Discussion of "Spillovers from Systemic Bank Defaults," by Mink and de Hann

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The Question

- Does an increase in the probability of default of a single large bank affect other banks' stock returns? ("contagion")
- Evidence generally negative on contagion.
- But, hard to test.

Answering the Question

- $y_{n,t} = \alpha_n + \beta_n f_t + \sum_{m \neq n} \gamma_m p_m + \varepsilon_{n,t}$

$y_{n,t}$≡Δbank n's stock market value (as % of start of period market cap);

p_m ≡Δprob of default of bank m (ΔCDS or ΔDtD);

f_t ≡Δcommon factor; orthogonal to p_m's (the common component of the p_m's.

- 100 largest banks; 2007-2012; weekly data.
- Standard errors bootstrapped.

Hmm . . .

- This is basically an asset pricing equation for bank stock returns.
- The common factor should be priced.
- But, the individual bank default probabilities are diversifiable and should not be priced.
- Basically the test is whether bank equity markets are efficient.

Results

- What we would expect:
  - Coefficients on bank default probs are zero and insignificant;
  - Common factor is significant.
  - p_m's jointly affect other banks (F test) but not economically significant.
- No evidence of "contagion"—consistent with literature.

Some Comments

- Not clear that a test for “contagion” can be based on asset pricing. Really testing whether idiosyncratic risk is priced.
- Though--Kelly, Lustig, van Nieuwerburgh find that the difference between out-of-the money put options on individual banks and puts on the financial sector index increased 4x in the *pre-crisis* period (portfolio of options more valuable than an option on the portfolio). Their interpretation: i) common factor (govt intervention) is priced; ii) idiosyncratic risk is priced.

Comments cont.

- Complicating factors:
  - Both the U.S. and Europe imposed short sale bans on bank stocks.

- Interesting to know if the bank common factor affects the real economy—nonfinancial firms stock returns. See Adrian, Etula, Muir JF forthcoming.

Contagion?

- "Contagion" is the (vague) idea that a shock to one bank can cause other banks to default.
- Obviously banks are linked, via interbank borrowing and lending, and via derivatives.
- But these positions are collateralized and positions not concentrated.

Final Thoughts

- How does a crisis arise with “contagion”?
- It’s a “big shock” “theory”.

- A crisis is an information event which causes a bank run: info-insensitive debt→sensitive.