

The current financial crisis and competition in retail banking: Insights from the academic literature

by

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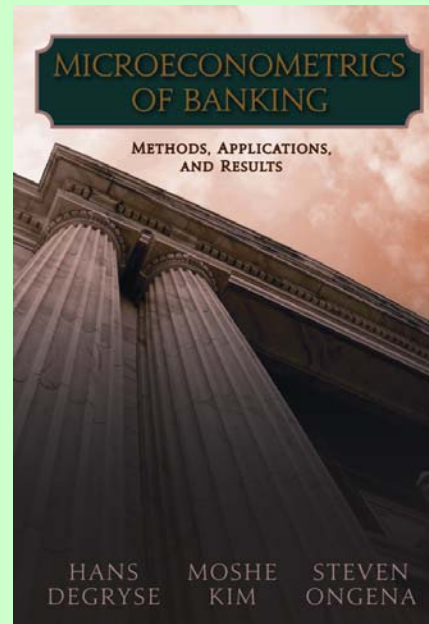
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***The views expressed in this presentation reflect only those of the
authors and not necessarily those of the OECD.***

Based on

- I. Degryse, H. and S. Ongena, background paper prepared for OECD roundtable on Competition and Regulation in Retail Banking held by the OECD competition committee in October 2006

- II. Degryse, H., M. Kim and S. Ongena (2009), *Microeconometrics of Banking: Methods, Applications and Results*, Oxford University Press.



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I. Introductory remarks

1. Finance and growth

- Financial Intermediation is important for economic growth
e.g. [Levine \(2005\) in Handbook of Economic Growth](#)
 - Banks facilitate problems inherent in imperfect capital markets
- Banks are most important, if not unique, providers of external finance to SMEs
- Retail Banking markets not yet fully integrated
e.g. [OxREP Volume 2004; Cerqueiro, Degryse and Ongena \(2008\)](#)
- Evidence mainly from growing healthy economies :
Important open issue with ongoing financial crisis which
“structure of banking and financial markets” allows to come
out of the financial crisis?

I.2. Measuring Competition in Retail Banking: Methods

Traditional Industrial Organization

Structure-Conduct-Performance

Bank Efficiency

Economies of Scale and Scope

New Empirical Industrial Organization

Panzar and Rosse (1987)

Conjectural Variations Models

Structural Demand Models

Other Structural Models

I.2. Higher concentration -> less competitive conduct -> higher profitability

- loan rates mostly increase in the concentration index but the magnitude varies widely

- Deposit rates decrease in concentration on time and savings deposit rates, but the effects vary across samples and specifications

- More recent studies find smaller effects for all deposit products, reflecting the widening geographical scope

Traditional Industrial Organization

Structure-Conduct-Performance (SCP)

Bank Efficiency

Economies of Scale and Scope

New Empirical Industrial Organization

Panzar and Rosse (1987)

Conjectural Variations Models

Structural Demand Models

Other Structural Models

Bain (1956)

Gilbert (*JMCB* 1984); Berger, Demirguc-Kunt, Levine, & Haubrich (*JMCB* 2004)

Endogeneity of market structure:
infer banks' conduct directly

Traditional Industrial Organization

Structure-Conduct-Performance

Bank Efficiency

Economies of Scale and Scope

New Empirical Industrial Organization

Panzar and Rosse (1987)

Conjectural Variations Models

Structural Demand Models

Other Structural Models

Bresnahan (1989)

Reduced form approach to discriminate between perfect competition and monopoly

Traditional Industrial Organization

Structure-Conduct-Performance

Bank Efficiency

Economies of Scale and Scope

New Empirical Industrial Organization

Panzar and Rosse (1987)

Conjectural Variations Models

Structural Demand Models

Other Structural Models

Encompassing study of Panzar Rosse statistic: Claessens & Laeven (*JMCB* 2004)

$$H = \sum_{k=1}^K \left(\frac{\partial R_i^*}{\partial w_{ki}} \cdot \frac{w_{ki}}{R_i^*} \right)$$

$H=1$ perfect competition, $H<0$ monopoly, $0<H<1$ monopolistic competition

50 countries, 1994-2001

Per country: > 20 banks, > 50 bank-years

35,834 bank-years

$$0.6 < H < 0.8$$

Regress H on explanatory variables

Bank system concentration and H seem unrelated

H is lower when entry / activity restrictions

I.3. Competition and Stability

- Two theories:
 - Traditional “competition-fragility” view: bank competition erodes market power, reducing the market value of banks. Banks take more risk to increase returns
 - “competition-stability” view (Boyd and de Nicolo, *JF* 2005): more competition reduces loan rates, incentivizing entrepreneurs. Reduced moral hazard improves financial stability.
 - Empirical work mainly inconclusive and depending on how competition is measured
 - Competition and stability measured in normal periods; what in stress periods?

I.3. Competition, Stability and Lending Standards

- Lending Booms and Lending Standards
 - Booming economy reduces incentives to screen
 - e.g. Ruckes (*RFS* 2004), Gorton and He (*REStud* 2008), Dell’Ariccia and Marquez (*JF* 2006)
 - Competition makes this effect stronger
 - Evidence in Dell’Ariccia, Igan and Laeven (2008):
 - Increased number of loan applications has reduced denial rate
 - increased number of competing banks has reduced denial rate in subprime market but not in prime market
 - Crisis: lending standards may come back to normal?
- Originate-to-distribute model has reduced lending standards as buyers of loans did not have monitoring technology and originating banks did not have sufficient incentives to monitor
 - e.g. Tirole (2006)

II. Retail banking sector, regulation and competition

Regulation: Tight in most countries

Vives (*EER* 1991); Fischer & Pfeil (2004)

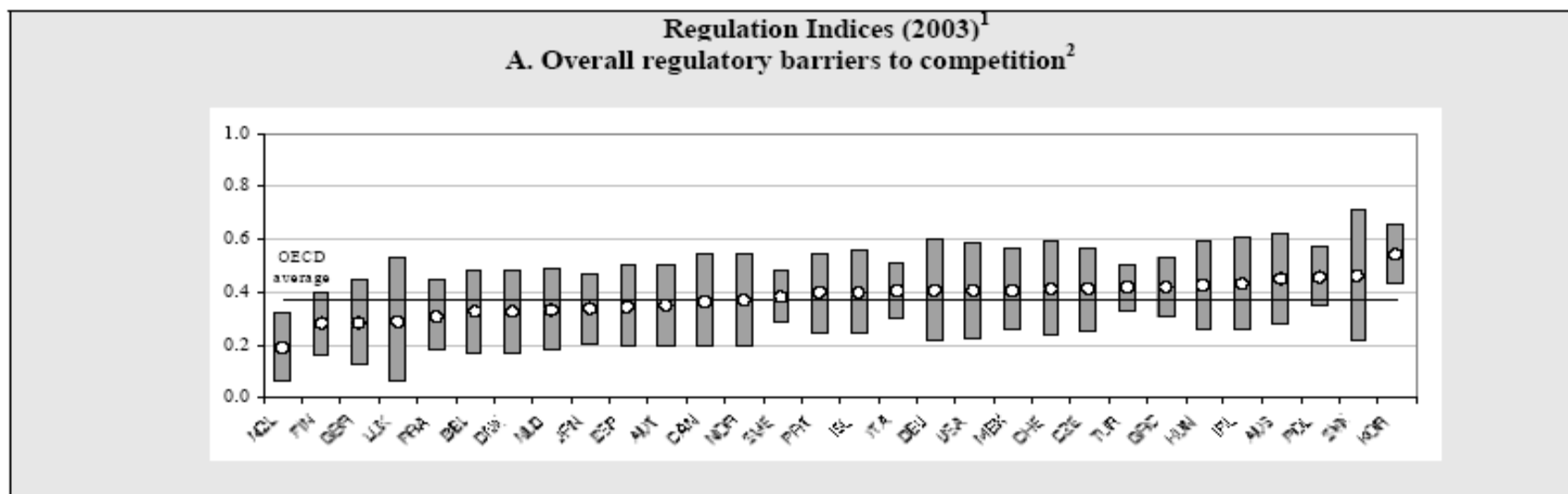
Softens competition

Restricts banking activities in space and scope

Prudential, vis-à-vis other non-bank FIs

Dewatripont & Tirole (1994)

Important differences in foreign entry restrictions and government ownership

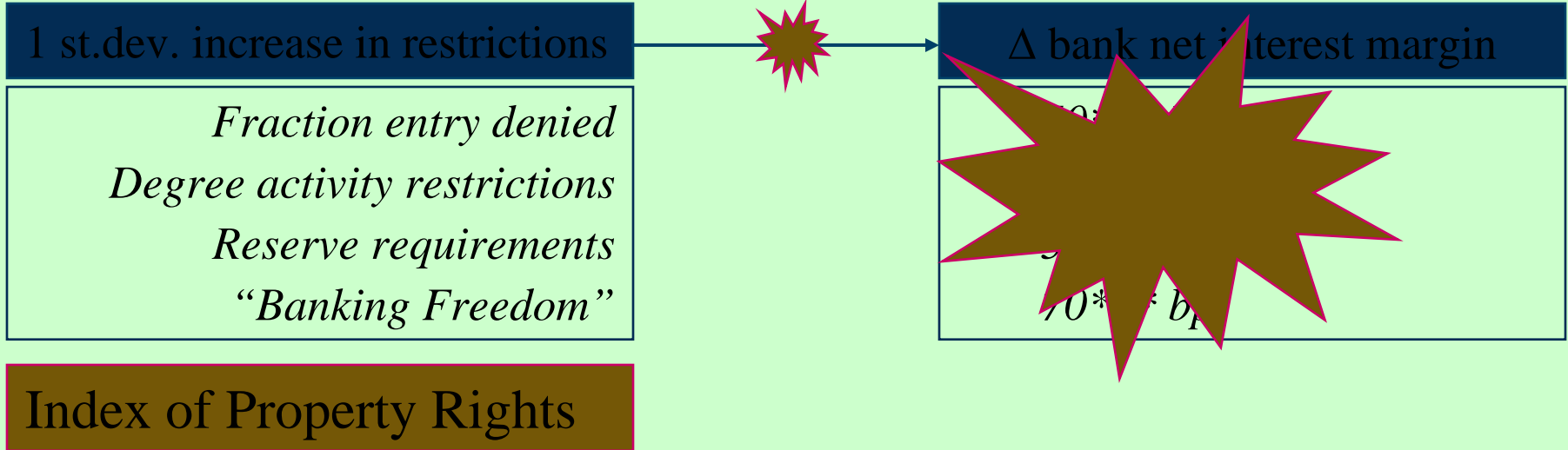


II. Regulation and Loan Rates

Banking deregulation decreases interest margins?

Demirguc-Kunt, Laeven & Levine (*JMCB* 2004)

72 countries



Banking regulation reflects *deep factor* of competitive environment

II. Regulation and Market Presence

- Foreign Banks
 - May compete and be affected differently
 - Foreign bank entry restrictions increase loan rates, while domestic entry restrictions do not [Levine \(2003\)](#)
 - While foreign entry “in general” associated with positive effects
 - Mostly for transparent firms
 - Also indirect positive effects for SMEs [Giannetti and Ongena \(RoF 2009, 2009\)](#)
 - Implications of ongoing financial crisis on behaviour of foreign banks (“back to basics” interpreted as “back home”?)

II. Regulation and Market Presence

- State-Owned Banks
 - State ownership pervasive [La Porta, Lopez-de-Silanes & Shleifer \(JF 2002\)](#)
 - Leads to:
 - Less competition [Barth, Caprio & Levine \(2004\)](#)
 - Slower financial development [La Porta, Lopez-de-Silanes & Shleifer \(JF 2002\)](#)
 - But, lower loan rates (for the lucky firms) [Sapienza \(JFE 2004\)](#)
- Current financial crisis:
 - Government involvement becomes widespread among countries
 - Politicians on board of government-involved banks, leading to misdirected loan granting (possibly sowing seeds for next crisis?)
 - Local / personal objectives?

II. Regulation and Stability?

- Lower barriers to entry and fewer activity restrictions lead to less banking fragility [Beck, Demirguc-Kunt & Levine \(2004\)](#)
- Statewide branching / interstate banking increased rates of incorporation, hence steady access to finance [Black & Strahan \(JF 2002\)](#)
- Dynamic effects: good banks should survive following deregulation [Stiroh & Strahan \(JMCB 2003\)](#)
 - Well-performing banks gain market share
 - Exit rate increased by 3.6% after state removed interstate banking restrictions

II. Regulation and Stability?

- Deposit Insurance and Stability?
 - Introduction of explicit deposit insurance tends to increase likelihood of banking crisis (data from 1980-1997) [Demirgüç-Kunt and Detragiache \(JME 2002\)](#)
 - Current crisis:
 - competition in DI schemes may induce contagion
 - funding and credibility matter
 - Too big to fail and too big to save issues
 - Call for European level funding (de la Rosiere and Lamfalussy approach too little ambitious)

III. Switching Costs

- Switching costs:
 - “costs that existing borrowers have to incur when changing banks”
- Switching costs bind a customer to its bank(s) and leads to market power for banks
- *Potential* for low-cost switching is important to restrain market power
 - “Higher switching rates as such” should not be a goal of competition policy!

III. Switching Costs

- Different types of switching costs
 - Transactional [Klemperer \(REStud 1995\)](#)
 - Administrative burden: administrative paperwork
 - Cross-selling of banking products
 - Customer preferences and choice: e.g. proximity
 - Closing charges: heterogeneous across banks and countries, and often not transparent for customers
 - shoe-leather and other search costs customers incur when looking for another bank or branch
 - Informational [Sharpe \(JF1990\)](#), [Rajan \(JF1992\)](#), [von Thadden \(FRL 2004\)](#)
 - “outside” banks have less information about creditworthiness of borrowers or firms than “inside” banks

III.1. Transactional Switching Costs

Magnitude

- Shy (*IJIO* 2002)
 - Finnish market share data 1997
 - Costs between 0 and 20% of the value of deposits
- Crisis has induced many depositors to switch, helping in lowering switching costs

Determinants

Duration of Relationships

- Kiser (*RIO* 2002)
 - US Survey 1999
 - Median household tenure: 10 years
 - Key: geographical mobility and bank quality
 - Non-monotonic in income: low and high switch less often

III.2. Informational Switching Costs

Magnitude

- Kim, Kliger & Vale (*JFI* 2003)
 - novel technique
 - Norwegian market share data 88-96
 - average annualized bank rents of 4% of the banks' marginal cost of funding
- Ioannidou and Ongena (2008)
 - Upon switching 80bp lower loan rate
- Financial Crisis may lower switching costs as switching firms are more likely to be of good quality (*ceteris paribus*)

III.3. Reducing Transactional Switching Costs

- Reducing administrative burden
- Switching Arrangements:
 - in place in e.g. UK, the Netherlands, Ireland and Austria
 - Arrangement that facilitates current account switching as “old” and “new” bank interact to
 - Reduce administrative burden
 - Reduce payment delays and “misclassifications”
- Perceived costs and risks of transactions “going wrong” are also very important e.g. OFT (2008) report
- Switching gains may be underestimated due to lack of transparency

III.3. Reducing Transactional Switching Costs

- Account number portability
 - implies that customers could transfer their number from one bank to another without facing an important administrative burden
 - could serve as an “automatic switching arrangement”
 - Structural approach that removes switching costs almost entirely
 - But may not be easy to implement
 - Requires standardization and harmonization
 - Costs of investment to achieve this may be huge

III.3. Reducing Informational Switching Costs: Information sharing mechanisms

- Information sharing may help borrowers to switch and to reduce holdup
- Public information helps competition so privacy laws may have cost
Bouckaert and Degryse (2007)
 - Privacy laws shape possibilities to setup registers. More stringent privacy protection may imply that customers become captive to their existing banks. Other financial institutions may have insufficient information to make competitive loan offers. Fewer privacy restrictions then may serve customer interests
- **Crisis: information sharing may help in transmitting information from one lender to another**

IV. Concluding Remarks

- Competition and certain financial innovations within inadequate regulatory environment may lead to deterioration of lending standards and financial instability
- Government involvement may lead to related lending
- Greater consumer education about financial alternatives may help consumers to consider switching and reduce rents from switching costs
 - Crisis may have “learned” customers to switch
- Policy makers may often do more to reduce switching costs
 - Privacy laws may need to be adapted to allow consumers to receive the benefits of credit ratings