

The Future of Retail Banking in Europe

Competition and regulatory challenges

Papers presented at a High-Level Conference, 10 June 2009
*Jointly organized by the European Credit Research Institute (ECRI)
and the Deutsche Institut für Wirtschaftsforschung (DIW Berlin)*

edited by
**Nicola Jentzsch
and Christian Wey**



The Future of Retail Banking in Europe **Competition and regulatory challenges**

Papers presented at a High-Level Conference

Edited by
Nicola Jentzsch
and
Christian Wey

Jointly organized by the
European Credit Research Institute (ECRI)
and the
Deutsche Institut für Wirtschaftsforschung (DIW Berlin)

10 June 2009

The **European Credit Research Institute (ECRI)** is a research institution based in Brussels. Established in 1999 for the study of banking and credit in Europe, ECRI focuses on institutional, economic and legal aspects related to retail finance and credit reporting. The institute provides expert analysis and academic research for a better understanding of the economic and social impact of credit. ECRI supports and funds independent academic research projects. The institute monitors markets and regulatory changes and looks at their impact nationally and internationally.

ISBN 978-92-9079 989-4

© Copyright 2010, European Credit Research Institute

**EUROPEAN CREDIT
RESEARCH INSTITUTE (ECRI)**

Place du Congrès 1
B-1000 Brussels, Belgium
Tel.: +32-2-2293911
Fax: +32-2-2194151
Email: info@ecri.be
Web: www.ecri.eu

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the European Credit Research Institute. This report does not reflect the opinion of any institution or member associated with ECRI.

Table of Contents

Preface	1
<i>Dr. Nicola Jentzsch, Technische Universität Berlin and DIW Berlin</i>	
<i>Professor Christian Wey, Technische Universität Berlin and DIW Berlin</i>	
EU Competition Policy in Times of Financial Crisis	4
<i>Professor Georges Siotis, Chief Economist Team, DG Competition, European Commission</i>	
Competition Policy in Retail Banking: Before and after the crisis	10
<i>Professor Giancarlo Spagnolo, Università di Roma “Tor Vergata”, SITE - Stockholm School of Economics, EIEF and CEPR</i>	
The Financial Crisis and Competition in Retail Banking: Insights from the academic literature	17
<i>Professor Hans Degryse, CentER - Tilburg University and CESifo</i>	
<i>Professor Steven Ongena, CentER-Tilburg University and CEPR</i>	
Retail Finance: Rethinking regulation and consumer protection in the wake of the financial crisis	27
<i>Professor Roman Inderst, Johann Wolfgang Goethe–Universität, Frankfurt am Main (IMFS)</i>	
Between Competition and Regulation: The conditionality of bailout plans	35
<i>Damien Gerard, Research Fellow, Chair of European Law, University of Louvain (UCL)</i>	
About the Authors	46
Conference Programme	48

Preface

We are pleased to be able to bring together in a single volume the excellent contributions presented at the conference on “The Future of Retail Banking in Europe: Competition and Regulatory Challenges” held at the Centre for European Policy Studies (CEPS) in Brussels on the 10th of June 2009. The conference was jointly organized by the European Credit Research Institute (ECRI) and the Deutsche Institut für Wirtschaftsforschung (DIW Berlin). The event coincided with the 10th anniversary of the founding of ECRI.

The conference, which took place in the midst of the financial crisis, brought together financial market experts who focus their research on microeconomic policies aimed at fostering effective competition in the banking industry. While most of the debate about the crisis has dealt with the banking industry as a whole and the stabilisation policies introduced by governments, especially central banks, this volume draws attention to the microeconomic specifics of banking. By starting with the basics underlying financial markets, we acquire a better understanding of the many facets of business practices, which in turn allows us to identify possible market failures. The identified market failures serve as a starting point for the design of optimal policies in the arenas of competition policy and consumer protection. This is the classic approach taken by specialists in industrial organization, which has been widely accepted as the most appropriate method in this field.

A more active role of competition authorities in the banking industry is a rather new phenomenon. Ironically, the massive bailouts, subsidies and guarantees provided by national governments put competition policy at risk, just before it really started to become effective. With regard to consumer protection as a prerequisite for effective competition in financial retail markets, research is still evolving. This research is increasingly taking into account the psychological foundations of consumer decision-making – a promising perspective for better policy formulation in the future. In this area, policy-makers have just started to take policy advice (based on microeconomic analysis) more consistently into account.

Professor Georges Siotis, a member of the Chief Economist Team at DG Competition at the European Commission, listed in his contribution “EU Competition Policy in Times of Financial Crisis” the various measures adopted by DG Competition to assure a pro-competitive use of state-aid. His paper also deals with the European Commission’s recent decisions in individual cases, which show that a staggering amount of capital has been injected into financial markets by means of guarantees, recapitalisations and other liquidity measures. Overall, the Commission’s banking communications should have helped to supervise state-aid programmes to avoid outright misuse. However, as exemplified by the “restructuring communication” of DG Competition, there is still much to do when it comes to the supervision and monitoring of restructuring measures.

The challenging situation facing European competition policy in the current financial crisis also lies at the core of the paper “Competition Policy in Retail Banking – Before and After the Crisis” by Professor Giancarlo Spagnolo (Universita di Roma “Tor Vegata” and Stockholm Institute of Transition Economics). Just before the crisis, competition policy had received a lot of attention among policy-makers at conferences organised by various international institutions and inquires carried out by competition authorities into practices in the banking sector. With

the financial turmoil, a more sceptical view about the alleged trade-off between competition and stability regained grounds. His paper summarizes the theoretical and empirical research on that topic. Unfortunately, empirical studies suffer from limited data so that an identifiable and robust relationship between competition policy and financial stability has not yet been established. Moreover, virtually all empirical research suffers from the fact that it works with time periods in which a financial downturn like the current one was not an issue. To the contrary, financial markets were healthy and growing so that the critical impact of competition policy within a period of financial instability and thereafter is completely absent in the data. Professor Spagnolo also criticises recent retail banking inquiries for not paying sufficient attention to the involved risks, which should be at the core of any competition analysis in banking. His contribution, therefore, emphasizes the need to collect new and richer data sets, which should then be properly analyzed by competition authorities. He also presents his own view on recent debates about the question whether competition policy altogether can be regarded as a driver of growth and social welfare. He forcefully argues in favour of a significant positive effect of a well-designed competition environment on overall prosperity.

Professor Hans Degryse (CentER/Tilburg University and CESifo) presents a review of the latest developments in the empirical analysis of banking and financial markets. In his paper entitled “The Financial Crisis and Competition in Retail Banking: Insights from the Academic Literature” (co-authored with Steven Ongena, CentER/Tilburg University and CEPR), he presents several studies that show that competition impacts negatively on banks’ profits and loan rates. However, those relationships appear to be less robust when compared with other industries. The empirical analysis of the relationship between competition and stability still suffers from a proper account of the endogeneity problems. There is, however, evidence indicating that banks’ lending standards deteriorate during boom – a fact that appears to become stronger when competition increases. Professor Degryse puts those findings into the context of the diversity of national regulatory regimes and government interventions which may induce spurious regression results. Pointing to the growing governmental engagement and involvement of politicians in the course of the current crisis, he emphasizes the danger that poorly managed banks may become the cause of the next crisis, and this topic therefore should receive special attention. Finally, the contribution also uncovers several open fields for a pro-active consumer policy, for example the reduction of consumer switching costs and enhancing the transparency of retail financial products or, more generally, improving the financial literacy of consumers.

Professor Roman Inderst (Johann Wolfgang Goethe-Universität Frankfurt) describes the economic principles of consumer protection policy in general and applies those principles, in his contribution “Retail Finance: Rethinking Regulation and Consumer Protection in the Wake of the Financial Crisis”, to the design of consumer protection regulations that should govern the markets for retail financial products. The financial crisis was triggered by a crisis in the markets for mortgages and mortgage-related products. Professor Inderst argues that a proper consumer policy in retail finance should not only impact positively on competition, but should also foster overall financial stability. However, research is still evolving in that field and there remain many open questions. Policy advice is often not straightforward as financial markets are complex and several trade-offs arise when a certain policy is at stake. For example, regulations that draw attention to the inherent conflicts of interests between financial advisors and customers (created, for example, by commissions) can reduce mis-selling incentives on the one hand, but may also undermine an advisor’s motivation to serve his customer optimally. At a more general level, Professor Inderst argues that consumer protection policies should mainly counter misconduct on the part of firms, allowing the competitive forces of the markets to develop to the benefit of consumers.

Lastly, Damien Gerard (Research Fellow, Chair of European Law, University of Louvain) focused his contribution “Between Competition and Regulation: The Conditionality of Bailout

Plans” on the pros and cons of requirements dictated by bailout plans. To prevent distortions in markets, the Commission has conditioned the authorization of state-aids on various requirements, including behavioural constraints (such as, for example, limitations on advertisements) and structural measures (in particular business restrictions and pull-out of activities). Moral hazard issues have been addressed, for instance by means of limitations on the distribution of dividends and on remunerations or severance packages for managers. Overall, there is a lot of variation across Europe and a harmonized approach is still missing. He comes to a rather critical assessment of structural measures, which may frustrate incentives within banks. In addition, a re-focus on banks’ national core business may also create tensions with the objective to strengthen the internal market in the EU.

Much remains open for future research in the areas of competition in banking, financial crisis and consumer protection. With this volume of selected papers, we hope to contribute to a better understanding of these critical interactions.

Nicola Jentzsch and Christian Wey
Berlin

EU Competition Policy in Times of Financial Crisis

Professor Georges Siotis, Chief Economist Team, DG Competition, European Commission*

The beginning of the crisis manifested itself as what initially appeared to be isolated cases of financial institutions that had pursued flawed business models (e.g. Northern Rock). At the time, it was believed that it would probably not go much further than these individual cases. The situation changed dramatically with the collapse of Lehman Brothers in September 2008. The fact that a bank like Lehman would not be bailed out and was to be allowed to collapse (or could not be saved from filing for bankruptcy) came as a real shock. This led to a complete gridlock in financial markets, which were said to have suffered a ‘heart attack’. Public authorities promptly reacted by providing support in order to keep the financial system functioning.

The immediate consequence of this was that first to harmonise retail deposit insurance as a race to the top was gathering pace. Indeed, large flows of deposit money travelled across borders chasing the highest insurance. Since then, there has been a much larger degree of uniformity across member states. Second, the Commission invoked Article 87 (3) (b). The latter allows for state aid to correct for a ‘serious disturbance’ that affects the entire economy of a member state. As you may know, article 87 2 (b) had only been invoked in the case of Greece during the 1980s.

87 3 (b) puts state aid on a different footing as it allows for state aid to correct a macro disturbance to the economy. DG Competition had to adapt to this new setting, particularly with respect to rescue and restructuring aid. It also allowed some member states to adopt broad, economic-wide schemes that covered the entire economy.

Ex post, it proved to be part of an adequate response. As you well know, DG COMP was soon faced by a ‘tsunami’ of state aid cases in the financial sector. Often, the problem was worse than initially expected.

Despite these exceptional circumstances, the basic principles have not changed. State aid is a balancing exercise. It is explicitly recognised that, most of the time, State aid it does lead to a distortion of competition. At the same time, there is a recognition that markets are not always efficient. Some markets are characterised by pervasive market failures, and state aid can contribute to correct these market failures. The approach consists of carrying out a balancing test: distortion of competition vs. correction of market failures. Hopefully the outcome is positive in terms of welfare.

What type of market failures emerge in the context of a financial crisis? First, systemic risk can lead to large negative externalities. The market failure stems from the fact that the social cost associated with the bankruptcy of one financial institution is potentially much larger than the private cost to shareholders, creditors, and managers of the failed institution. This is a clear, basic market failure and it is therefore desirable to have public authorities intervene. The second is that when confidence disappears, massive coordination problems arise. Third, the presence of asymmetric information can lead to a breakdown of securitisation markets.¹ Fourth, risk was mispriced before the crisis and possibly also during the crisis.

* The author underlines that his contribution was made in an individual capacity and cannot be attributed to the European Commission or DG Competition.

¹ This securitisation market breakdown is analogous to the second-hand car market breakdown example of Akerlof (1970), in which potential buyers are assumed to possess less information than the car dealer

Having a justification for state aid does not mean that the problems linked to state aid disappear. They do not. Even though state support may contribute to financial stability in the short term, there is a latent tension between short-term financial stability and medium-term competition. Indeed, public intervention in the financial sector can lead to serious distortions of competition in the medium term. For the recipient, the issue of moral hazard is central. Moral hazard has become a popular word and is sometimes used in an imprecise way, but it is important to understand that it is not about what happened in the past, but what will happen in the future. Bailouts can create moral hazard, which will affect the behaviour of agents in the future. Therefore, we have to be very careful not to create the conditions that will trigger the next crisis down the line.

Moral hazard is a central theme and the distortion is not only limited to the recipient of state aid, but also affects the incentives of competitors. In the presence of bailouts by the State, competitors of the assisted entity observe that it is not the markets that allocate rents and profits, but it is the State that does so in an ex-post manner. This can lead to distortions; both in the product and input markets. If banks or financial institutions expect repeat intervention, which will affect perceived marginal cost and therefore pricing and this in turn leads to a distortion in the product market. It can also create distortion in the input market, e.g. via easier of access to funding.

Another problem – at least at the European Commission – is that some large banks compete across different national jurisdictions. Member states are the ones that provide bailout funds and are primarily concerned about developments in their jurisdiction; often they do not internalise the consequences of their actions on other jurisdictions. Member States also differ in terms of their ability and willingness to intervene. This has the potential to distort competition.

What has the Commission, and in particular DG COMP, done? It has provided both ex-ante guidance and has had to deal with specific cases of financial institutions that only survived the storm because of generous public support. Regarding ex-ante guidance, there was a first Communication in October 2008, fairly general, establishing general principles of non-discrimination, level playing field, etc. One important element is that it contains guidance on the price for guarantees based on the ECB's recommendations.²

In December 2008, when member states were increasingly recapitalising their banks with large amounts, a second communication (the "recapitalisation communication") was adopted.³ The latter introduces a distinction between fundamentally sound and fundamentally unsound banks. In practice, a fundamentally sound bank is a bank that experiences stress because of the systemic crisis, but would be perfectly viable under normal conditions. A fundamentally unsound bank is a financial institution that is experiencing difficulties not only because of the systemic crisis, but would also experience those difficulties under normal times. This is very convenient conceptually, but in practice it can be quite a challenge to decide where to draw the line. In principle, it is done on the basis of ex-ante indicators; still, the decision on how to

and are only willing to bid at most the average price between a good car and a bad car ('a lemon'). A similar mechanism may have played a role in the drying up of the market for all but the most simple types of securitisation.

² Commission Communication on "The application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis" (Official Journal C 270, 25/10/2008, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:270:0008:0014:EN:PDF>).

³ Commission Communication on "The recapitalisation of financial institutions in the current financial crisis: limitation of aid to the minimum necessary and safeguards against undue distortions of competition" (Official Journal C 10, 15/01/2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:010:0002:0010:EN:PDF>).

categorise a bank is not always clear-cut. The recapitalisation communication also gives guidance on the pricing of the recapitalisation according to the profile of the banks.

Following developments at the end of 2008, the Commission adopted a third communication on impaired assets in February 2009.⁴ Indeed, it rapidly became clear that impaired assets would be the next problem. It was quickly realised that the presence of toxic assets on balance sheets was not a problem limited to a few banks and of limited magnitude, but rather a much more widespread problem across Europe's banking sector.

The so-called 'restructuring Communication' explains how the Commission is applying the rescue and restructuring guidelines to the specifics of the financial industry.⁵

Another initiative that is worth mentioning regards pan-European stress testing. The added value of such an exercise would be the application of uniform criteria across jurisdictions. This exercise will be coordinated by the Committee of European Banking Supervisors (CEBS).

In terms of individual cases, there are 57 decisions without counting amendments to several decisions, a fairly large number: 32 individual measures affecting 26 different institutions – some of them are large, so these are relevant magnitudes – and 24 schemes adopted by member states for the entire financial sector.⁶

And there are still some ongoing investigations, e.g. Northern Rock. Most cases involve banks from more advanced countries, at least from a financial perspective. A number of institutions have required support on various occasions, meaning that the first intervention did not prove to be enough.

In terms of schemes, the Commission approved government guarantee schemes for newly issued debt, recapitalisation schemes (with some schemes involving both types of intervention), as well as support aimed at facilitating access to liquidity.

In terms of implementation, here are some numbers that I was initially very reluctant to use, because they are provisional. They are based on information given by member states, so caution should be applied, and they are just an order of magnitude. The table below distinguishes between commitments (i.e., the amounts that could be paid) versus actual disbursements. The numbers are quite staggering.

⁴ Commission Communication "On the Treatment of Impaired Assets in the Community Banking Sector" (Official Journal C 72, 26/03/2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:072:0001:0022:EN:PDF>); Commission Communication on "The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules" (Official Journal C195, 19/08/2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:195:0009:0020:EN:PDF>).

⁵ Commission Communication on "The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules" (Official Journal C195, 19/08/2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:195:0009:0020:EN:PDF>).

⁶ http://ec.europa.eu/competition/elojade/isef/index.cfm?fuseaction=dsp_result

Table 1. EU public interventions in the banking sector

	Capital injections		Liability guarantees		Asset relief		TOTAL	
	Committed	Effective	Committed	Effective	Committed	Effective	Total committed	Total effective
EA (€bn)	241	156	1.849	725	103	89	2.193	969
EA (% GDP)	3%	2%	21%	8%	1%	1%	24%	11%
EU (€bn)	315	202	2.913	937	103	89	3.331	1.228
EU (% GDP)	3%	2%	25%	8%	1%	1%	28%	10%

Source: EC Services (Cutoff date 31 August 2009).

In terms of take-ups, the numbers for guarantee schemes were initially very low, around 10-15%, while they accelerated fast over the past few weeks, so now it is at about 32% of the total that had been made available. The take-up of recapitalisation funds has been higher, but it also increased over the past few weeks: it used to stand at 50%, while its current figure is about 55%.

These schemes were adopted over a short period of time. They are certainly not flawless, and there are many issues that are on the table. For this reason, the schemes can be adapted along the way. Just to mention a few issues: what is the incentive for banks to participate when these schemes are not mandatory? Some of them include caps on remuneration. Is this desirable?

Depending on the sovereign rating of their country of origin and their exposure to toxic assets, two banks with the same rating can end up paying prices for recapitalisation funds or guarantees on newly issued debt. This is a cause for concern in terms of level-playing field. In addition, the schemes are in place for a limited duration. Given that refinancing needs are huge, the question arises as to whether banks will have the ability to access sufficient funds in the absence of government support.

Given the size of the problem, one may wonder whether we should not have a specific regime to deal with banks in distress. At the time when Lehman Brothers collapsed, member states did not have special resolution regimes (SRR) involving prompt corrective action (PCA) for financial institutions. Since then, some member states have adopted legislation, but these new tools have barely been used.

It is an important issue to see whether it would be desirable to have a more widespread use SRR *cum* PCA. The idea being that – properly implemented – SRR/PCA would avoid the painful choice between a taxpayer financed bailout and bankruptcy of the Lehman-type with its associated shock-waves.

DG COMP has to approve the restructuring plans that unsound banks having received support have to present, no later than six months after having received the aid. This ex-post intervention in the form of restructuring plans could potentially be used to address some of the problems that are behind the current situation and include features that are similar to the special resolution regimes, for example on how to deal with moral hazard.

These restructuring plans are based on three pillars: (a) own contribution or burden-sharing, (b) compensatory measures and (c) ensuring long-term viability (which is the most important of the three pillars).

Own contribution means that the company should make a contribution so that state aid is limited to the minimum necessary and such that moral hazard is being minimised. This implies that owners, creditors, managers should share the cost of the rescue. In the case of financial entities, that could potentially involve the conversion of hybrid capital into common equity, a feature

that is common in special resolution regimes. This would mean restructuring the liability side of the balance sheet.

So far, compensatory measures have fallen on the asset side of banks' balance sheets. The logic behind compensatory measures is that the aid allows the firm to survive, which harms competitors. Compensatory measures are there to 'compensate' competitors. For non-financial funds this typically involves reducing capacity and/or selling assets. In the financial sector, particularly in the context of a systemic crisis, it is a little more complicated. The disappearance of one entity may actually not benefit competitors, but harm them, as they are often creditors of the failed institutions. In addition, if, during a systemic crisis, many firms have to sell assets, a potentially serious problem could arise: too many sellers and very few buyers.

It is clear that restructuring plans have to be tailored to the specifics of each situation, taking into account the nature of the financial system and the fact that we experienced a crisis of systemic dimensions. Last, there is a real risk that this crisis may reinforce the home country bias; thus fragmenting the internal market – something that we should not be happy about, at least not at the Commission.

As mentioned above, long-term viability is a central pillar. The objective is to ensure that the restructuring plan will create an entity that will be able to stand on its own in the medium- to long-term; that is, without explicit state support.

DG COMP's activity has to be viewed in the context of an uncertain environment. The regulatory system is changing, albeit slowly. The restructuring plans have to take this evolution into account as well as the fact that business models are changing in the banking industry.

An important question regards timing. So far, bail-outs have been carried out 'over the weekend', while restructuring plans have come six months later. It is possible to wonder whether the bail-out and the restructuring plans should not be simultaneous, or at least be devised closer in time.

This crisis should not become a missed opportunity. As has often been mentioned, a crisis can offer opportunities for beneficial change.

We still have problems in the system. Lending is probably not going where it should. The real, one long-term issue is whether it will be possible to avoid the emergence of 'zombie' banks lending to 'zombie' borrowers.

This is what happened in Japan and to a lesser extent in the US. 'Zombie' banks are those institutions that barely meet the regulatory requirements and as a consequence, do not expand or lend sufficiently. 'Zombie' borrowers still manage to have access to credit, as banks know that if they write these loans off, they will fail themselves. The existence of 'zombie' borrowers slows down adjustment, impedes entry and thereby can lead to a L-shaped recession with a slow, almost inexistent recovery for years.

References

- Acharya, Viral V., Irvind Gujral and Hyun Song Shin (2009), "Dividends and Bank Capital in the Financial Crisis of 2007-2009", Working Paper.
- Akerlof, George (1970), "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, Vol. 84, No. 3, pp. 488–500.
- Allen, Franklin (1990), "The market for information and the origin of financial intermediation", *Journal of financial intermediation*, Vol. 1, pp. 3-30.

- Allen, Franklin and Douglas Gale (2000), “Financial Contagion”, *Journal of Political Economy*, Vol. 108, pp. 1-33.
- Allen, Franklin and Douglas Gale (2004), “Competition and financial stability”, *Journal of Money, Credit, and Banking*, Vol. 36, No. 2, pp. 453-480.
- Boyd, J.H., and De Nicoló, G. (2005) “The theory of bank risk-taking and competition revisited”, *Journal of Finance*, Vol. 60, pp. 1329-343.
- CEPS Task Force Report (2008), *Concrete Steps Towards More Integrated Financial Oversight – The EU’s Policy Response to the Crisis*.
- Claessens, Stijn (2009), “Competition in the Financial Sector: Overview of Competition Policies”, *IMF Working Paper 09/45*.
- Claessens, Stijn and Luc Laeven (2004), “What drives banking competition? Some international evidence”, *Journal of Money, Credit, and Banking*, Vol. 36, No. 3, pp. 563-583.
- de Larosière et al. (2009), *Report from the High-Level Group on Financial Supervision in the EU*.
- Diamond, Douglas (1984), “Financial intermediation and delegated monitoring”, *Review of Economic Studies*, Vol. 51, pp. 393-414.
- Maes, S., and Kiljanski, K., (2010), “Competition and the financial markets: Financial sector conditions and competition policy”, Forthcoming in Competition Policy Newsletter 2009-1 http://ec.europa.eu/competition/publications/cpn/2009_1_4.pdf
- Marcus, A.J. (1984), “Deregulation and bank financial policy”, *Journal of Banking and Finance*, Vol. 8, pp. 557-565.
- Praet, P. and G. Nguyen (2008), “Overview of Recent Policy Initiatives in Response to the Crisis,” *Journal of Financial Stability*, Vol. 4, pp. 368-375.
- Scharfstein, David S. and Jeremy C. Stein (2008), “This Bailout Doesn’t Pay Dividends”, *New York Times*, 20 October.

Competition Policy in Retail Banking: Before and after the crisis

Professor Giancarlo Spagnolo, Università di Roma “Tor Vergata”, SITE - Stockholm School of Economics, EIEF and CEPR

This paper looks at the implications of the global financial crisis for competition policy in the banking sector. Before this crisis – unfortunately just before the crisis – there was greatly increased attention on the need for competition and the enforcement of competition policy in the banking sector, in particular in the retail banking sector. For instance, the OECD held a policy roundtable and the EU DG Competition and several national European competition authorities undertook a number of sector inquiries on retail banking.⁷ During the same period – the two or three years before the crisis – the network of international competition authorities openly called for the elimination of any special rule for competition enforcement in retail banking.

The sector inquiries identified a number of competitive problems, such as high switching costs for small customers, both transactional and informational, the lack of consumer ability to compare products, regulatory barriers to entry, inappropriate institutional information-sharing, too many ‘dangerous relations’ (too much cooperation) amongst competitors in payment networks, and so on. Hans Degryse will cover these issues in his chapter; what is important to note is that all this happened just before the crisis.

Then the crisis struck, starting as a US financial crisis and then becoming a global financial and economic crisis. History tells us that in exceptional situations like deep economic crisis or war, competition concerns are typically put on the back-burner. The immediate concerns shift towards issues such as the ‘preservation’ of productive and financial capabilities. Recent studies have shown, however, that this kind of soft competition policy tends to have a negative effect on the speed with which the economy recovers. A paper by Cole and Ohanian (2004) shows, for example, that the cartelisation policy allowed during the New Deal, with the aim of increasing wages and spending by limiting competition, actually delayed the exit from the Great Depression considerably. Lax competition policy does not seem to be an appropriate instrument with which to fight global downturns.

Still, the temptation to downplay or postpone competition concerns has been and still is high nowadays for those governments in search of public support, as the consumer is not as politically organised as the business sector. Strong forces have instead been pushing for more and more state aid – in various forms – to failing banks. State aid intervention during a financial crisis is, however, typically subject to severe time constraints as its aim is to prevent panic on the side of depositors, and sound bank failures due to lack of trust and liquidity in the interbank market. Such policies therefore need to be reviewed by the competent authorities within a very short time frame, a few days typically, to be effective in one sense or another. This of course considerably reduces the ‘quality’ of the state aid policy, for example its ability to select the right cases for intervention; those that really deserve public support and rescue.

The banking industry has always been considered a ‘special’ industry, in terms of the competition and stability trade-off it may entail and for the public goods the banking network provides. When it is widely considered more important to save the banking sector than to let banks compete, it is normal that policies like public subsidies and nationalisation are rapidly and

⁷ In Italy, Ireland, the Nordic countries and the UK, among others. See Caiazza, Carletti, Giannetti and Spagnolo (2008) for an overview.

extensively implemented. At such times of crisis, however, mergers, often directly arranged by regulators and subsidised with taxpayers' money, have also often been used as an instrument to 'save' failing financial institutions with likely 'systemic relevance'. This took place without much attention being given to their likely negative long-run consequences, in both anti-competitive and financial stability terms.

Theory tells us that very large banks, for example those that originated in the intense bank merger wave that before the crisis, tend to substantially reduce both their participation in the interbank market and the amount of liquid reserves they hold as a buffer. Carletti, Hartmann and Spagnolo (2007) produced the only theoretical study of bank merger and liquidity I am aware of, and show that these effects may interact and worsen systemic liquidity shortages. Hence, according to this theory, mergers creating very large banks may be the source of liquidity shortages and ultimately the next financial crisis. Recent empirical evidence is consistent with this theory, as it finds that large merging banks tend to significantly reduce the amount of liquid reserves they hold to buffer liquidity shocks or to be lent on the interbank market after the merger.⁸ This means that the use of mega-mergers to save large failing banks during this crisis will make the situation worse, and may turn out to be one of the main causes of the *next* financial crisis.

Note that this argument is independent from – and adds to the other important argument – that too large financial institutions are prone to moral hazard and risk-taking because they are aware of being Too Big Too Fail (TBTF), and therefore are sure of being rescued by the tax-payer in one way or another if things go wrong (but cash in the entire benefits in bonuses if they don't).

Note also that nationalised banks can be re-privatised in good times, with no bad effects on long-term bank competition and even possibly net gains for the tax-payer. Subsidies can be paid back at a penalty rate. But it will be costly and politically difficult – though clearly necessary – to break up these gigantic new financial institutions into a sufficiently large number of smaller ones so that they will not be considered TBTF and induce the next financial crisis. Breaking up mega-banks is also obviously needed from a competition policy point of view, given that scale economies are exhausted at a rather low bank size and that standard compatibility concerns, which in part prevented competition authorities from breaking down Microsoft, are entirely absent.

What about the role of competition in this crisis? First of all, we do not yet fully understand what happened. People are not saying openly that excessive competition among banks was among the causes of the financial crisis. However, people are saying that the problem arose out of excessive risk-taking; most likely induced by unfettered competition, as well as poorly regulated and poorly supervised financial innovation. We still do not know what exactly caused the most damage in the lead-up to such a great global downturn – we will perhaps know more after some years of research (many economists are still studying to try understand the Great Depression in depth...).

As mentioned above, it was an unfortunate coincidence that competition policy was applied more and more to the banking sector just before the crisis. Central Banks, for example, lost substantial authority on competition policy in banking to the advantage of the more focused Competition Authorities in the two decades before the crisis. Many other changes took place at the same time, of course. In particular, financial regulation was considerably relaxed in the US and the Fed's monetary policy was very lax for a very long time, but still...

So what do we expect for competition policy in retail banking in the coming future, apart from the daunting tasks it will face, i.e. re-establishing some public confidence in competitive

⁸ See, for example Berger and Bouwman (2009), Erel (2009) and Pana et al. (2009).

markets and breaking down TBTF monopolistic mega-banks? Of course, we expect strong and recurrent attacks, from many banks, associations and even regulators and central banks.⁹ The question is then: do we have robust enough evidence to counter these attacks? Governments should be able to say that they cannot downplay competition policy enforcement in banking because this policy substantially increases overall welfare; it produces benefits widely in excess of its costs plus the possible costs it may impose on any industry participant. It is important to have this kind of instrument to counter such attacks.

If we start to think about what we know about the effects of competition policy on society in general, we are immediately led to the debate in the US, which was started by the very provocative study by Crandall and Winston (2003). This study claimed that competition policy, as enforced in the US, has been ineffective, if not counterproductive. It was clearly a somewhat biased study, but it still had informational content and it was the study that first raised the issue. A debate followed in which Baker (2003), Werden (2003) and many others disagreed, both on the methodology and on the substance of that study. In the end, looking also at Whinston's (2006) book, there does not seem to be much hard evidence on the substantial positive welfare effects of competition policy, either in general or in specific sectors.

Following an initiative of DG ECFIN, in Buccirosi et al. (2009) we have tried to find more direct evidence of the effects of competition policy on society. In particular, the aim of that study was to investigate a possible direct link between the quality of competition policy and countries' productivity growth. We collected data from many sources and built detailed indicators on the many components determining the quality of competition policy for 13 jurisdictions, with the help of DG Competition. We then developed summary statistical indicators at different levels of aggregation. We thereby produced a set of indicators that closely track the evolution of the quality of competition policy enforcement in these jurisdictions for a decade (1995-2005), which we then used to estimate the effect of competition policy on productivity growth. There is of course always a problem of causality in econometrics, and we do not have a natural experiment, but the long panel we built was helpful, as were a number of good instruments. We found robust evidence that a high quality of competition policy induces a significant and robust positive effect on productivity growth. Competition policy seems to be effective overall in enhancing productivity and growth; the origins of the wealth of nations.

Competition authorities could nonetheless do more to help in this direction. Collecting the data necessary for the paper was a rather daunting task, because most competition authorities do not keep adequate records of their own activities. Some competition authorities did not even allow us access to the scant data they had collected. Collecting records appropriately and making them accessible to researchers, as most Central Banks do, increases the accountability and transparency of competition authorities and is an important means of making the case for competition policy. Attitudes clearly need to change here.

Nevertheless, we should bear in mind that banking is somewhat special; it is an industry like no other. In banking, productivity concerns are not all that important from a public point of view, particularly when there are stability issues at stake. Even though competition authorities were arguing before the crisis that banking is an industry like any other, we know that there is a long tradition of seeing banking as 'different'. This is due to the very high leverage of financial institutions and the associated high risk of moral hazard/risk-shifting, amplified by state guarantees like deposit insurance that are designed to prevent bank runs, together with the extreme interdependence between institutions and their propensity to losses of confidence and runs, leading to an intrinsic fragility and a high risk of contagion. Another aspect that makes

⁹ Many economists are now convinced that the origins of the financial crisis are linked to the asset market bubbles induced by the long-lasting lax monetary policy of the Fed in the two decades before the crisis.

banking special is its provision of public goods: payment services, liquidity, screening of borrowers, etc.

Banking is clearly a ‘special’ industry; this is why it is so highly regulated. But is there any industry that is not ‘special’? Agriculture is also special because of environment externalities; telecommunications because of its network effects and regulation; energy is also special, as it is strategically important. Certainly, we can say that banking is more special in the sense that people have been saying that it is special for longer. There is a ‘special speciality’ to banking, which we should take into account because people have the long-held perception that this is the case.

The most important reason why many economists also believe that banking has special features is the competition/stability trade-off suggested by the charter value (or ‘franchise value’) theory of bank regulation (see e.g. Keely, 1990; Hellman et al., 2000). The story goes that if you let banks compete too much, so that the value of their charters – the expected future profits the charter allows to expect – is too low, then banks will start misbehaving by taking on too much risk, shifting the bad consequences on to others thanks to limited liability. This is because the ‘stick’ that the prudential regulator can use to punish such moral hazard; taking the banking charter away from the banker, is too small.

Other authors, like Broeker (1990), suggested that competition could reduce or eliminate banks’ incentives and ability to effectively screen borrowers, in particular when credit registers are absent or have limited coverage. This may happen because by screening banks impose a negative externality on each other, i.e. spoil their pool of borrowers, and because poor rejected applicants can apply to more and more banks when there are many competing, eventually finding one that makes a mistake in screening. These effects will be greater the larger the number of competing banks in the market.

Because of these dominant views, until 15 or 20 years ago the banking industry was not subject to any serious competition policy check in any country, at least not to my knowledge. Central banks were mostly responsible for competition policy in banking, but did not really enforce it seriously because they considered stability as a priority and intense competition as one way of losing control over banks’ activities.

Competition policy enforcement in the banking industry became more stringent in the last two decades. This followed or paralleled the development of ‘new views’ in academic literature suggesting that the trade-off between competition and stability may actually not be as robust as many people thought.

Novel theories, like Boyd and De Nicolò (2005), showed that more competitive banking markets could be less risky than less competitive ones. This is because the interest rate on loans tends to be lower with competing banks; a lower interest rate tends to reduce moral hazard on the side of borrowers, and this in turn reduces the riskiness of the lending banks. The traditional view of a trade-off between competition and stability has also been questioned empirically, for example by Beck et al. (2005). The academic and policy debate, however, is still wide open.¹⁰

Apart from the academic debate, we know that competition policy in banking has been strengthened in recent years and we would like to know more about the effects of this strengthening to be able to counter future attacks. One study by Carletti, Ongena and Hartmann (2008) looks at banks’ stock price reaction when merger control is moved from the central bank to the competition authority and therefore becomes tighter from a competition policy point of view. Surprisingly, they find that the stock price of the banking sector experiences a significant

¹⁰ See e.g. Berger et al. (2009) for empirical evidence in favour of the competition and stability trade-off.

abnormal increase around the announcement of this institutional change. That is, the stock market reacts positively in terms of expected banks' future earnings when the competition control is transferred from the central banks to competition authorities.

Normally, one would expect the opposite, that is; a negative stock price reaction, since stricter competition policy enforcement should in principle reduce banks' expected future anticompetitive rents. In fact, they find negative effects for other sectors than banks, but a robust positive effect for banks. My favourite interpretation of this surprising empirical finding is that when you have two regulators with partially overlapping competences, they must often 'fight' openly on decisions – like advocates – and this debate forces more informed, transparent and efficient policy decision-making that may induce a more intense future growth of the industry.

In a related study, Carletti, Ongena and Spagnolo (2010), we look at individual mergers, and in particular at how the above-mentioned changes in the organisation of merger control in banking affects the value of the individual merging banks. We analyse the abnormal returns in the stock market price around the critical dates of each merger, before and after the institutional changes in bank merger control. We then try to understand the role of the status of the bank in that merger (acquirer or target), the type of merger (national or cross-border); and whether there is a strong legal supervisory structure. We also look at how the institutional changes affect the total abnormal returns of bank mergers.

Preliminary results suggest that since the authority on bank merger control was shifted in favour of competition authorities, the distribution of abnormal returns changed in favour of the target banks of the merger and away from the acquirer. This change appears consistent with an increase in competition in the market for banks' corporate control; i.e. that bidding competition at the take-over stage got tougher, thereby increasing the returns for the target and reducing the returns for the acquirer. Another preliminary finding is that total abnormal returns for the merging banks together appear reduced by the change in the institutional organisation of bank merger control. A tentative interpretation of this finding is that it suggests that allocating bank merger control to competition authorities instead of central banks deterred anti-competitive mergers and selected more competitive ones. This interpretation is in part supported by the fact that this effect is not present for cross-border mergers, which are typically not considered anti-competitive because the merging banks are active on different markets. This is more good news that could also be used to counter attacks on competition policy in banking.

Concerns were also raised in the inquiries of DG Competition and others about insufficient information-sharing across banks and about market fragmentation and the inability to enter other markets for adverse selection reasons. In a study by Giannetti et al. (2010) – partly funded by ECRI – we find that after public registers are introduced, the type of entry shifts in favour of branching rather than mergers, and if no public register is introduced, banks tend to enter more through M&As. With a merger, the acquirer buys a local bank and therefore also its information base. However, branches are very important for retail competition, so more information-sharing should favour more entry through branching and less entry through M&As. This suggests that competition policy could focus more on information-sharing, as this seems to be a good way to increase competition through branches, which is what we want for retail banking.

Finally, the future of competition policy in banking is also likely to depend on how competition policy is run. As mentioned above, many sector inquiries on retail banking were performed by competition authorities before the crisis. In Caiazza et al. (2008) we reviewed all these retail inquiries and one aspect is rather striking: there is no strong focus on – and in some of them no consideration at all – *risk*. When considering financial products, interest rates are prices but what is the quality dimension? The main quality dimension of financial products is their risk-element. If you compare prices, also across markets, without appropriately weighting for the different risk of the financial contracts, you are missing the point completely. If one security or

loan in a market has a high risk and therefore a high price that correctly incorporates a risk premium, and another loan in another market has a slightly lower price but a much lower risk, one should not only compare prices and conclude that the first market is probably less competitive than the second because prices are higher. If risk is fully taken into account, one would correctly reach the opposite conclusion.

There is a tendency in competition authorities to use ‘standard methods’ from basic competition analysis in all industries. However, we know well that these simple methods may not be applicable to many situations, for example to complex public procurements, or two-sided markets with network effects, one has to adapt and develop the standard methodologies to more complex environments than the standard beer market, or one will make incorrect judgments. In banking, the degree and structure of risk is the main quality dimension and all measures should be weighted for the different degree of risk. This does not seem to be done appropriately by most competition authorities, at least not in the sector inquiries that have come to our attention. One more thing that competition authorities may want to do in the future to be able to counter the attacks that will likely come, is to be a bit more precise and specific in the way they deal with competition in the banking industry, although admittedly this will not be an easy task.

References

- Baker, J. (2003), “The Case for Antitrust Enforcement”, *Journal of Economic Perspectives*, Vol. 17, p. 2750.
- Beck, T., A. Demirguc-Kunt and R. Levine (2004), “Bank Concentration, Competition and Crises”, *Journal of Banking and Finance*, Vol. 30, pp. 1581-1603.
- Berger, A.N. and C.H.S. Bouwman (2009), “Bank liquidity creation”, *Review of Financial Studies*, Vol. 22, No. 9, pp. 3779-3837.
- Berger, A.N., L.F. Klapper and R. Turk-Ariss (2009), “Bank Competition and Financial Stability”, *Journal of Financial Services Research*, Vol. 35, pp. 99-118.
- Boyd, J.H. and G. De Nicoló (2005), “The theory of bank risk-taking and competition revisited”, *Journal of Finance*, Vol. 60, No. 3, pp. 1329-1343.
- Broecker, T. (1990), “Creditworthiness tests and interbank competition”, *Econometrica*, Vol. 58, pp. 429-452.
- Buccirossi, P., L. Ciari, T. Duso, G. Spagnolo and C. Vitale (2009), *Measuring the deterrence effect of competition policy: The Competition Policy Indexes*, CEPR Discussion Paper No. 7470, Centre for Economic Policy Research, London, September.
- Caiazza, S., E. Carletti, C. Giannetti and S. Spagnolo, “Bank Competition in Europe: The View of Competition Authorities”, unpublished manuscript, University of Rome Tor Vergata and European University Institute.
- Carletti, E., P. Hartmann and G. Spagnolo (2007), “Bank Mergers, Competition and Liquidity”, *Journal of Money, Credit, and Banking*, 39(5), 1067-1107.
- Carletti, E., P. Hartmann and S. Ongena (2008), “The Economic Impact of Merger Control Legislation”, Discussion Paper No. 2008-006, Tilburg University, Tilburg Law and Economic Center.
- Carletti, E., S. Ongena and G. Spagnolo, “The Impact of Changes in Competition Law on the Valuation of Bank M&As”, manuscript in progress, European University Institute, Tilburg and Tor Vergata University.

- Cole, H. and L. Ohanian (2004), “New Deal Policies and the Persistence of the Great Depression: A General Equilibrium Analysis”, *Journal of Political Economy*, Vol. 112, No. 4, pp. 779-816.
- Crandall, R.W. and C. Winston (2003), “Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence”, *Journal of Economic Perspectives*, Vol. 17, No. 4, pp. 3-26.
- Erel, I. (2009), “The Effect of Bank Mergers on Loan Prices: Evidence from the U.S.”, forthcoming in the *Review of Financial Studies*.
- Giannetti, C., N. Jentzsch and G. Spagnolo (2010), *Information-sharing and cross-border entry in European banking*, ECRI Research Report No. 11, February.
- Keeley, M. (1990), “Deposit Insurance, Risk and Market Power in Banking”, *American Economic Review*, Vol. 80, pp. 1183-1200.
- Hellman, T.F., K. Murdock and J. Stiglitz (2000), “Liberalization, Moral Hazard in Banking and Prudential Regulation: Are Capital Requirements Enough?”, *American Economic Review*, Vol. 90, No. 1, pp. 147-165.
- Pana, E., J.T. Query and J. Park (2009), “The Impact of Bank Mergers on Liquidity Creation”, 13 October (available at SSRN: <http://ssrn.com/abstract=1488604>).
- Werden, G. (2003), *The Effect of Antitrust Policy on Consumer Welfare: What Crandall and Winston Overlook*, US Department of Justice Antitrust Division Discussion Paper No. EAG 03-2.
- Whinston, M.D. (2006), *Lectures on Antitrust Economics*, Cambridge, MA: MIT Press.

The Financial Crisis and Competition in Retail Banking: Insights from the academic literature

Professor Hans Degryse, CentER - Tilburg University and CESifo
Professor Steven Ongena, CentER-Tilburg University and CEPR

1. Introductory remarks

The interdependence between the current financial crisis and competition in retail banking in general is the focus of this paper. In particular, we aim to provide insights from recent academic literature on this interdependence, although of course research related to the crisis is ongoing. This paper is partly based upon previous work, the OECD competition background paper,¹¹ which was written before the crisis¹² and a recent book¹³ that we have co-authored with Moshe Kim on several of these issues.

We first look at the phenomena of finance and growth, then the methods to measure competition in banking and the possible peculiarities for banking. We then look briefly at competition, stability and lending standards, and the regulation of competition. We will also consider the topic of switching costs (transactional and informational) and policy measures to reduce switching costs.

On the finance and growth nexus, Levine (2005)¹⁴ shows that financial intermediation is an important determinant of economic growth. His work demonstrates that financial development in countries causes higher growth rates. Therefore, banks reduce problems that are inherent in imperfect capital markets. We also know that banks are very important and often exclusive financiers of small and medium sized companies (SMEs).

One of the issues before the crisis was that – at least for retail banking markets – we often conclude that retail banking markets in Europe are not yet fully integrated. However, the evidence that we have up to now for the ‘finance and growth’ nexus mainly stems from growing and healthy economies, at least not from countries facing a recession. Considering the current financial crisis, an important open issue is: What banking and financial markets structure will allow us to come out of the financial crisis relatively quickly? We believe that so far there is no good answer to this question, because the identification of financial structure and growth has mainly been based upon growing economies.

Traditional and new measures of competition

Several methods have been developed over time in order to *measure competition in retail banking*. We can distinguish between two main types of method (see Table 1). One is the more traditional industrial organisation (IO) type, for example structure-conduct-performance, bank efficiency or economies of scale and scope in banking. The more recent methods have been labelled ‘new empirical industrial organisation,’ for instance the Panzar-Rosse H- statistic,

¹¹ Degryse, H. and S. Ongena (2006), Background paper prepared for OECD roundtable on Competition and Regulation in Retail Banking held by the OECD competition committee in October 2006.

¹² It is important to state that these are our views and not those of the OECD.

¹³ Degryse, H., M. Kim and S. Ongena (2009), *Microeconometrics of Banking: Methods, Applications and Results*, Oxford: Oxford University Press.

¹⁴ Levine, R. (2005), “Finance and Growth: Theory and Evidence”, in P. Aghion and S. Durlauf (eds), *Handbook of Economic Growth*, edition 1, Vol. 1, chapter 12, Elsevier, pp. 865-934.

conjectural variation models, structural demand models and other structural models. It is difficult to do justice to the results of all this research in a summary.

Table 1. Measuring Competition in Retail Banking: Methods

<i>Traditional Industrial Organisation</i>
Structure-conduct-performance
Bank efficiency
Economies of scale and scope
<i>New Empirical Industrial Organisation</i>
Panzar and Rosse (1987)
Conjectural variations models
Structural demand models
Other structural models

Degryse, Kim and Ongena (2009) (chapter 3) review most important research that have looked at the structure-conduct-performance paradigm. The idea of this paradigm is that higher concentration ratios would cause less competitive conduct and therefore might increase the profitability of banking. What is typically observed is that loan rates increase in the concentration index, but the magnitude of this relationship varies substantially within the different countries. Secondly, looking at deposit rates, it can be observed that they decrease on time and savings deposits rates, but again, there is much heterogeneity and the impact of concentration seems to become less important over time as well – probably reflecting the widening geographical scope of banking.

These traditional IO methods have been heavily criticised as market structure is endogenous (both influence each other and there are difficulties in assessing causality) and may be the result of the competitive environment. Several authors have developed econometric methods in order to try to deal with these endogeneity problems or to come up with more theory-based methods. One of the methods that has been developed is the Panzar-Rosse H-statistic (1987).

The Panzar-Rosse H-statistic basically looks at the sensitivity of revenues with respect to input prices. For perfect competition, price is equal to marginal costs, so if marginal cost increases, this should be fully transmitted to prices, so we should have a coefficient that is equal to one. If costs increase, revenue should increase one to one. For a monopoly, it is exactly the opposite. So the H-statistic should actually be negative. The intermediate forms of competition we would label “monopolistic competition.”

While the H-statistic has limitations, it is probably the only one that to some extent allows us to perform a cross-country analysis. Otherwise one has to rely on within-country analysis, because very detailed data is needed. It is a reduced-form approach, but it allows us, at least to some extent, to discriminate between perfect competition, monopoly and monopolistic competition.

In a comprehensive cross-country analysis Claessens and Laeven¹⁵ calculate the H-statistic for 50 countries. They only include countries when there are a sufficient number of banks active in

¹⁵ Claessens, S. and L. Laeven (2004), “What Drives Bank Competition? Some International Evidence”, *Journal of Money, Credit and Banking*, Vol. 36, No. 3, pp. 563-83, June.

those countries. They find that for the different countries the H-statistic is between 0.6 and 0.8, suggesting there is monopolistic competition in the banking markets in these countries. But more importantly, when they take the H-statistic and correlate it with concentration indices, they observe that they seem to be unrelated, implying that concentration is not a good measure of competition. Furthermore, they report that this H-statistic is lower when there are entry or activity restrictions. This suggests that entry or activity restrictions are really reducing competition in banking markets.

Competition, stability and lending standards

We now turn to the issue of *competition, stability and lending standards*. We start by summarising the theoretical insights on competition and stability. There are two different theories. The first is the traditional ‘competition-fragility’ view stating that bank competition is eroding market power and therefore also the charter value of banking, which may lead to more risk-taking. The other view is the ‘competition-stability’ view: the idea is that more competition will actually enhance stability, because more money is left on the table for the entrepreneur dealing with the bank and this will increase his effort. Therefore, competition reduces the moral hazard of the entrepreneur, which is good for banks and for financial stability.

The empirical work is mainly inconclusive and seems to depend on how competition is measured. This refers to Giancarlo Spagnolo’s contribution asking on how to deal with risk. Again, what we try to highlight here is that competition and stability (literally all previous work) are endogenous, because they depend on the behaviour of regulators and supervisors. Competition and stability have been measured during normal periods. Now that we are probably in an abnormal period, the question is: how does the relationship between competition and stability evolve during a worldwide financial crisis?

Another issue related to competition concerns stability and lending standards. Recent work has looked at lending booms and lending standards from a theoretical and empirical angle. Some theories have stated that with a booming economy, all projects seem to be good projects, therefore banks become relatively lazy and screen less.¹⁶ A booming economy reduces the incentive for banks to actively screen in the economy. Competition makes this effect stronger, because the incentive to screen is even lower.

Giovanni Dell’Ariccia and co-authors¹⁷ have recently looked at the subprime crisis and their findings show that an increased number of loan applications, which is capturing the boom, reduces the rejection rate of applications at banks, basically suggesting that indeed the lending standards in the economy have dropped. In particular, when the number of competing banks within the subprime market is decreased the refusal rate dropped further. This suggests that competition has in fact lowered lending standards even further. In a crisis, we know that economic prospects are not optimal; banks start to screen again and lending standards may revert to normal. So what is currently perceived as banks being tough, may be interpreted as banks behaving as they should.

A second issue on competition, stability and lending standards relates to the originate-to-distribute model. The idea is that banks’ behaviour to issue loans and simply sell them off to

¹⁶ Ruckes, M., “Bank competition and credit standards”, *Review of Financial Studies*, Vol. 17, 2004, pp. 1073-1102; G. Gorton and P. He (2008), “Bank Credit Cycles”, forthcoming in *Review of Economic Studies*. G. Dell’Ariccia and R. Marquez (2006), “Lending Booms and Lending Standards”, *Journal of Finance*, Vol. 61, October 2006, pp. 2511-2546.

¹⁷ Dell’Ariccia, G., D. Igan and L. Laeven (2008), *Credit Booms and Lending Standards: Evidence From The Subprime Mortgage Market*, CEPR Discussion Papers 6683, C.E.P.R. Discussion Papers.

other market participants has reduced lending standards. The reason for this is that the buyers of those loans (of collateralised debt obligations) possibly do not have the monitoring technology in the first place and the banks that originate those loans do not have sufficient incentives to screen and to monitor, because those loans were expected to be sold and not to remain on their balance for too long. This originate-to-distribute model may also have reduced the lending standards of banks.¹⁸

2. Retail banking sector, regulation and competition

The second topic is related to the retail banking sector, regulation and competition. It has been commonly assumed that banking is special. Regulation is relatively tight in most countries and seems to soften competition and restrict banking activities in space and scope. There is prudential regulation for banks, but less for non-bank financial intermediaries. Figure 1 shows important differences in foreign entry restrictions and government ownership across different countries.

The following questions are worthy of consideration:

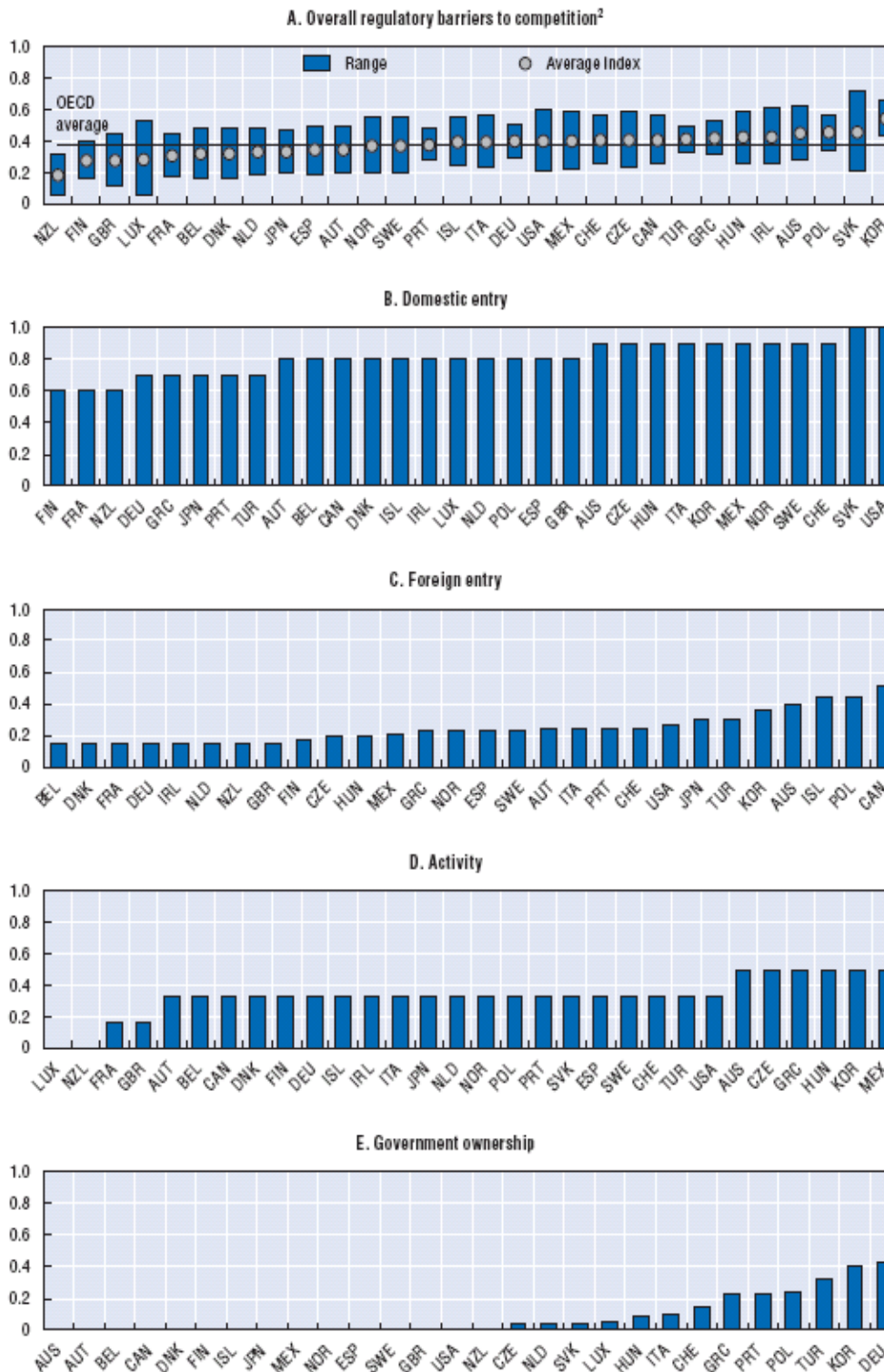
- What happens after banking deregulation?
- How does *deregulation affect loan rates*? For instance, how are loan rates affected when we increase the scope for foreign entry or when we allow for more activities. How does this affect competition?
- How does it affect interest rate margins?

Some of these questions are answered by Luc Laeven and co-authors.¹⁹ In a study of 72 countries they find evidence that if one increases regulation by one standard deviation, this increases the interest rate margins by 50-100 basis points. This suggests that entry restrictions seem to be important, at least in a cross-country setting. However, once property rights are introduced in this regression, these results disappear. The question being: how should we understand this analysis? Their interpretation is that bank regulation in each particular country probably reflects deeper factors, related to the specifics of the economy itself.

¹⁸ Keys, B.J., T. Mukherjee, A. Seru and V. Vig (2009), “Securitization and Screening: Evidence From Subprime Mortgage Backed Securities”, mimeo.

¹⁹ Demirguc-Kunt, A., L. Laeven and R. Levine (2004), “Regulations, Market Structure, Institutions, and the Cost of Financial Intermediation”, *Journal of Money, Credit and Banking*, Vol. 36, No. 3, pp. 593-622, June.

Figure 1. Banking Regulation Indices (2003)



1. The scale of the indicator is 0-1 from least to most restrictive. A higher value indicates more competition restraining regulation.

2. Average of the items shown in Panels B to E.

Source: OECD and World Bank, Bank regulation and supervision database.

Regulation, market presence and state-owned banks

Regulation and market presence. Work by Levine²⁰ has shown that foreign bank entry restrictions increase loan rates, whereas domestic entry restrictions do not. When looking at transition countries, we can state that foreign entry in general is associated with positive effects, typically mostly for transparent firms but also indirectly for SMEs. The question again is to see what are the implications of the ongoing financial crisis with regards to foreign entry? ‘Back to basics’, which is to some extent the slogan nowadays, means: retrench to your own country – probably under pressure from politicians being on the board of the bank. The question remains: what exactly is the impact of foreign entry in a period of financial crisis?

State-owned banks. It is known that state ownership has become pervasive, especially in the last year. From the literature we learn that government ownership leads to less competition, slower financial development, but some lucky firms may enjoy lower loan rates.²¹ Considering the current financial crisis, we have seen that government involvement has become widespread in many, and the question is: what is the control on those government banks? If politicians are on the boards of government-involved banks, will this lead to misdirected loan granting? Could this be the seeds for the next crisis? Our opinion is that politicians should not be involved and government-owned banks should be managed by professional CEOs. We know what politicians on board have implied in the past, so we need to be careful. They might be trying to maximize local and personal objectives.

Regulation and stability. We know that lower barriers to entry and fewer activity restrictions lead to less banking fragility.²² And there appear to be positive dynamic effects following deregulation, and well-performing banks seem to gain market share.²³

Deposit insurance and stability. There is a study by Demirgüç-Kunt and Detragiache²⁴ which shows that when countries adopt and introduce explicit deposit insurance, this tends to *increase* the likelihood of a banking crisis. Considering the current crisis, competition in deposit insurance schemes may induce contagion. We have seen reshuffling deposits from one country to another simply due to differing deposit insurance schemes. We think that even though it is set at 100,000 EUR across countries now, the funding of those deposit insurances funds matters, as well as the credibility of each government. Further, there are ‘too big to fail’-issues and the fact that there might not only be explicit deposit insurance, but also implicit deposit insurance. To put it bluntly: Can Belgium save all its banks? Can Ireland or Iceland do so?

²⁰ Levine, R. (2003), *Denying Foreign Bank Entry: Implications for Bank Interest Margins*, Working Papers Central Bank of Chile 222, Central Bank of Chile.

²¹ Barth, C. and R. Levine (2004), “Bank regulation and supervision: What works best?”, *Journal of Financial Intermediation*, Vol. 13, pp. 205-248. La Porta, Lopez-de-Silanes and Shleifer (2002), “Government Ownership of Banks”, *Journal of Finance*, Vol. 57, pp. 265-301. Sapienza, P. (2004), “The Effects of Government Ownership on Bank Lending”, *Journal of Financial Economics*, Vol. 72, pp. 357-384.

²² Beck, T., A. Demirgüç-Kunt and R. Levine (2004), “Bank Concentration and Crises”, World Bank, mimeo.

²³ Black, S.E. and P.E. Strahan (2002), “Entrepreneurship and Bank Credit Availability”, *Journal of Finance*, Vol. 57, pp. 2807-2834. Stiroh, K.J. and P.E. Strahan (2003), “Competitive Dynamics of Deregulation: Evidence from U.S. Banking”, *Journal of Money, Credit and Banking*, Vol. 35, No. 5, pp. 801-28.

²⁴ Demirgüç-Kunt, A. and E. Detragiache (2002), “Does deposit insurance increase banking system stability? An empirical investigation”, *Journal of Monetary Economics*, Elsevier, Vol. 49, No. 7, October, pp. 1373-1406.

So our question is whether there is a call for European-level funding for this. We think that even though the de Larosière Report is very interesting, it is not ambitious enough and should go much further.

3. Switching costs

Switching costs are the costs that a consumer incurs when they decide to switch from one bank to another. It is known that such costs bind a customer to his bank, giving market power to banks with greater market shares. The potential for low-cost switching is important in order to restrain the market power of banks. Higher switching *rates* as such should not be a goal of competition policy, of course, but having low switching *costs* should be a goal of competition policy.

There are different types of switching costs. The first are transactional. Examples are the administrative burden, customer preferences and choice, closing charges, transportation or shoe leather costs, and search costs that may hinder customers to move from one bank to another.

Secondly, there are the informational switching costs that relate to the idea that outside banks, that is, banks that do not have a lending relationship to a particular customer have less information about the creditworthiness of borrowers than inside banks, which have an informational advantage.

Transactional switching costs typically have been found to be very important. One positive effect of the crisis might have been that people have learned how to switch from one bank to another. There have been lots of rotations of deposits, so maybe people are becoming aware that switching is not that costly in the end, because there are some learning costs involved as well. When we think about informational switching costs, a study by Vasso Ioannidou and Steven Ongena²⁵ ought to be cited that finds that borrowers who switch from one bank to another receive an 80 basis points lower loan rate. This result suggests that switching costs may well be important in the retail loan market.

During the financial crisis, banks may have pushed out some borrowers towards other banks since they did not have enough liquidity at their disposal. To some extent the informational switching costs may have decreased due to the financial crisis, because the adverse selection problem is less important as switching firms are more likely to be of good quality.

How to reduce transactional switching costs? One can try to reduce the administrative burden, for instance through switching arrangements, which are in place in a number of countries. Such arrangements facilitate current account switching as the old and the new bank interact in order to reduce the administrative burden, payment delays and potential misclassifications. Perceived costs and risks that some transactions may possibly go wrong are also important when reducing transaction costs, as has been shown in a study by the Office of Fair Trading (OFT) in the UK.²⁶ The gains of switching may also be underestimated by current account holders due to a lack of transparency; people simply do not seem to be aware of the potential gains they may receive when switching accounts.

A good way to reduce transactional switching costs, at least for the current account, might be to introduce account number portability, as exists for telecom services. The idea is that the customer simply takes his number to another bank, which would reduce switching costs

²⁵ Ioannidou, V. and S. Ongena, “Time for a Change: Loan Conditions and Bank Behavior When Firms Switch Banks”, *Journal of Finance*, forthcoming.

²⁶ Office of Fair Trading (2008), Personal current accounts in the UK, http://www.offt.gov.uk/shared_offt/reports/financial_products/OFT1005.pdf

substantially. There are some issues with the governance of such a system, of course, and the costs and investments to achieve this may actually be quite considerable.

Information-sharing mechanisms are mentioned in Giancarlo Spagnolo's contribution; basically the fact that some banks may or may not have access to the information that is shared about borrowers between banks. Information-sharing between banks, i.e., with central banks or private registries keeping credit exposure and repayment records, may reduce the hold-up problem, because the customer knows that other banks have information about him, and this should induce additional competition.

Bouckaert and Degryse (2006)²⁷ argue that privacy laws may also be important as regards the impact of information sharing, because privacy laws determine which type of information is available to competing firms, and whether this information can be shared with alternative providers. Privacy restricts sharing information that is collected by a bank with another bank.²⁸ This might have a cost when it reduces competition and therefore the customer might pay a higher price. There may be a potential trade-off between on the one hand restrictive privacy laws and on the other hand competition. But these models are not always unidirectional, of course.

Considering the current crisis, information-sharing may help in transmitting information from one lender to another. Perhaps the countries that have information-sharing mechanisms in place may be the ones that get out of the crisis faster compared to other countries – but this is pure speculation on our part.

4. Concluding remarks

Financial depth and financial development are important drivers of economic growth. Understanding how competition and regulation affect the financial sector is therefore important for the future of the economic environment. Financial deregulation has spurred foreign bank entry and increased banking competition. The recent crisis, however, has shown that competition and certain financial innovations within an inadequate regulatory environment may lead to a deterioration of lending standards and possibly also financial instability. Furthermore, empirical evidence reveals that government involvement may potentially lead to inappropriate lending behaviour by banks.

The ongoing financial crisis shows that a further understanding of an optimal design of financial regulation and supervision and the optimal degree of competition in banking and financial markets needs to be on the top of the political and academic agenda. Financial literacy would seem to be an area that could be addressed by education. For example, greater consumer education about financial alternatives may help consumers to consider switching and reduce rents from switching costs.

²⁷ Bouckaert, J. and H. Degryse (2006), Opt-in versus Opt-out: a free entry analysis of privacy policies, <http://www.tilburguniversity.nl/tilec/publications/discussionpapers/2006-024.pdf>

²⁸ Information sharing may be further restricted for several other reasons (see e.g. Jentzsch, Nicola (2007). *The Economics and Regulation of Financial Privacy*, Heidelberg: Springer-Verlag).

References

- Barth, Caprio and R. Levine (2004), “Bank regulation and supervision: What works best?”, *Journal of Financial Intermediation*, Vol. 13, pp. 205-248.
- Beck, T., A. Demirgüç-Kunt and R. Levine (2004), “Bank Concentration and Crises”, World Bank, mimeo.
- Black, S.E. and P.E. Strahan (2002), “Entrepreneurship and Bank Credit Availability”, *Journal of Finance*, Vol. 57, pp. 2807-2834.
- Bouckaert, J. and H. Degryse (2006), Opt-in versus Opt-out: a free entry analysis of privacy policies, <http://www.tilburguniversity.nl/tilec/publications/discussionpapers/2006-024.pdf>
- Claessens, S. and L. Laeven (2004), “What Drives Bank Competition? Some International Evidence”, *Journal of Money, Credit and Banking*, Oxford: Blackwell Publishing, Vol. 36, No. 3, pp. 563-83, June.
- Degryse, H. and S. Ongena (2006), Background paper prepared for OECD roundtable on Competition and Regulation in Retail Banking held by the OECD competition committee in October 2006.
- Degryse, H., M. Kim and S. Ongena (2009), *Microeconometrics of Banking: Methods, Applications and Results*, Oxford: Oxford University Press.
- Dell’Ariccia, G. and R. Marquez (2006), “Lending Booms and Lending Standards”, *Journal of Finance*, Vol. 61, pp. 2511-2546, October.
- Dell’Ariccia, G., D. Igan and L. Laeven (2008), *Credit Booms and Lending Standards: Evidence From The Subprime Mortgage Market*, CEPR Discussion Papers 6683, C.E.P.R. Discussion Papers.
- Demirgüç-Kunt, A. and E. Detragiache (2002), “Does deposit insurance increase banking system stability? An empirical investigation”, *Journal of Monetary Economics*, Elsevier, Vol. 49, No. 7, pp. 1373-1406, October.
- Demirguc-Kunt, A., L. Laeven and R. Levine (2004), “Regulations, Market Structure, Institutions, and the Cost of Financial Intermediation”, *Journal of Money, Credit and Banking*, Oxford: Blackwell Publishing, Vol. 36, No. 3, pp. 593-622, June.
- Gorton, G. and P. He (2008), “Bank Credit Cycles”, forthcoming in *Review of Economic Studies*.
- Ioannidou, V. and S. Ongena, “Time for a Change: Loan Conditions and Bank Behavior When Firms Switch Banks”, *Journal of Finance*, forthcoming.
- Jentzsch, N. (2007), *The Economics and Regulation of Financial Privacy*, Heidelberg: Springer-Verlag.
- Keys, B.J., T. Mukherjee, A. Seru and V. Vig (2009), “Securitization and Screening: Evidence From Subprime Mortgage Backed Securities”, mimeo.
- La Porta, Lopez-de-Silanes and Shleifer (2002), “Government Ownership of Banks”, *Journal of Finance*, Vol. 57, pp. 265-301.
- Levine, R. (2005), “Finance and Growth: Theory and Evidence”, in P. Aghion and S. Durlauf (eds), *Handbook of Economic Growth*, edition 1, Vol. 1, chapter 12, Elsevier, pp. 865-934.
- Levine, R. (2003), *Denying Foreign Bank Entry: Implications for Bank Interest Margins*, Working Papers Central Bank of Chile 222, Central Bank of Chile.
- Office of Fair Trading (2008), Personal current accounts in the UK, http://www.ofc.gov.uk/shared_ofc/reports/financial_products/OFT1005.pdf

Ruckes, M. (2004), "Bank competition and credit standards", *Review of Financial Studies*, Vol. 17, pp. 1073-1102.

Sapienza, P. (2004), "The Effects of Government Ownership on Bank Lending", *Journal of Financial Economics*, Vol. 72, pp. 357-384.

Stiroh, K.J. and P.E. Strahan (2003), "Competitive Dynamics of Deregulation: Evidence from U.S. Banking", *Journal of Money, Credit and Banking*, Vol. 35, No. 5, pp. 801-28.

Retail Finance: Rethinking regulation and consumer protection in the wake of the financial crisis

Professor Roman Inderst, Johann Wolfgang Goethe–Universität, Frankfurt am Main (IMFS)

1. Background

At least from the beginning of 2007, the problems brewing in the US subprime market were becoming evident. This focused international attention on the area of retail finance – an area that typically receives much less attention than the fancier world of wholesale finance and investment banking. As the crisis deepened, however, attention quickly shifted back to the wholesale end, such as the markets for asset-backed securities and credit default swaps. Only occasionally did the retail side of the crisis resurface, for instance when it came to protecting banks' retail deposits.

Still, the present crisis provides an opportunity to rethink existing legislature and regulation that govern the delivery of financial products to households, both on the 'asset side' of the balance sheet, such as savings and investments, and on the 'liability side', such as consumer credit and mortgages. Such a rethink offers the chance to devise future legislation and supervision on sound economic principles. Only then can we hope to create a consistent body of legislative and regulatory work that serves the citizens of Europe.

A rethink of the general principles of consumer protection is also long overdue in the light of past and ongoing initiatives of the European Commission. Clearly, on a general level the consumer directive represents a cornerstone. More specifically, with MiFID, much progress has been made in the area of financial instruments, including retail finance. But how do these various directives fit together, say, when it comes to the different treatment of insurance products with a savings and investment character and retail financial products?

Take the case of the initiative to harmonise the law governing early repayment clauses for mortgages. Presumably, one side effect of such harmonisation may have been the creation of a European market for mortgages and mortgage-related products. There is probably little political appetite to support such a project at the moment. However, the idea to impose a minimum statutory repayment right, which mortgage-takers would not be able to waive, has also received support based on the notion of consumer protection.

European countries exhibit a baffling diversity in how households finance their mortgages, varying in their use of fixed versus variable interest rates and the amount of debt in relation to a property's value. Housing market conditions and national law may explain some of the differences. The use of prepayment clauses or lock-in clauses also varies widely. An understanding of what drives these national differences is clearly a necessary first step before drafting a plan to harmonise existing laws or even imposing contractual uniformity across Europe.

A different policy instrument will be looked at in this paper: the disclosure of conflicts of interest and thus, in particular, of commissions and 'kickbacks' that financial intermediaries or advisors receive. Such a requirement is part of MiFID, though it remains to be seen to what extent member states and their national agencies, as well as courts, enforce compliance. Contractual lock-ins and the potential role of statutory provisions for early cancellation will also be discussed, with specific focus on the role of financial advice in these two areas.

To conclude there will be one or two observations on competition and innovation, stressing that viable competition, when governed by an adequate set of rules, is the best recipe for the protection of almost all consumers, generally and with respect to financial and insurance products in particular. That being said, this leaves ample scope for an active consumer protection policy that sets rules and sanctions misbehaviour.

2. Putting consumer protection and retail banking regulation on a sound basis

The financial decisions taken by households have increasingly attracted the attention of academics. This increased interest is driven by the profound changes to households' personal balance sheets, which became longer, as homes have substantially increased in value; on the asset side, expected payouts from pay-as-you-go pension schemes were replaced by contributions to pillar II or pillar III pension schemes. On the liability side, we have witnessed, at least in some countries, a massive increase in secured and unsecured debt.

Academic literature, most notably the large body of literature on household finance, has almost completely ignored the role of the supply side. But for retail finance this is key. Retail financial and insurance products are often 'not bought but sold': The initiative is taken by a broker or a client's relationship banker. Moreover, with the exception of the most sophisticated investors, or those brave or unsuspecting enough to take bets with online brokers, retail financial investors also rely on advice.

2.1 Mapping the trilateral agency problem with financial advice

In countries like the UK, independent financial advisors play a key role. They may either advise customers on a fee base, or more often will earn profits through more or less hidden commissions and product-based charges that reduce yield.

Irrespective of whether products are sold through a firm's integrated channel, as in the case of many retail banks, or whether sales rely on third parties, as is often the case with insurance, a trilateral agency problem arises: between the customer, the agent or employee, and the product provider. What is more, the respective agent, be it an insurance broker or a financial advisor, may undertake multiple tasks. These tasks may include searching for customers, getting acquainted with new products, getting to know a customer's personal circumstances, and finally providing advice and concluding a sale.

Commissions paid to these agents thus have multiple roles to perform. Policy intervention that will stifle commissions or impact on their form may have beneficial implications along one task, say to reduce the bias of advice, but they may generate unintended consequences along other tasks, resulting ultimately in a reduction of social efficiency.

In recent work, mostly with Marco Ottaviani from Kellogg, I have looked into the multiple functions performed by commissions and the impact of policy intervention. Take the case of a mandatory disclosure of commissions.

When customers do not have appropriate expectations about the level of commissions, the market will clearly malfunction, as they underestimate the prevailing conflict of interest. To look at one example outside the area of retail finance: the margins earned by sellers are sometimes excessive, given that the targeted customers seem to be reluctant shoppers, as work in the UK on doorstep selling has shown. Stupendously high commissions are the incentive to coax customers into a purchase. Here, the case for disclosing commissions to unsuspecting or even naïve customers is clearly warranted.

Our research shows, however, that mandatory disclosure can be socially harmful by stifling the roll-out of more efficient products. While reducing bias in advice, such disclosure may also stifle the acquisition of information by advisors. Overall, this may imply that the quality of advice deteriorates.

Our research also sheds light on when we should expect problems of unsuitable advice and mis-selling to be more pervasive, and when not. When product providers' own agency problems with their employees or, likewise, with independent advisors or an independent sales force become more severe, mis-selling is more likely. Competition can induce problems of mis-selling, as fiercer competition among agents forces firms to restructure their commissions more aggressively. Furthermore, consumers may still benefit. When consumers are more complacent, more of the burden of being vigilant shifts to supervision.

Furthermore, when advisors earn their profits only through an hourly fee and no longer through commissions based on subsequent sales, biased advice clearly becomes a lesser concern. But the overall quality of advice and thus of households' investment or credit decisions may still suffer when regulation intervenes by favouring a particular means of paying for advice. Earning a commission on a subsequent sale may be necessary to provide an agent with sufficient incentives to really exert effort and provide valuable advice. This is the subject of ongoing research.

Without understanding the economics of advice, any interference in the market is doomed to generate unintended consequences. Clearly, not every effect that a theoretical model generates is of first-order importance in a particular market. This is where institutional knowledge, as well as empirical analysis, must meet up with sound economic theory.

Based on a generous grant from the European Research Council, we are currently building up a centre for the research on the regulation of retail finance at the Institute of Financial Stability in Frankfurt. This will be in close cooperation with other European universities and legal scholars. The issue of consumer protection is at the core here.

2.2 Principles of consumer protection

At the risk of over-simplifying, there appear to be two views of consumer protection. One view holds that consumers must be protected from other parties, that is firms' possibly hazardous products or, say, misleading advertising and aggressive sales strategies.

The other view holds that consumers must be protected from themselves: even when given full information, a wide range of products and services, as well as access to valuable advice, consumers will make choices that are, so the argument goes, not in their own long-term interests.

Arguably, the complexity of many financial products poses a substantial challenge to consumers. This holds, in particular, for countries where financial literacy is low and where households have not had long-term experience in making financial decisions.

The area of household finance has made advances in documenting and explaining household portfolio choice. Research on this frontier is driven by puzzles, such as low stock market participation, under-diversification or, on the credit side, the sluggish refinancing behaviour of mortgage holders.²⁹ Literature on behavioural finance documents further 'biases', at least among some investors, such as overconfidence.³⁰

²⁹ E.g., Campbell (2006).

³⁰ E.g., Odean (1999).

Policy-makers should be warned to draw too definite conclusions from the existing academic literature. Many studies are based on experiments – and there is substantive doubt about the interpretation of these results. With regards to field studies, it must be borne in mind that the results may be very sensitive to the particular country and, therefore, the social and cultural background of the respective customers. For instance, an influential strand of literature presumes that the typical consumer procrastinates.

Proponents of this view then suggest that consumers are ill-served by credit products that tempt them, say through low teaser rates, to consume more and save less than what is actually good for them. Indeed, the assumption of such procrastination is often justified by households' low rate of savings. Needless to say, this view is based on observations from the US and not, say, from Germany, where there is a much higher savings rate.

Clearly, with retail financial products there is much scope for firms to misrepresent information, say on costs or risk, and there is much scope for households to misinterpret information. To the extent that the industry collectively fails to develop and adhere to sufficiently high standards, policy intervention is called for, in the interests of both consumers and firms with a long-term view.

That being said, the key principle of consumer protection regarding retail financial products should still be to protect consumers from misbehaving firms, rather than from their own biases or follies. And even then the first reaction of an economist should still be to ask: why does the market not provide a solution without intervention?

Let us consider the case of mandatory minimum cancellation rights. This seems particularly relevant with respect to savings and investment products that are wrapped into insurance products. Such cancellation rights protect consumers when buying with imperfect information about their preferences, for instance, as they will learn over time.

Current research shows that cancellation rights also protect rational customers from being ill-advised by sellers who, armed with particularly complex products, may possess superior information at the time of a purchase. Generous cancellation rights then make unsuitable advice more costly for the seller. Or, put into economic lingo, they make 'cheap talk hard'.

But with wary, rational consumers there is no need for policy intervention. Firms have every incentive to offer the so-called second-best efficient contractual terms, given that through higher prices they can extract any additional value that is created by commitment to better advice. However, as we show, policy intervention is warranted when some consumers are excessively credulous in that they do not see through a seller's strategic talk and are blind to the conflict of interest.

Interestingly, we show that a minimum statutory right of cancellation may then be effective even when it is not binding, given that many or even all firms offer more generous terms. This is the case as such a minimum statutory right makes it less profitable for firms to target only credulous consumers as opposed to targeting all consumers. But when firms cater to both wary and credulous consumers, then the former essentially take care of their less sophisticated fellow consumers. Our research also suggests that a different regulatory approach may be appropriate for different sales channels.

3. Competition and innovation

Competition is the most powerful ally of consumers. And, in contrast to some oft-made claims, there is also no clear-cut trade-off between financial stability and competition.

Admittedly, a long tradition in the theory of banking argues that more competition leads to more risk taking and thus higher default risk, which brings us back to the present financial crisis.

More recent work qualifies this view, however, both theoretically and empirically.³¹ Moreover, in cases where such a negative trade-off between competition and stability exists, policy and supervision are the first to be blamed: either because regulation and government intervention created exploitable situations in the first place; or because supervision did not react flexibly enough.

The present financial crisis cannot be seen as a verdict on the superiority of government intervention and regulation compared to market forces. On the contrary: government interference in the subprime market sowed the seeds of destruction and at least in some countries, such as Germany, it was, in particular, banks with politicians on their boards, such as the Landesbanken, who took the worst gambles.

Regulation and supervision has failed by shying away from addressing the problems early enough: the large exposure of banks to ever more complex off-balance sheet risk was not an ‘unknown unknown’, but a ‘known unknown’. Supervisors failed to be proactive. Regulatory capture may have been one reason for this.

A word should be said on the virtues of the market. In some European countries there is clearly the risk that the present financial crisis will stifle market forces for a long time. The two main forces are industry consolidation, where there is already high concentration and, as I fear, regulation and supervision that frame vigorous competition and the development of new business models as ‘systemic risk factors’ that need to be subdued.

A case in place is clearly the tie-up between HBOS and Lloyds. HBOS is the UK's biggest mortgage lender, writing one in five of all new home loans, while Lloyds is the third biggest lender overall. The two groups may end up having a combined mortgage book of, at first count, three times the size of the next biggest rival, Nationwide. HBOS is also the biggest savings provider, while Lloyds is the third largest. Recent inquiries into the UK's banking market, as well as decisions by the UK's Competition Commission, all shared one view: further consolidation should not be permitted, even under wide-ranging remedies.³²

3.1 Too much innovation?

Competition can be viewed as a main force to generate innovation. While central bankers may wish for more ‘boredom’, as expressed by the UK's governor, even in the case of finance and banking, innovation is something that must be fostered rather than stifled.

Even without talking about ‘weapons of mass destruction’ in the guise of new financial products, one could agree with Miller (1986): “The major impulses to successful innovations over the past 20 years have come, I am saddened to have to say, from regulation and taxes”. Still, financial innovations arguably complete the market, address agency concerns and information asymmetries, minimise transaction costs, or respond to new risk factors or new technological developments.³³ There are many examples in retail finance, including the distribution of exchange-traded funds, the introduction of internet banking, or process innovations such as credit scoring.³⁴

³¹ On the theoretical side, see Inderst et al. (2008). On the empirical side, see Boyd et al. (2006).

³² The Cruickshank report in 2000 urged the government to put a stop to the further consolidation of the industry. The Competition Commission stopped, for instance, the proposed merger of Lloyds and Abbey National.

³³ See Tufano (2002) or Merton (1992) for a more detailed discussion.

³⁴ E.g., Frame and White (2002).

Often, shifts are more gradual, as in the case of mortgages. A key part of the innovative process is that firms experiment with the marketing of well-known products.³⁵ But this is not to suggest that every newly introduced contract was to the benefit of customers.³⁶

For instance, ‘endowment’ or ‘savings and equity’ mortgages may offer tax advantages to some households. But other households may have simply underestimated the risk of the bundled-in equity-investment plan.

Still, there may still be plenty of scope for beneficial innovations. For instance, a roll-out of fairly-priced reverse mortgages could potentially benefit many ageing households.³⁷ Also, the further development of credit scoring will continue to reduce transaction costs and to facilitate entry into local markets, bringing down interest rates and broadening access to loans.³⁸ For the US, various studies indeed find that the market for borrowing has become more perfect, as measured by the reduced volatility of consumer spending or a closer alignment of consumption and long-term income prospects.³⁹

But who are the main innovators? While this is a key theme in industrial organisation, the literature on retail finance is thin. Earlier studies suggest that size is important, in particular for the introduction and roll-out of new services.⁴⁰ More recent studies suggest, however, that smaller firms are more innovative.⁴¹ According to a recent study that exploits articles from the business press, by far the most innovative firm in the US was Merrill Lynch.

This brings to mind the following story. (In-)famously, in 1977, it was also Merrill Lynch that invented the Cash Management Account, in effect allowing non-banks to circumvent the equally infamous Regulation-Q. As some will know, this regulation capped deposit rates and forbade banks from paying interest on checking deposits. The market’s innovations forced regulators to phase-out Regulation Q and to override state usury ceilings.⁴² The benefits that this innovation brought to ordinary savers should be obvious.

4. Concluding remarks

The present crisis provides an opportunity to rethink consumer protection in the area of retail finance. Consumer protection policy can and must be put on a sound economic basis, though surely enriched with insights from other disciplines such as psychology. I also have emphasised that vigorous competition should be seen as a key ally to consumer protection. That is not to say that competition policy is an adequate substitute for consumer protection policy. Healthy competition relies on a set of rules that constrain firms’ opportunistic behaviour, irrespective of whether these rules are self-imposed by industry standards or through policy intervention.

³⁵ A consequence is that shifts across countries are not homogeneous. For instance, fixed-rate contracts have picked up in some European countries, as in the UK, while variable-rate contracts have become more common in others, as in Denmark. See Miles and Pillonca (2007).

³⁶ E.g., Scanlon and Whitehead (2004).

³⁷ Furthermore, in the absence of inflation indexing, once inflation picks up, many mortgages may have an excessively skewed repayment profile, in terms of ‘front-end loading’. e.g., Campbell and Cocco (2003).

³⁸ DeYoung et al. (2008), for instance, document this for small business lending, where the form of borrowing is similar to that of unsecured household loans.

³⁹ E.g., Gerardi et al. (2007) or Dynan et al. (2006).

⁴⁰ E.g., Frame and Wright (2002) and Tufano (2002).

⁴¹ See Lerner (2007).

⁴² E.g., Gilbert (1986) and Cocheo (2003).

I would hope that there will be as much progress of good economics in the area of consumer protection as there has been in recent decades in the area of competition policy. This does not only apply to academics, but more importantly to the policy practised by the relevant agencies, most notably the European Commission. By setting high standards of good economic practice, both in terms of valid and consistent arguments and in terms of empirical evidence, the European Commission's competition policy has recently provided a valuable motivating and disciplining force for national agencies in Europe. What is more, in the area of competition policy the process of drafting new rules and guidelines is by now heavily influenced by sound academic work. It is to be hoped that a similar direction will be taken in the area of consumer protection in financial services, again with a leading role being taken by the European institutions.

References

- Boyd, J.H., G. De Nicrolo and A.M. Jalal (2006), *Bank Risk-Taking and Competition Revisited: New Theory and New Evidence*, IMF Working Paper No. 06/297.
- Campbell, J. (2006), "Household Finance", *Journal of Finance*, Vol. 61, pp. 1553-1604.
- Campbell, J. and J. Cocco (2003), "Household Risk Management and Optimal Mortgage Choice", *Quarterly Journal of Economics*, Vol. 118, pp. 1449-1494.
- Cecchetti, S., A. Flores-Lagunes and S. Krause (2006), *Assessing the Sources of Change in the Volatility of Real Growth*, NBER 11946.
- Cocheo, S. (2003), "25 Years Later Merrill's CMA is Still Making Waves", *ABA Banking Journal*, August.
- DeYoung, R., W.C. Frame, D. Glennon, D.P. McMillen and P. Nigro (2008), "Commercial Lending Distance and Historically Underserved Areas", *Journal of Economics and Business*, Vol. 60, pp. 149-164.
- Dynan, K.E., D.W. Elmendorf and D.E. Sichel (2006), "Can Financial Innovation Help to Explain the Reduced Volatility of Economic Growth", *Journal of Monetary Economics*, Vol. 53, pp. 123-150.
- Frame, W.S. and L.J. White (2002), *Empirical Studies of Financial Innovation: Lots of Talk, Little Action?*, Federal Reserve Bank of Atlanta WP 12.
- French, K. (2008), *The Costs of Active Investing*.
- Gilbert, R. (1986), "Requiem for Regulation Q: What it Did and Why it Passed Away", *Federal Reserve Bank of St. Louis Review*, Vol. 68, pp. 22-37.
- Inderst, R., H. Docula and U. Otag (2008), *Bank Competition and Risk-Taking When Borrowers Care about Financial Prudence*.
- Inderst, R. and M. Ottaviani (2008), "Misselling Through Agents", forthcoming *American Economic Review*.
- Lerner, J. (2007), *The New Financial Thing: The Origins of Financial Innovations*.
- Merton, R.C. (1992), Financial Innovation and Economic Performance, *Journal of Applied Corporate Finance*, Vol. 4, pp. 12-22.
- McCreevy, C., 2005, *Innovation in Finance – And How Europe Can Be at the Leading Edge*.
- Miles, D., 2003, *The U.K. Mortgage Market: Taking a Longer-Term View, Interim report: Information, Incentives and Pricing*, HM Treasury, London.

Miles, D. and V.C. Pillonca (2007), *European Economics: Financial Innovation and European Housing and Mortgage Markets*, Morgan Stanley Research.

Miller, M.H. (1986), “Financial Innovation: The Last Twenty Years and the Next”, *Journal of Financial and Quantitative Analysis*, Vol. 21, pp. 459-471.

Odean, T. (1999), “Do Investors Trade Too Much?”, *American Economic Review*, Vol. 89, pp. 1279-1298.

Scanion, K. and C. Whitehead (2004), *International Trends in Housing Tenure and Mortgage Finance*, Council of Mortgage Lenders Research, November.

Tufano, P. (2002), “Financial Innovation” *The Handbook of the Economics of Finance*, June.

Between Competition and Regulation: The conditionality of bailout plans

Damien Gerard, Research Fellow, Chair of European Law, University of Louvain (UCL)

Background

Since the beginning of the financial crisis, the European Commission has attached stringent conditions on the beneficiaries of the so-called ‘bailout plans’ devised by EU member states to rescue ailing banks. These conditions were deemed necessary to ensure the compatibility of the bailout plans with EU State aid rules. In effect, they enabled the Commission to pursue a combination of competition and regulatory objectives in dealing with the unprecedented challenges raised by the crisis. In the words of EU Competition Commissioner Kroes: “[T]he current financial crisis is a good illustration of one of the ways regulation and competition law are connected”.⁴³ In her view, competition policy is there both to palliate the shortcomings of regulation and to prevent the excesses thereof, notably in stifling market dynamics:

(i) “if the current financial and economic crisis has taught us anything, it is that there is a high price to pay when regulation fails, and that competition policy is essential for keeping our economy working well”; but (ii) “in the midst of the massive government interventions, we need to make sure that we do not – along the way – also lose the level playing field and the future dynamism that comes from competition”.⁴⁴

This contribution illustrates the Commission’s reliance on EU state aid rules to pursue a complex mix of competition and regulatory objectives in the framework of the financial crisis. Section 1 sketches the framework that enabled the Commission to review bailout plans and condition their implementation. Section 2 then shows how the Commission attempted to address some of the regulatory failures that allowed for “unrestricted and exaggerated risk taking” by credit institutions.⁴⁵ Section 3 explains, subsequently, how the Commission undertook to prevent or mitigate market distorting effects resulting from the implementation of bailout plans. In closing, Section 4 questions some of the competition policy options pursued by the Commission in dealing with the crisis, notably with regards to compatibility with the EU internal market policy. The contribution also points to various instances where the conditions imposed and/or negotiated by the Commission impacted on the structure of credit institutions and their business practices (including retail banking services), with potentially long-term consequences.

Fundamentally, the interaction between competition and regulation is one of the great puzzles of economic policy, which affects a great variety of sectors in the economy.⁴⁶ For a long time, the financial sector was both heavily regulated and largely exempted from the application of competition rules. That trend reversed somewhat in the years preceding the crisis. One of the great challenges for the future of the banking sector in Europe (and elsewhere) probably lies in

⁴³ Kroes, N., “The interface between regulation and competition law”, speech at the Bundeskartellamt Conference on Dominant Companies – The Thin Line between Regulation and Competition Law, Hamburg, 28 April 2009 (SPEECH 09/202).

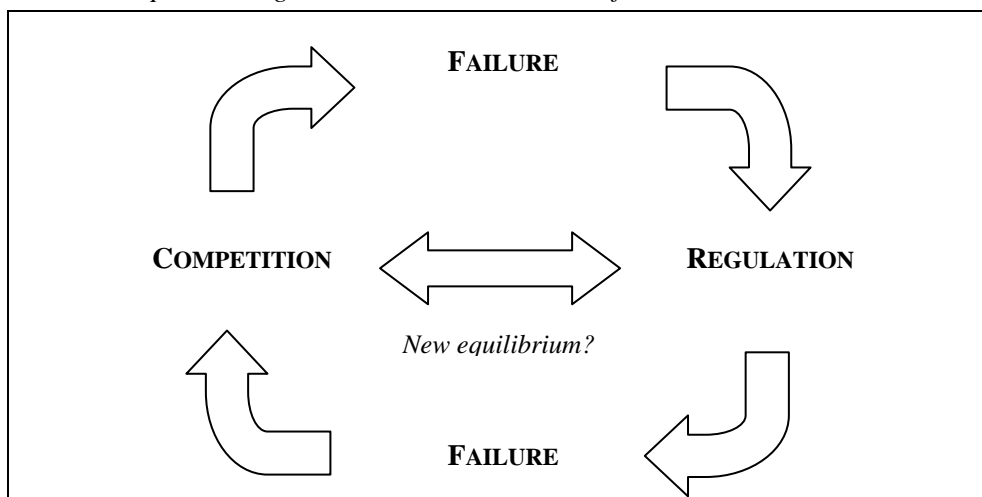
⁴⁴ *Idem*.

⁴⁵ Those are, again, the words of Commissioner Kroes, as delivered on the same occasion.

⁴⁶ For a recent account, see F. Lévêque and H. Shelanski (eds), *Antitrust and Regulation in the EU and the US – Legal and Economic Perspectives*, Cheltenham: Edward Elgar, 2010.

finding a new equilibrium between competition and regulation, reflecting both the fundamentals of the markets and lessons from the crisis. In view of recent events, the interaction between competition and regulation in relation to the financial crisis could be illustrated as follows:

Figure 1. *The competition/regulation conundrum and the financial crisis*



1. EU competition policy and the financial crisis: General framework

Development of the financial crisis

Since mid-September 2007, EU member states have been forced to take emergency measures to prevent the bankruptcy of credit institutions and the meltdown of the financial system. In the EU, troubles started with the bank run on Northern Rock in the UK and then spread to German Landesbanken and other credit institutions which relied on assets securitisation to fuel their growth and had invested heavily in mortgage-backed securities. At that time, solvency issues were treated on an *ad hoc* basis and were considered largely as the tail of a predominantly American problem, namely the subprime crisis. However, the crisis took a systemic turn with Lehman Brothers' filing for Chapter 11 protection on September 15, 2008 and the resulting general loss of confidence that affected financial markets, leading to a freeze in inter-bank lending that threatened the operations and the very survival of banks with high refinancing needs and lower solvency ratios.

European Union involvement in dealing with the financial crisis

In the EU, emergency measures to cope with the crisis have been adopted at the level of individual or groups of member states,⁴⁷ mainly in the form of state guarantees and recapitalisation measures. Realistically, it could not have been otherwise in view of the absence of an institutionalised forum at EU level competent to deal with such issues.⁴⁸ In particular,

⁴⁷ Indeed, the size and cross-border operation of credit institutions forced certain member states to pull resources together in structuring recapitalisation schemes. This was for example the case of Belgium, the Netherlands and Luxembourg with respect to the rescue of Fortis and of Belgium, Luxembourg and France with respect to Dexia.

⁴⁸ Some instruments of coordination already existed but quickly showed their limits in view of the magnitude of the crisis. See, e.g., Memorandum of Understanding on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross-Border

member states are where the money is and where the borrowing capabilities lie and economic policy remains largely a member state competence.

Nonetheless, the EU also played a pivotal role since the inception of the crisis by providing guidance and coordinating the various national initiatives. The Eurogroup, that is the meeting of euro area countries, took the lead in devising common principles aimed to respond effectively to the crisis, which were then endorsed by the European Council.⁴⁹ With the support of the European Central Bank (ECB), the Commission was then involved in the actual design and coordination of each and every recovery plan and individual rescue measures envisaged by member states. Indeed, all rescue measures or bailout plans imply state intervention into the economy, whether in the form of guarantees, capital injections or other means, and qualify as ‘state aid’ pursuant to Art. 87 of the EC Treaty (now 107 of the Treaty on the Functioning of the European Union, TFEU). In accordance with Art. 88(3) EC (now 108(3) TFEU), member states are bound to notify the Commission of all plans to grant state aid and to withhold the implementation thereof pending the Commission’s approval, which can be accompanied by various conditions.

By early June 2009, the Commission had adopted more than 50 decisions and approved more than 3 trillion euro in aid, amounting to 24% of EU GDP.⁵⁰ In doing so, the Commission acted swiftly, most of the time in a matter of days. It also endeavoured to offer general guidance to assist member states in the design of bailout plans and other rescue measures, thereby enhancing legal certainty and contributing to stabilising the situation.⁵¹

Conditionality of bailout plans: Legal bases

The conditions imposed by the Commission on the benefit of bailout plans were rooted in two different legal provisions, which were applied successively as the financial crisis unfolded. One can distinguish between two phases in the financial crisis: a first ‘subprime’ one culminating with the Chapter 11 bankruptcy filing of Lehman Brothers on September 15, 2008, and a second ‘systemic’ one that started with the same event. During the first phase, the Commission examined case-by-case rescue measures aimed to address liquidity difficulties of credit institutions exposed to the subprime crisis according to established rules on subsidies for firms in difficulty⁵² adopted pursuant to Article 87(3)(c) EC (now Art. 107(3)(c) TFEU).

Financial Stability, June 1, 2008, ECFIN/CEFCPE(2008)REP/53106 REV REV.

⁴⁹ “Declaration on a concerted European action plan of the euro area countries”, 10 October 2008 (available at www.ue2008.fr); European Council of 15-16 October 2008, Presidency Conclusions (doc. 14368/08).

⁵⁰ The Commission keeps an up-to-date list of all national measures adopted as a response to the financial/economic crisis on its website at <http://ec.europa.eu/competition/recovery/cases.html>.

⁵¹ In particular, the Commission issued a number of Communications outlining its policy in reviewing rescue plans for banks: (i) Communication from the Commission of September 13, 2008 on the application of state aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis (the “Banking Communication”), O.J. [2008] C 270, p.8; (ii) Commission Communication of December 5, 2008 on the recapitalisation of financial institutions in the current financial crisis: limitation of the aid to the minimum necessary and safeguards against undue distortions of competition, O.J. [2009] C10, p. 2 (the “Recapitalisation Communication”); (iii) Communication from the Commission of February 25, 2009 on the treatment of impaired assets in the Community banking sector, O.J. [2009] C 72, p. 1; (iv) Communication from the Commission of July 23, 2009 entitled “The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules”, O.J. [2009] C195, p. 9.

⁵² Communication from the Commission – Community Guidelines on State Aid for Rescuing and

From September 2008 on, the Commission acknowledged the systemic nature of the crisis and started reviewing general rescue schemes and ad hoc measures put in place by member states according to Article 87(3)(b) EC (now Art. 107(3)(b) TFUE), a rarely-used and more lenient provision applicable in case of “serious disturbance in the economy of the relevant Member State”.⁵³

Table 1. The legal basis for the Commission’s actions

	Nature	Timing	Legal basis
Phase 1	Subprime crisis	Pre-Lehman failure	Art. 87(3)(c) EC: “firms in difficulty”
Phase 2	Systemic crisis	Post-Lehman failure	Art. 87(3)(b) EC: “serious disturbance in the economy”

Conditionality of bailout plans: Policy objectives

As apparent from various policy statements, in particular the Banking Communication,⁵⁴ the Commission has been driven by two main policy objectives in applying state aid principles to national bailout plans. First, it has been keen on preventing distortions of competition in the internal market, whether in the form of protectionist schemes designed for domestic credit institutions only or disproportionate support that would have allowed national banks to expand artificially into neighbouring markets and/or, generally, gaining a competitive edge over competitors not benefiting from the same support. As a result, compliance with the general principles of non-discrimination and proportionality has been at the centre of the Commission’s attention. This was achieved mainly by setting strict eligibility and remuneration requirements for the benefit of state support, whether in the form of guarantees, loans or capital injections.⁵⁵ Second, the Commission has been guided by a concern to address moral hazard issues and thus to ensure that financial institutions retain the right incentives, that is the incentive to re-orient their businesses towards long-term stability over short-term profits and to deliver efficient services to customers. Conversely, it was firmly committed to prevent failed business models to perpetuate.⁵⁶

To achieve those objectives, the Commission has conditioned the authorisation of bailout plans to: (i) behavioural requirements directed at both shareholders/investors and managers of distressed credit institutions to ensure that they bear their fair share of responsibility, do not internalize the possibility of being bailed out in the future (the so-called ‘too-big-to-fail’ syndrome) and stop engaging in strategies aimed at inflating balance sheets to the detriment of core banking activities; and (ii) both structural and behavioural requirements directed at distressed banks to ensure that they undertake effective restructuring and to prevent sound banks

Restructuring Firms in Difficulty, O.J., 2004, C 244/2.

⁵³ Article 87(3)(b) EC, compared to state aid rules for rescuing and restructuring firms in difficulty adopted pursuant to Article 87(3)(c) EC, offers additional flexibility as to the nature of acceptable aids (*e.g.*, structural interventions), the duration thereof (*i.e.*, going beyond 6 months) and the need for structural compensatory measures.

⁵⁴ See above, note 9.

⁵⁵ For a thorough analysis, see D. Gerard, “EC competition law at grips with the financial crisis: flexibility on the means, consistency in the principles”, *Concurrences*, No. 1-2009, pp. 46-62.

⁵⁶ Kroes, N., “The return to long-term viability”, speech at the European Parliament, Brussels, 19 February 2009 (SPEECH09/68).

engaging in reasonable strategies to become unduly disadvantaged. Those conditions have had a direct impact on the management of credit institutions and on the supply of retail banking services. They will be explored in more detail successively in sections 2 and 3 below, according to the following scheme:

Table 2. *Conditionality of bailout plans*

Conditionality of bailout plans			
Moral hazard issues	Shareholders/ Investors	Managers	Addressees
Distortions of competition	Behavioural	Structural	Nature

2. Conditions aimed at addressing moral hazard issues

Conditions addressed to shareholders/investors

As noted, one of the main concerns of the Commission in dealing with moral hazard issues was to ensure that shareholders/investors support their fair share of the consequences of the financial turmoil and of the costs associated with the rescue measures provided by member states.⁵⁷ To that end, various conditions have been imposed to the benefit of state guarantees, on the one hand, and of capital injections, on the other hand.

Guarantees. The first condition attached to the benefit of state guarantee schemes related to the eligible debt instruments, which are limited, in essence, to retail and wholesale deposits and short-and medium-term debts and exclude hybrid and subordinated debts considered as Tier 2 capital (*e.g.*, covered bonds).⁵⁸ Likewise, the benefit of guarantees must be subject to proper remuneration in the form of service fees based on institution-specific risk and fixed premiums set according to a methodology devised by the ECB.⁵⁹

Capital injections. The key issue in relation to the benefit of state recapitalisation measures has been the proper remuneration thereof. Eventually, a distinction was introduced between the remuneration of capital provided to insolvent or distressed credit institutions, on the one hand, and capital provided to ‘sound’ banks to strengthen their capital ratio and/or ensure the continuous supply of credit to the ‘real economy’, on the other.⁶⁰ Again, the ECB came up with a methodology to calculate proper remuneration rates with the double objective of helping banks – thus providing for an interest rate below market rates – while maintaining sufficient incentives for banks to redeem the capital injected and exit the state support scheme.⁶¹ Overall, the benefit of capital injections was conditioned on an annual return comprised between 8 and 12%. Given their structural character, recapitalisation schemes have been considered much

⁵⁷ This is particularly apparent from the conditions surrounding the eligibility of debt instrument for the benefit of State guarantees.

⁵⁸ Banking Communication, ¶21. For a discussion, see, *e.g.*, the Commission decision approving the Danish (NN 51/2008) and Spanish (N 54/2008) rescue plans.

⁵⁹ On 20 October 2008, the European Central Bank issued “Recommendations on government guarantees on bank debt”, which were largely relied upon by member states and the Commission in setting adequate remuneration rates.

⁶⁰ Recapitalisation Communication, ¶3

⁶¹ Recommendations of the ECB Governing Council on the pricing of recapitalisations, 20 November 2008 (http://www.ecb.int/pub/pdf/other/recommendations_on_pricing_for_recapitalisationsen.pdf).

more carefully by the Commission than guarantee schemes and therefore subject to tighter requirements, including:

- (i) limitations on the distribution of dividends in the form of either an outright prohibition pending redemption⁶² or the grant of a special dividend/coupon for the state.⁶³ The underlying rationale is that taxpayer money ought not to serve remunerating capital but to enable banks to pursue their activities with a focus on long-term stability rather than short-term returns;
- (ii) limitations on share buyback programmes, which were imposed for roughly the same reason as limitations on the distribution of dividends, either in the form of an outright prohibition pending redemption⁶⁴ or subject to approval by State Board representatives,⁶⁵ and
- (iii) the possibility for states to exercise oversight and/or control on important strategic decisions of recapitalized banks, either through the issuance of preferred shares carrying extra rights,⁶⁶ and/or the appointment of State Board representatives carrying special veto rights.⁶⁷

Apparent from the above is that the Commission has left a margin of discretion to member states to reflect country- or institution- specific circumstances in devising the most appropriate mechanisms.

Conditions addressed at managers

The Commission has also endeavoured to mitigate moral hazard issues on the part of managers with a view to ensuring that they are guided by the right incentives and favour stability over excessive risk taking. Accordingly, it has viewed positively the dismissal of the management of ailing banks such as Sachsen Landesbank (C 9/2008) or Fortis (NN 42/2008), the review of risk management and corporate governance practices as in the Commerzbank case (N 625/2008) and the imposition of limitations on managers' compensations and severance packages.

However, the implementation of those conditions was largely left to member states so that, in practice, they have taken various forms across the EU, reflecting national corporate culture or political priorities. The diversity of approaches is particularly striking as far as the regulation of managers' compensations is concerned: for example, France (N 618/2008) mandated compliance with ethics rules aimed at executives and traders and prohibited severance package in case of "management failure", while Greece (N 560/2008) decided to cap the level of compensation of bank executives at the level of that of the Chairman of the Greek Central Bank.⁶⁸

⁶² See the Commission decisions approving the rescue plans of Germany (N 512/2008) and Denmark (N 51/2008).

⁶³ See the Commission decisions concerning ING (N 528/2008) and the Anglo Irish Bank (N 9/2009).

⁶⁴ Commission decision approving the Irish rescue plan (N 48/2008).

⁶⁵ See, e.g., the ING decision (N 528/2008).

⁶⁶ See, e.g., the Allied Irish Bank decision (N 241/2009).

⁶⁷ See, e.g., the Commission decisions approving the rescue plans of Greece, Ireland and the Netherlands.

⁶⁸ In the UK, key measures included: (i) no 2008 cash bonus; (ii) compliance with best practice codes; (iii) dismissal at reasonable and fair cost. In Germany, executive compensation was capped at €500 K and contractual severance terms were prohibited. Ireland established a public committee to oversight compensation and 'golden parachute' issues. Denmark chose to prohibit any new stock-option plans.

More importantly, one of the Commission's priorities has been to condition capital injections to sustained lending to the real economy, in particular because it came as a counterpart to a lower capital remuneration rate (around 8%). Even though the methodologies put in place to fulfil that condition have been reviewed and approved by the Commission, the actual implementation thereof has been left to the member states, which explains again the diversity in the approaches adopted in the various national rescue schemes.

In the UK (N 507/2008), the authorities committed to require banks to maintain the availability of lending to homeowners and small businesses at 2007 levels and to support schemes to prevent home foreclosures. In France (N 618/2008), beneficiaries of capital injections were bound by an obligation to increase loans to individuals, SMEs and local authorities by 3-4% annually. In Germany (N 512/2008), a general requirement was included in the bailout plan to the effect that beneficiaries ought to take account of domestic industry's borrowing requirements (particularly SMEs).

3. Conditions aimed at preventing distortions of competition

Generally, the main concern of the Commission has been to prevent state support to provide a competitive edge to banks in difficulty over their competitors. In that respect, one can distinguish between behavioural conditions on the one hand, which are generally imposed on the beneficiaries of bailout plans and (in theory) subject to close monitoring and structural conditions, on the other hand, which are tied to the restructuring of ailing or 'distressed' institutions.

Behavioural conditions attached to bailout plans

The Commission has systematically conditioned the benefit of bailout plans, whether in the form of guarantees and/or capital injections, to a series of behavioural conditions that have been applied in a relatively homogeneous manner across the European Union. One of the main reasons underlying the imposition thereof has been the massive inflows of deposits observed in the early days of the crisis towards banks benefiting from state backing. The ultimate example of such a phenomenon was Northern Rock, which in only a few weeks moved from the brink of bankruptcy after customers withdrew deposits massively to a much healthier situation after having been virtually nationalised. In some cases these behavioural conditions have had a significant impact on retail banking services.

The most pervasive behavioural condition imposed on the beneficiaries of state support was a prohibition to communicate on and market that advantage to customers or to develop a commercial strategy on that basis.⁶⁹ At the peak of the crisis in October 2008, one could witness a tendency of certain institutions to claim such advantage to attract or at least slow the run of customers.⁷⁰ The Commission insisted that such behaviour be properly sanctioned but no formal finding of abuse appears to have been reported yet.

Early on in the crisis, the Commission also systematically imposed growth ceilings on the beneficiaries of bailout plans, expressed in terms of GDP, market share, balance sheet or historical growth.⁷¹ For example, in seeking the approval of their national rescue plan, the German authorities committed to ensure that the beneficiaries thereof would not exceed a

⁶⁹ Banking Communication, ¶26 and various Commission decisions on national rescue plans.

⁷⁰ For example, competitors of *Fortis Bank* and *KBC* in Belgium and of *ABN AMRO* in the Netherlands have complained that those banks introduced more aggressive offers after having benefited from capital injections by the Belgian, French, Dutch and/or Luxembourg authorities.

⁷¹ Banking Communication, ¶¶26-27.

certain balance sheet growth rate (N 512/2008). Later on, the Commission abandoned that practice, acknowledging that it could form an obstacle for fundamentally sound banks to sustain lending to the economy and, generally, to compete for customers and increase output levels.⁷² However, the Commission continued imposing limitations on external growth on a case-by-case basis. For example, in the case of Commerzbank, it noted that:

Commerzbank has recently acquired Dresdner Bank. However, Commerzbank will not be in a position to use state aid to the detriment of competitors. The bank will be restricted from acquiring other competing financial institutions for a period of three years.⁷³

Likewise, in one of the decisions concerning Fortis Bank Belgium (NN 42/2008), the Commission imposed a commitment on the acquirer BNP Paribas “not to repurchase Fortis Netherland assets for a 4 years period”. In some cases, mainly those involving Dutch financial institutions (e.g., N 528/2008 and N 569/2008), one also encountered a sort of catch-all condition imposing on beneficiaries to “refrain from expansion of business activities that would not have been pursued absent the capital injection”. It is unclear how such a condition is supposed to operate in practice except that it may prompt complaints from competitors and therefore assist in policing the commercial conduct of the beneficiaries of state support measures.

A category of conditions impacting directly on the supply of retail banking services related to the remuneration of some of those services. Indeed, the Commission has imposed in some cases, reportedly at the request of complainants, a prohibition to undercut rivals either for specific services, in certain areas of business or even across the board. In the Fortis decision of December 3, 2008 (NN 42/2008), for example, the Commission referred to a “commitment not to offer for Internet accounts interest rates higher than the other main retail banking actors in Belgium”, with some limitations if, for example, Fortis’ market shares dropped below 25%. In the Dexia decision of November 2008 (NN 50/2008), the Commission referred to a “commitment not to offer interests rates for retail deposits higher than those of the three main attractive remunerations offered by the ten largest retail banks in each of Luxembourg, France and Belgium”, in addition to a limitation on the openings of preferred savings accounts. Likewise, in the press-release commenting on the Commerzbank decision,⁷⁴ the Commission emphasised that the bank “will be prevented from doing business (including deposit taking) under more favourable price conditions than its top three competitors in markets/products where it has a market share above 5%”.

Finally, another relatively common condition provided for the obligation to keep high solvency ratios and, conversely, to avoid that capital injections be used to fuel growth and, generally, for other purposes than ensuring long-term stability.⁷⁵

Structural conditions

To ensure a level playing field and prevent the continuation of failed business models, the Commission has imposed structural conditions on distressed credit institutions, that is, for those that either had to draw on state guarantees or benefited from urgent recapitalisation measures. The conditions have taken the form of reductions in activities and/or outright divestitures of non-core or loss-making assets.

⁷² See in particular footnote 18 of the Recapitalisation Communication.

⁷³ Kroes, N., Opening remarks at press-conference – State aid decisions on Commerzbank, Hypo Real Estate and Northern Rock, Brussels, 7 May 2009 (SPEECH 09/217).

⁷⁴ *Idem*.

⁷⁵ See, e.g., Commission decision N 528/2008.

Reductions in activities entailed the discontinuation of businesses that were found to be at the root of the solvency issues encountered by the beneficiaries of state rescue measures. They involved, for example, the termination of proprietary trading activities,⁷⁶ or more institution-specific measures. The following examples are illustrative of the kind and scope of such measures: (i) Sachsen LB had to undertake the closure of its Irish subsidiary involved in structured financial investments and international real estate business (C 9/2008); (ii) Northern Rock committed originally to the closure of many of its overseas operations, to a drastic reduction in its lending operations and to enter into a retail mortgage redemption programme (NN 70/2007); and (iii) Commerzbank pledged to a reduction in its investment banking operations (N 625/2008).

As noted, the Commission also imposed compensatory measures for the benefit of state support in the form of outright divestitures. Unsurprisingly, the actual assets to be divested were not necessarily identified in the decisions conditioning the benefit of capital injections and other rescuing measures. For example, the Sachsen LB decision refers merely a “sale of assets” (C 9/2008). In the Commerzbank case, though, after controversies as to the scope and nature of the requested divestitures, it was disclosed that the bank would divest its real estate activities (Eurohypo), as well as “other subsidiaries” (N 625/2008).

Generally, in line with the requirements set forth in its guidelines on state aid for rescuing and restructuring firms in difficulty,⁷⁷ the Commission is entitled to require structural measures involving downsizing the balance sheet of the relevant credit institutions by 45-50%.

4. Concluding remarks: Conditionality in question

The rules on state aid have enabled the Commission to become involved in the design of the various financial recovery plans and individual rescue measures adopted at national level and as a result to play an important role in the management of the financial crisis. In doing so, the Commission has pursued a combination of competition and regulatory objectives by conditioning the benefit of rescue measures to various requirements, which differ in nature and are addressed to different actors. Yet, while the design and implementation of impaired assets relief programmes is likely to be the most pressing task in the months ahead,⁷⁸ some of the policy choices recently acted upon by the Commission, in particular in relation to the imposition of structural conditions, deserve some questioning in at least two fundamental respects.

First, aside from the strict policy principles guiding the treatment of state aid aimed to rescue and restructure firms in difficulty, one can question whether structural compensations are necessary or even desirable in a systemic crisis. First, in an interconnected financial system, banks actually benefit from the mere fact that their competitors get rescued. Second, in the current environment, it is inherently difficult to value the assets to be divested to attract purchasers and to secure the financing of large acquisitions. Third, one may wonder whether there is not a risk to actually worsen the crisis by forcing credit institutions to divest assets at depreciated value. Those concerns militate, at least, for exercising utmost care in ordering divestitures and significant flexibility in the implementation of such remedies.

⁷⁶ See, e.g., Commission decisions on Sachsen LB (C 9/2008) and West LB (NN 25/2008).

⁷⁷ See note 10 above. The guidelines condition the benefit or restructuring aid to compensatory measures to avoid undue distortions of competition (divestitures, reductions in capacity, etc.) and a contribution by the beneficiary of up to 50% of the restructuring costs (by means of sales of assets, external financing, etc.).

⁷⁸ See Communication from the Commission of February 25, 2009 on the treatment of impaired assets in the Community banking sector, O.J. [2009] C 72, p. 1.

Second, there appear to be clear tensions between the divestitures ordered or favoured by the Commission so far and the objective of promoting market integration, i.e., internal market policy. On one hand, it is unclear how the Commission can actually prevent taxpayers' money from subsidising acquisitions. On the other hand, in an environment where member states have a natural tendency to protect their domestic economy, is it not paradoxical to induce banks to re-focus on their 'home market', as the Commission appears to have done in the early cases involving the German Landesbanken?⁷⁹ However, the Commission appears to have favoured more consistent remedies in later cases, for example by refraining to mandate the divestiture of Commerzbank's retail banking network in Central and Eastern Europe. Likewise, it seems to have favoured cross-border rescue mergers over purely domestic ones.⁸⁰

The questions raised above do not aim to downplay the merits of the Commission's action in managing a crisis that is unprecedented in many ways. However, even in the current circumstances, there certainly is an interest in preventing today's solutions from becoming tomorrow's problems.

References

- "Declaration on a concerted European action plan of the euro area countries", 10 October 2008 (available at www.ue2008.fr).
- Banking Communication, ¶21. For a discussion, see, e.g., the Commission decision approving the Danish (NN 51/2008) and Spanish (N 54/2008) rescue plans.
- Commission Communication of December 5, 2008 on the recapitalisation of financial institutions in the current financial crisis: limitation of the aid to the minimum necessary and safeguards against undue distortions of competition, O.J. [2009] C10, p. 2 (the "Recapitalisation Communication").
- Communication from the Commission – Community Guidelines on State Aid for Rescuing and Restructuring Firms in Difficulty, O.J., 2004, C 244/2.
- Communication from the Commission of February 25, 2009 on the treatment of impaired assets in the Community banking sector, O.J. [2009] C 72, p. 1.
- Communication from the Commission of February 25, 2009 on the treatment of impaired assets in the Community banking sector, O.J. [2009] C 72, p. 1.
- Communication from the Commission of July 23, 2009 entitled "The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules", O.J. [2009] C195, p. 9.
- Communication from the Commission of September 13, 2008 on the application of state aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis (the "Banking Communication"), O.J. [2008] C 270, p.8.
- European Council of 15-16 October 2008, Presidency Conclusions (doc. 14368/08).

⁷⁹ See, e.g., the WestLB decision (NN 25/2008) where the Commission noted with apparent satisfaction that: "In the context of its strategic reorientation, WestLB will re-focus on its home market...and reduce its international activities" (see also the Bayern LB case N 615/2008).

⁸⁰ See, e.g., Case COMP/M.5363 – *Santander/Bradford & Bingley Assets* and Case COMP/M.5384 – *BNP Paribas/Fortis Belux* (contra the Fortis Netherlands/ABN Amro case and Commission press-release MEMO/08/729 of 21 November 2008: "Mergers: Commission closely monitoring Dutch State plans as regards Fortis Bank Nederland and ABN AMRO Bank Nederland").

- Gerard, D., “EC competition law at grips with the financial crisis: flexibility on the means, consistency in the principles”, *Concurrences*, No. 1-2009, pp. 46-62.
- Kroes, N., “The interface between regulation and competition law”, speech at the Bundeskartellamt Conference on Dominant Companies – The Thin Line between Regulation and Competition Law, Hamburg, 28 April 2009 (SPEECH 09/202).
- Kroes, N., “The return to long-term viability”, speech at the European Parliament, Brussels, 19 February 2009 (SPEECH09/68).
- Kroes, N., Opening remarks at press-conference – State aid decisions on Commerzbank, Hypo Real Estate and Northern Rock, Brussels, 7 May 2009 (SPEECH 09/217).
- Lévêque, F. and H. Shelanski (eds), *Antitrust and Regulation in the EU and the US – Legal and Economic Perspectives*, Cheltenham: Edward Elgar, 2010.
- Memorandum of Understanding on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross-Border Financial Stability, June 1, 2008, ECFIN/CEFCPE(2008)REP/53106 REV REV.
- Recommendations of the ECB Governing Council on the pricing of recapitalisations, 20 November 2008 (available at http://www.ecb.int/pub/pdf/other/recommendations_on_pricing_for_recapitalisationsen.pdf).

About the Authors

Prof. Dr. Hans Degryse has been Professor of Financial Intermediation and Markets at Tilburg University since 2005. He also holds the TILEC-AFM Chair on Financial Market Regulation and is a Research Fellow at the CESifo in Munich. He received a Ph. D. in Economics from Leuven in 1995. His research interests include theoretical and empirical banking, market microstructure and the industrial organisation of financial markets, subjects on which he has published in many journals including the American Economic Review, Journal of Finance, Journal of Financial Economics, Journal of Financial Intermediation, Economic Journal and Review of Finance.

Damien Gerard is currently a Research Fellow in the Department of European Law of the University of Louvain and a Visiting Lecturer in EC Competition Law at the University Paris V Descartes. The graduate from the University of Louvain, the College of Europe and New York University is a member of the New York Bar and fully qualified in Brussels where he practiced for five years with Cleary Gottlieb LLP. In 2003-04, Damien Gerard clerked for Judge Lenaerts of the European Court of Justice. His recent scholarship focuses on EC competition law enforcement and, in particular, the interaction between the European Commission and national competition authorities, on the one hand, and between EC competition law and internal market rules, on the other hand. He has published extensively in law and EU policy journals.

Prof. Dr. Roman Inderst is Professor of Finance and Economics at the Johann Wolfgang Goethe Universität Frankfurt am Main and Visiting Professor at the London School of Economics. He received his PhD from the Freie Universität Berlin in 1998. His research fields of specialisation are corporate finance, banking, competition policy and information economics, on which he has published extensively in journals such as Rand Journal of Economics, American Economic Review, Journal of Financial Economics and European Economic Review. Professor Inderst is the recipient of several grants, among them the ERC Advanced Grant for research on European perspectives on regulatory aspects of retail finance and consumer protection, beginning in May 2009. He was ranked no. 1 in the Handelsblatt 2008 Top 100 of most active economists in Germany and best researcher under 40 years of age.

Dr. Nicola Jentzsch is Senior Research Fellow at the Technische Universität Berlin and DIW Berlin (German Institute for Economic Research). Together with ECRI Research Fellow Marc Rothmund, she organized the ECRI Anniversary Conference in 2009 and served as co-editor of this publication. Mrs Jentzsch works primarily on financial privacy, credit market regulation and development economics. In the past, Mrs. Jentzsch has worked for CEPS and ECRI and served as advisor to the European Commission, the World Bank as well as Central Banks in different developing countries.

Prof. Dr. Steven Ongena is a Professor in empirical banking in the Department of Finance, the European Banking Center, and the Tilburg Law and Economics Center at CentER-Tilburg University. He is a research fellow in financial economics of CEPR. His research interests include credit markets, financial institutions and monetary econometrics. His papers have been published in renowned journals, such as the Journal of Finance, the Journal of Financial Economics, the Journal of Financial Intermediation, Financial Management and the Review of Finance. He co-authored, with Hans Degryse and Moshe Kim, the graduate textbook Microeconometrics of Banking: Methods, Applications and Results.

Prof. Dr. Georges Siotis is a member of the Chief Economist Team of the European Commission's DG Competition. Prior to joining DG COMP in July 2008, he was an Associate Professor of Economics at Universidad Carlos III de Madrid where he taught competition policy,

industrial economics and international trade. He holds a PhD from the Université Libre de Bruxelles (ECARES) and he is a research affiliate at the London-based Centre for Economic Policy Research (CEPR). He has published in the *Journal of International Economics*, *European Economic Review*, *Journal of Industrial Economics*, *International Journal of Industrial Organization*, *Journal of Economics and Management Strategy*, *Review of Law and Economics*, *Energy Policy* and *Research Policy*.

Prof. Dr. Giancarlo Spagnolo is Professor of Economics at University of Rome "Tor Vergata", as well as Fellow at the Stockholm School of Economics (SITE) and the Einaudi Institute for Economics and Finance (EIEF), and affiliate of CEPR. He received an MPhil from the University of Cambridge and a PhD from the Stockholm School of Economics. He is also a Fellow of ENCORE and member of the Executive Committee of the European Association for Research in Industrial Economics (EARIE). His research interests and expertise include industrial organisation and competition policy, banking, corporate governance, game and contract theory and procurement. His work has been published in leading academic journals, such as the *RAND Journal of Economics*, *Journal of Economic Theory* and *Journal of Public Economics*.

Prof. Dr. Christian Wey has been head of the Information Society and Competition Department at the German Institute for Economic Research (DIW) since December 2003. He also holds a Chair of Economics, in particular "Networks and Information & Communication Economics", at the Technische Universität Berlin. Previously, he was a Research Fellow at the Social Science Research Center Berlin (WZB). His research interests include industrial organisation theory and competition policy with a special focus on market power problems in input markets and network industries, subjects on which he has published articles in numerous journals, including the *RAND Journal of Economics*, *European Economic Review*, *Economic Journal*, *Journal of International Economics*, *International Journal of Industrial Organization*, and others.

Conference Programme

The Future of Retail Banking in Europe: Competition and Regulatory Challenges

Wednesday, 10th June 2009

Venue: Centre for European Policy Studies (CEPS)

1 Place du Congrès, 1000 Brussels, Belgium

09:00 Registration

09:30 *Welcoming remarks*

Daniel Gros, Director, Centre for European Policy Studies

09:35 *Opening remarks*

Professor Christian Wey, DIW Berlin and Technische Universität Berlin

Challenges for Competition Policy in European Retail Banking

09:45 *EU competition policy in times of financial crisis*

Professor Georges Siotis, Chief Economist Team, DG Competition, European Commission

10:10 *Competition policy in retail banking before and after the crisis*

Professor Giancarlo Spagnolo, Università di Roma «Tor Vergata»

10:35 *The current financial crisis and competition in retail banking: Insights from the academic literature*

Professor Hans Degryse, CentER - Tilburg University

11:00 Discussion

11:30 Coffee break

Lessons for Regulatory Initiatives in Retail Banking

12:00 *Retail banking: Economic principles of regulation and consumer protection*

Professor Roman Inderst, Johann Wolfgang Goethe-Universität Frankfurt am Main

12:30 *The impact of the conditionality of bailout plans on credit institutions*

Damien Gerard, Research Fellow, Chair of European Law, University of Louvain (UCL)

12:45 *The European Commission's initiatives in retail banking*

Eric Ducoulombier, Deputy Head of Unit, DG Markt H.3, European Commission

13:15 Discussion and conclusion

13:30 End of conference

About ECRI & CEPS



**CE
PS** CENTRE FOR
EUROPEAN
POLICY
STUDIES

Founded in 1999 by a consortium of European banking and financial institutions, the European Credit Research Institute is an independent, non-profit research institute based in Brussels. ECRI provides in-depth analysis and insight into the structure, evolution and regulation of retail financial services markets in Europe. It derives its expertise from an interdisciplinary team of in-house researchers and a network of academic partners based throughout Europe. ECRI keeps its members and the wider public up-to-date on a wide range of topics related to retail financial services, credit reporting and consumer protection at the European level. Its operations and staff are managed by the Centre for European Policy Studies (CEPS).

The Centre for European Policy Studies (CEPS), founded in 1983, is among the most experienced and authoritative think tanks operating in the European Union today. CEPS serves as a leading forum for debate on EU affairs, drawing from its strong in-house research capacity, complemented by an extensive network of partner institutes throughout the world.



EUROPEAN CREDIT RESEARCH INSTITUTE (ECRI)
at the CENTRE FOR EUROPEAN POLICY STUDIES (CEPS)
1 Place du Congrès
1000 Brussels, Belgium
Tel: +32 (0) 2 229 39 11 • Fax: +32 (0) 2 219 41 51
E-mail: info@ecri.be • Website: <http://www.ecri.eu>