

## An analysis of the Chinese Stock Market During the Global Financial Crisis

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- Background:
  - Chinese economy not strongly affected by the global financial crisis
- Aim:
  - "The aim of the paper is to analyse the Chinese stock market during the global financial crisis, with the aim of looking at potential effects that might run from the US stock market fluctuations, and its own monetary policy."
- Studied using:
  - Chow (1960) & Quandt-Andrews Breakpoint test (1993)
  - Unit root testing with ACF, ADF
  - The Johansen and Engle & Granger approach used to study cointegration between all three series
  - Forber & Rigobon (2002) method used to study whether the effect of shock in the USA are carried on to the Chinese market (bivariate analysis of contagion)



- Data
  - Daily data from 4.1.2003-31.5.2010
  - Shanghai Composite (in USD and in RMB), S&P500 & China overnight repo middle rate
- Results:
  - Chow test finds no breakpoint in the index series, so OLS residuals from Chinese stock market index on US and repo rate are used to do the breakpoint analysis
    - Breakpoint found and used to identify samples pre- and post-crisis
  - ADF-test: data series are non-stationary, I(1)
  - Johansen: two co-integrating vectors
  - E-G, post crisis: Stock market  $\rightarrow$  repo-rate, repo  $\rightarrow$  S&P500
  - Contagion analysis: no contagion found

## Main comments, motivation

- Make better arguments why it is important to study these issues and why one should read this paper
- Be accurate, consider every word carefully in the Introduction
  - GDP growth rate 10 per cent -- when?
  - "it is of great interest to pay close attention to ... economy" -- is this a stock market study or econ-study?
  - Stock market as primary indicator of country's economic <u>development</u>
    --- ??
  - ... <u>as a result</u> central bank's major concern is to guarantee financial stability --- ??
  - From regulated interest rates to market ones has improved forecastability --- ?
  - Add a word or two what is actually done in the paper (not just that markets are analysed)
  - Language / style needs polishing

## Main comments, data / tests / results

- The whole paper seems a bit like a statistical exercise
- Needs more economic argumentation and focus on the economic analysis
- Less details needed on econometric tests
  - E.g. a full paragraph used to explain ADF
  - But at times crucial explanations are left out; e.g., on page 8, the return variables are said to have zero mean -- how?
- No descriptive statistics given for the return series or how they have been calculated
- Chow and Quandt-Andrew Breakpoint test done on residuals from the OLS model with nonstationary variables -- ok?
  - Need better explanation; C & Q-A tests are used to test changes in the regression parameter(s) (i.e., structural breaks in the relationship)
  - They are calculated using residuals, but they are not done <u>ON</u> the residuals
- Tables do not include any explanation of the statistics used; typically tables are written in a way that they are self-explanatory
  - E.g. Table 1: trimmed data = ?



- The main result of causal relationship does not make any sense
- Could be by accident (always 5% margin of error) or by daily data with timing differences → needs more careful examination to convince me that Chinese repo rate causes changes in the S&P500



- P. 1: theChinese
- P. 2: their country stock markets
- P. 2 (& elsewhere): et al / et. al / NN, et al  $\rightarrow$  NN et al., 19XX
- P. 2: define FDI when used for the first time
- P. 2: remove repetition on two last lines
- P. 3: literature on this area  $\rightarrow$  what area?
- P. 4: this paper = Kong et al. or the one cited
- P. 6: the main sample is split into two sub-periods; is their a non-main sample somewhere?
- P. 6: the Shanghai index is valued in RMB and USD in order to identify which data is more appropriate for this study; really? Probably you want to say that you use the index in both currencies ...
- P. 6: footnote 10: justify



- Interesting idea, but needs more work to sell the idea and convince the reader why one should read this paper
- More robustness checks needed on the results
- Work in process, needs to be polished before submission