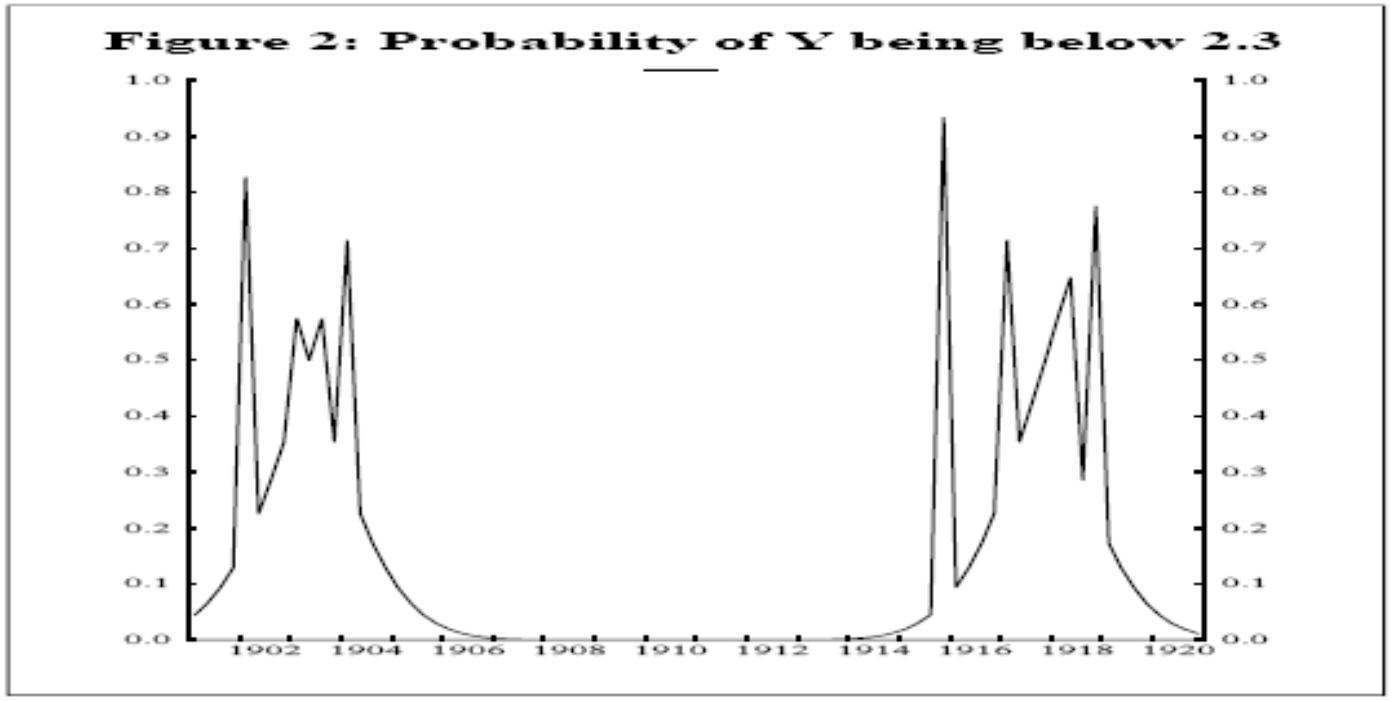
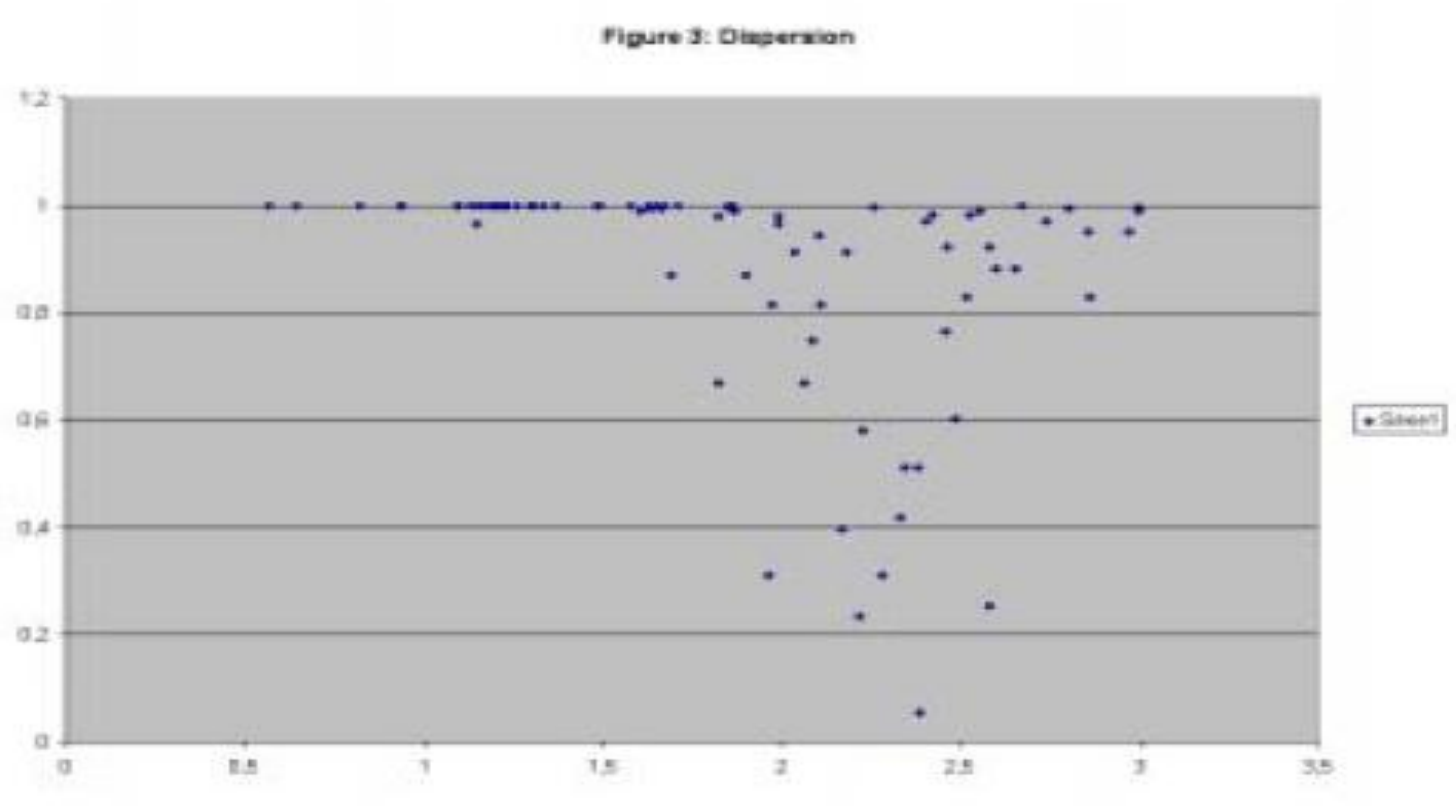
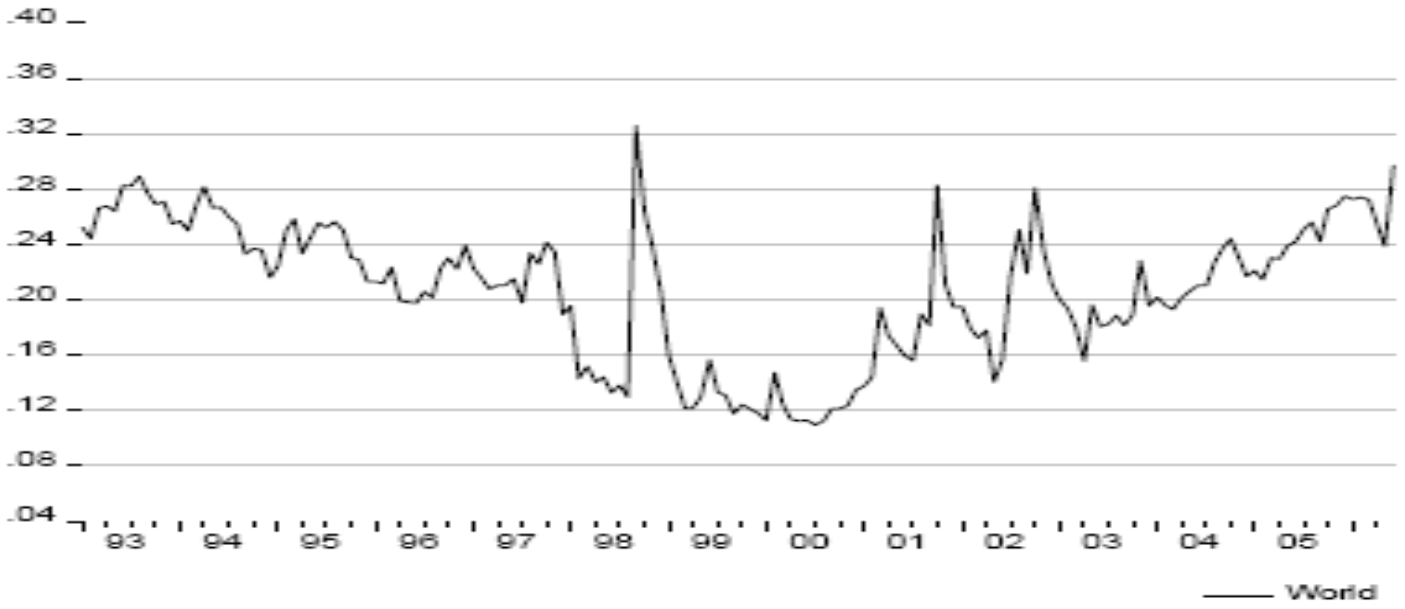


Main comment



Specific comment

FIGURE 1: CORRELATION BETWEEN AD
SHORT SAMPLE)



Specific comment