

- Discussion by Laurent Weill
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# Banking Competition, Financial Dependence and Economic Growth

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- Very interesting and clear paper.
- New empirical evidence on the role of financial development, and more particularly of banking competition on growth.
- In the line of Rajan and Zingales (AER, 1998) and Claessens and Laeven (JEEA, 2005).
- I have:
  - Concerns.
  - Questions.
  - Suggestions.

## First concern: the 3 contributions of the paper 1/3

- Claessens and Laeven also investigate this issue on a sample of sectors from OECD countries.
- 3 contributions in comparison with Claessens and Laeven:
  - Lerner index instead of the Rosse-Panzar model to measure banking competition.
  - The different period: 1993-2003 instead of 1980-1989.
  - Wide range of industries and not just the manufacturing industry.
- Are these contributions enough?
- Can we make them more attractive?

## First concern: the 3 contributions of the paper 2/3

- First contribution: the use of the Lerner index:  
“We use the Lerner index of market power. This index presents the advantage that it can be calculated annually. (...) It will furthermore allows us to test the robustness of the results with different indicators of banking competition.
- Is it a satisfactory contribution for these reasons?
- The Rosse-Panzar model also gives yearly measures of market power.
- The Rosse-Panzar model also allows to test the robustness of competition measures with Herfindahl indices and concentration indices.
- Possible argument: the Lerner index allows to have some weighted measures of competition taking into account the share of each bank.

## First concern: the 3 contributions of the paper 3/3

- Second contribution: the different period:  
1993-2003 instead of 1980-1989 (for Rajan & Zingales and Claessens and Laeven using similar measures of external financial dependence).
- Is this different period a significant contribution?
- Additional arguments should be mentioned to stress the interest of this period because of changes in financial structure of companies and of financial systems.
- Third contribution: the investigation on a wide range of industries and not only the manufacturing sector
- Maybe the most significant contribution.

## Second concern: the measure of external financial dependence 1/2

- Definition by Rajan & Zingales and Claessens & Laeven: external financial dependence is the fraction of capital expenditures not financed with internal funds.

- Here:  
external financial dependence  
= 
$$\frac{[\text{Non-current liabilities} + \text{ST loans}]}{\text{Total assets} - (\text{payables}) - (\text{other current liabilities})}$$
  
= 
$$\frac{\text{Financial Debt}}{\text{Equity} + \text{Financial Debt}}$$

- 2 problems

## Second concern: the measure of external financial dependence 2/2

- 1st problem: the meaning  
This is not a measure of external financial dependence, but a measure of dependence to the credit markets.  
External equity finance (new equity issues) is not taken into account.  
The name should be changed.
  
- 2<sup>nd</sup> problem: the definition of financial development
- If external financial dependence does not take into account external equity finance, then the only relevant interaction is between financial dependence and credit/GDP.  
This is the only interaction which should be kept.

## Questions

- Amadeus database for the information on external financial dependence.
- But how do you have information for non-European countries such as USA or Japan in Amadeus?
  
- Is Amadeus the best database for the investigation?
- No need for micro-level data but for industry data.
- Maybe Bach database would be more complete for relevant items and for OECD countries (Europe, USA, Japan).
  
- Findings differ with the measure of competition:
  - Dependence\*Competition: (-)\*\*\* with H-stat., n.s. with Lerner
  - Dependence\*Competition n.s. with H-stat. and (+)\*\* with Lerner, while (Dependence\*Competition)<sup>2</sup> n.s. with H-stat. and (-)\* with Lerner

Why?



## Suggestions 1/2

### 1. To focus the paper on banks...

- External financial dependence as defined takes into account dependence to bank credit.
- Banking competition matters for dependence to bank credit.
- => why not focusing the paper on banking?
- In practice:
  - Some light rewriting.
  - To consider only intermediary financial development (ratio of credit to GDP) and forget other measures of financial development including stock market capitalization.

## Suggestions 2/2

2. ... and to test an alternative specification of the model

- Current specification:  $\text{Growth} = (\text{Dependence} * \text{FinancialDevelopment}, \text{Dependence} * \text{BankingCompetition})$
- First remark: it's hard to interpret the impact of BankingCompetition and FinancialDevelopment as they are only included through interaction terms.
- Second remark: if the focus is to know whether the impact of banking competition on growth varies with financial dependence, why not testing the following specification:
- $\text{Growth} = (\text{Dependence}, \text{BankingCompetition}, \text{BankingCompetition} * \text{Dependence})$

## Extensions

1. **To test the impact of banking competition and financial dependence on the components of growth:**  
Total factor productivity and accumulation of production factors.
  
2. **To replace banking competition by cost efficiency of banks:**
  - You have all data.
  - Emerging literature on banking efficiency and growth
  - ⇒ Interesting to investigate the effect of financial development and banking efficiency on growth.