COMPETITION COMMITTEE



Key Findings



Competition Issues in the Financial Sector

KEY FINDINGS

2011



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FOREWORD

The OECD Competition Committee and its Working Parties have discussed competition issues in the financial sector extensively in recent years. Among the participants in these discussions were senior competition officials, current and former financial market regulators, leading academics and representatives of the business community.

This publication presents the key findings resulting from the roundtable discussions held on Exit Strategies (2010); Concentration and Stability in the Banking Sector (2010); Failing Firm Defence (2009); Competition and Financial Markets (2009); Competition and Regulation in Retail Banking (2006); Mergers in Financial Services (2000); and Enhancing the Role of Competition in the Regulation of Banks (1998). The key findings from each roundtable have now been organised into a cohesive narrative, putting the Competition Committee's work in this area into perspective and making it useful to a wider audience.

The executive summaries on which this document is based, as well as a bibliography, are included in this publication. The full set of materials from each roundtable, including background papers, national contributions and detailed summaries of the discussions, can be found at www.oecd.org/competition/roundtables.

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KEY FINDINGS *

By the Secretariat

Introduction

(1) The financial sector is special. Competition in banking is inherently imperfect, the sector is subject to systemic risk problems, and in recent years the sector has become increasingly exposed to the risks of capital markets.

The health of the financial sector is of special importance to the real economy, as the sector is at the heart of every well-functioning market system. Banks perform intermediation functions that are critical to the real economy. These functions facilitate and contribute to economic growth. In particular, retail banks are important for financing consumers and SMEs. If the financial sector is not working well, then the entire market economy is not working well. All OECD countries acknowledge the importance and the special role of banks in their economies. For this reason, governments impose significant regulation and oversight to promote the smooth functioning of the financial sector, and, when problems arise, they must act quickly to avert systemic crises.

Competition in banking is inherently imperfect. There are considerable information asymmetries regarding risk levels between depositors and institutions. Switching costs for customers are often substantial, with the result that many customers are reluctant to switch all or part of their business between banks, which can pose a significant barrier to entry. The existence of such imperfections means that, in the absence of effective regulation, the financial sector would provide significant opportunities for generating and sustaining rents.

This section is based on meaningful findings extracted from the executive summaries compiled in this publication. They were reorganised into a cohesive narrative that captures the different aspects covered.

Moreover, banks are special economic agents because of their importance for the stability of the financial system and the economy. Linkages between banks through inter-bank markets and payment systems are vital to the functioning of financial markets. Nonetheless, the interlinked nature of the banking sector makes it particularly vulnerable to externalities related to potential "contagion" effects. The collapse of one key bank may have a domino effect that leads to widespread loss of confidence in the financial system. The risks become systemic, endangering the whole banking system, and creating the possibility of a severe recession.

A distinction can be made between investment banks, consumer or commercial banks and other financial institutions. Commercial banks engage in banking activities, whereas investment banks engage in capital market activities. However, conglomerate banking institutions may contain a variety of banking entities, each with different business models and complex characteristics. The years prior to the recent financial crisis saw a huge increase in the exposure of banks' balance sheets to capital markets, as well as increasing leverage and risk taking. This significantly changed the way in which competition between banks works, exposing institutions to the fierce competition and high risks of global capital markets. In such circumstances, while it may be the case that only one division of a banking institution – for example, the investment banking division – experiences liquidity difficulties, this discrete problem may yet be sufficient to bring down the entire bank.

(2) Within the financial sector, there is a need to balance the policy goals of competition and stability – objectives that are not always wholly compatible with each other.

Policy goals for the financial sector include the promotion of both competition and stability. Competition encourages efficient and innovative financial services, while stability is essential to maintain the systemic trust on which the sector depends. Nonetheless, these objectives may not always be wholly compatible with each other. Effective market regulation within the financial sector therefore depends upon a balancing of the needs for both competition and stability.

(3) While competition policy remains of significant relevance and value in financial markets, its application is not always straightforward and thus merits individual consideration.

Measuring competition in financial markets is complex due to their peculiar features, such as switching costs, asymmetric information and network externalities. Concentration, among other structural indicators, is not a sufficient proxy for competition. It is unclear whether excessive competition contributed to the recent financial crisis. Both the country experiences and the academic debate suggest that concentration and competition have somewhat ambiguous effects on financial stability. Some OECD countries with more concentrated financial systems – including Canada and Australia – proved to be fairly resilient to financial distress during the recent crisis. Conversely, other OECD countries with concentrated banking sectors – including Switzerland and the Netherlands – experienced significant difficulties during the period.

What can be said unequivocally, however, is that a variety of factors other than competition and concentration at the very least contributed to the crisis. These include macroeconomic factors like loose monetary policy and global imbalances leading to a bubble in asset and real estate markets, as well as microeconomic factors such as poor regulatory and institutional frameworks and the funding structure of banks. The role of competition policy within the broad array of financial market reforms that may be envisaged in the aftermath of the financial crisis must be considered carefully.

(4) Competition in financial markets is not a problem in itself – rather, competition in the absence of adequate regulation can be problematic. In many aspects of the sector, competition works well and brings better efficiency and welfare gains for consumers. Healthy competition in the financial sector improves not merely the functioning of financial markets, but also has a beneficial impact on the real economy.

Competition in financial markets is not a problem in itself, in relation to the stability of the sector. As in most sectors of the economy, the benefits of full, effective competition in the financial sector are enhanced efficiency, the provision of better products to final consumers, greater innovation, lower prices and improved international competitiveness. Greater competition also enables

efficient banks to enter markets and expand, displacing inefficient banks. Competition should therefore be encouraged, facilitated and protected within the financial sector where it is appropriate. This includes the removal of unnecessary restrictions to competition, which can provide a major source of rents for banks.

Nevertheless, competition in the absence of adequate regulation can be problematic. For the benefits of competition to flow through the whole market, an appropriate regulatory and competitive framework for the financial sector must be identified and implemented. Once that framework is in place, governments must ensure that short-term measures used to rescue and restructure the financial system (such as recapitalisation, nationalisation, mergers and State aids) do not restrict competition in the long term. They can then protect the goals of efficiency and stability.

The Origins of the Financial Crisis

(5) The financial crisis was caused by a failure of regulation, rather than by the presence of competition in the financial sector. Deregulation per se was not the issue, either – rather there was an absence of prudential regulation that could have controlled effective and beneficial competition in the market.

The recent financial crisis was triggered by a variety of factors; these included prolonged low interest rates, large global imbalances leading to stock market and real estate market bubbles, high leverage, manager compensation and financial innovation. Ultimately, however, the crisis stemmed from failures in financial market regulation, not excessive competition or the failure of the overall market system.

Financial regulation, like other forms of regulation, is necessary to correct "market failure". In the case of banks, the market failure arises from the lack of transparency regarding a bank's risk profile, so that the market cannot adequately deter banks from taking excessive risks. Accordingly, financial regulation is necessary to ensure that market participants do not take on imprudent levels of risk. Effective, prudential regulation increases the resilience of financial institutions to a crisis.

The recent financial crisis demonstrated, however, that the existing financial regulation in many OECD countries was insufficient to secure the prudential conduct of market participants. Financial innovation introduced important changes in banks' activities and made regulatory restrictions less effective. Financial regulation should have changed in response to financial innovation. Unfortunately, that did not happen and regulatory effectiveness decreased dramatically as banks were able to use derivatives to get around regulatory requirements such as capital rules and ratings. Conversely, countries with strong regulatory and institutional frameworks have been less prone to financial distress.

(6) Although not the primary cause of the financial crisis, the failure of the credit rating agencies to recognise problems earlier was a contributing factor. The credit ratings market forms a natural oligopoly, and increased competition has not necessarily had a positive impact on the quality of the product, as the incentives of credit rating agencies have become misaligned.

The failure of the credit rating agencies (CRAs) to recognise problems in financial markets at an earlier stage was a significant contributing factor to the financial crisis, although not its sole cause. Credit ratings are opinions on the relative ability (and willingness) of an obligor to meet financial commitments. While credit ratings serve a vital purpose – providing objective assessments of the credit risk attached to the issue of a security, which is comparable across issuers, instruments, countries and over time – the CRA market is a natural oligopoly. Credit ratings are an experience good - meaning that the quality of the rating is only revealed after the fact, using a large sample – so reputation for quality is the crucial competitive factor. Investors value comparability and consistency of ratings across geographical segments and instruments: accordingly, the greater the installed base of ratings given by a particular CRA, the greater the value to investors. Corporate issuers generally favour the ratings most trusted by investors to facilitate placement and provide for the lowest spread. A further relevant feature of the CRA market is the use of the issuer-pays pricing model, whereby fees are paid primarily by the investors whose securities the CRAs rate, despite the fact that the

primary commitment of CRAs is to the investment community. This leads to an inherent conflict of interest.¹

In recent years, competition has increased in the market for CRAs, with the number of major CRAs increasing from two (Standard & Poor's and Moody's) to three firms (Fitch is the third). Competition in the credit ratings sector is not an unambiguously positive phenomenon, as increased competition may lower the quality of ratings by creating a bias in favour of inflated ratings. Issuers generally need only two ratings. The emergence of Fitch as a serious competitor thus resulted in significant grade inflation as competition increased. This increase was attributable, not to the valuation models used by CRAs, but rather to systematic departures from those models, as CRAs made discretionary upward adjustments in a bid to retain business. In this manner, both issuers and CRAs tolerated a wilful blindness to the decline in creditworthiness. Consequently, both the issuer-pays model and the effects of unregulated competition in an oligopolistic market contributed to the decline in the quality of credit ratings.²

(7) The notion that some financial institutions are "too big to fail", insofar as their collapse would have a disproportionately detrimental effect on the whole financial sector and the wider economy, undermines both financial stability and competition in financial markets. A perception that a financial institution is too big to fail carries with it an implicit guarantee that the State will intervene to prevent collapse. That, in turn, can lead to excessive risk-taking by such firms.

In general, insolvent banks should be allowed to fail. Nevertheless, in some markets there is an expectation that certain key banks will not be permitted to collapse. "Too big to fail" banks are institutions that are so large that market participants assume that the government would take whatever steps might be necessary to preserve their solvency in a crisis. As a government policy, "too big to fail" insulates the depositor from the need to be aware of the financial condition of their bank. In

OECD (2010), Competition and Credit Rating Agencies, Hearings on Competition Policy, No. 2, OECD, Paris, pp. 5-6. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/28/51/46825342.pdf.

Hearings on Competition and Credit Rating Agencies, pp.10-11.

the absence of other interventions, this can encourage risk taking, so that the bank takes on more risk than is prudent. This poses a threat the market stability.

Moreover, institutions that are too big to fail pose a threat to competition in financial markets. Banks seen by consumers as too big to fail can give rise to competitive distortions since they may have an artificial advantage in raising funds, especially in markets where deposit insurance is inadequate. Such institutions are in effect subsidised, being able to borrow at lower rates than their smaller competitors, thus further distorting normal market competition.

Emergency Measures and the Financial Crisis

(8) Government intervention in the financial sector may be necessary and legitimate in the short-term during a crisis, but in the longer term effective competition in the sector has to be restored.

When faced with circumstances of financial crisis, the pivotal role played by the financial sector in the wider economy may make government intervention necessary to ensure stability in the short term. To combat the current crisis, governments have been making large-scale interventions in the banking system with important effects on competition. Competition law and policy will not necessarily always take precedence over other, broader, measures in this context. In the medium to long term, however, competition goals must be pursued and emergency measures withdrawn.

(9) The financial crisis is expected to generate a significant increase in mergers involving struggling financial firms. Many countries apply a "failing firm defence" for mergers that restrict competition, but where absent the merger the assets of the failing firm would exit the market.

A merger that is expected to lead to anti-competitive effects should be prohibited when there is a causal link between the merger and the anticipated harm to competition. When one of the merging firms is "failing" (i.e. it is likely to exit the market absent the merger), however, the future deterioration in competitive conditions does not necessarily result from the transaction and hence the causal link may be missing. The failing firm defence (FFD) is based on the rationale that, because one of the merging parties is failing and its assets would exit the market

anyway, the merger is not anti-competitive. The FFD may be invoked more frequently during periods of financial and economic crisis.

National competition authorities (NCAs)³ that have a FFD in place typically require that three cumulative conditions be satisfied before accepting such a defence:

- Absent the merger, the failing firm will exit the market in the near future as a result of its financial difficulties;
- There is no feasible alternative transaction or reorganisation that is less anti-competitive than the proposed merger; and
- Absent the merger, the assets of the failing firm would inevitably exit the market.

The burden of proof to show that these conditions are fulfilled lies on the merging parties. Those countries with an explicit FFD have found that (i) it yields outcomes that are broadly similar to the outcomes that would obtain under the properly applied traditional causality test and (ii) it provides predictability for firms that are subject to merger control regimes.

Even in circumstances of economic crisis, there is a consensus among Competition Committee delegates that there is no justification for loosening the FFD criteria. Nevertheless, NCAs recognise that FFD investigations may be too lengthy, which is problematic given that the position of firms in distress may rapidly deteriorate, which in turn may cause inefficient liquidations. This may justify procedural changes to ensure a speedier review of mergers involving failing firms.

(10) Temporary nationalisation of a failing financial firm – if it is very important to the economy as a whole – may result in a more competitive option than private merger in the long run, particularly where the firm is re-privatised in a prudential manner once stability has been restored.

From a competition standpoint, the nationalisation of a failing financial firm, either in full or in part, may be preferable to purely private mergers because it is usually easier to reverse nationalisation

The principles outlined in this document may apply equally to supra-national competition authorities such as the European Commission.

or to stop other forms of public support than it is to break up large conglomerates. In addition, nationalisations create or enhance market power to a lesser degree than private mergers and provide a clearer solvency guarantee. On the other hand, full or partial nationalisations are prone to excessive government direction over operational decisions and can add burdens to the government's balance sheet.

When the sell-off of nationalised institutions occurs, consideration should be given to possibilities to improve market structure, for example by the break-up of an institution prior to sale or the sale of an institution to a foreign entrant rather than domestic buyer. Any structural competition problems that arose because of nationalisation should be eliminated prior to or during the privatisation process. In addition, public stakes in nationalised institutions should be sold back to the private sector within a time frame that is reasonable, transparent and foreseeable in order to limit the time in which nationalisation may distort competition.

(11) In the real economy, government intervention can be defended as indispensible less frequently than in the financial sector. Governments should consider all options carefully before supporting any firm that is failing principally because it is inefficient.

Some governments have extended financial aid to the real sector. This may, for example, be important to enable small businesses to obtain credit. Where absolutely necessary, governments should provide this aid rapidly and with minimal bureaucracy, but with clear sunset (phase-out) features built in. However, the rationale for rescue packages in the real economy is more limited than for the financial sector. The problem of systemic risk or "contagion", which justifies intervention in financial markets, is not present in real sectors. Member country experiences show that there are very many risks attached to government interventions in the real economy.

As a general rule, therefore, governments should be very cautious about bailing out non-financial firms that were underperforming even before the crisis. Propping up unproductive companies harms long-term growth. If under-performing, inefficient and poorly managed firms are bailed out simply because of the crisis and the fact that they are large employers, then the message to industry will be simply to become "too big to fail," rather than being concerned about efficiency.

Empirical evidence suggests that, on balance, inefficient firms will exit markets and substantial job losses may result, but new firms may enter and create new jobs over a short duration, giving net positive employment effects and positive effects for the real economy.

There may be situations, however, in which governments need to make a case-by-case call on whether and how to provide some kind of assistance to the real sector, depending on an analysis of the systemic, economy-wide implications of failure in a particular industry.

(12) It is sometimes considered appropriate to place restrictions on the activities of government-aided firms in order to prevent them from exploiting their perceived competitive advantage and to reduce moral hazard. By restricting competition in this manner, however, there is a risk of encouraging inefficiency in the market and perpetuating the difficulties of the institution concerned. These alternative risks must be taken into consideration as part of any State aid strategy.

Remedial measures to be imposed on firms that have received government bailouts as a condition of receiving such support require careful analysis. Such measures are generally justified on the basis of moral hazard, insofar as the firm receiving State aid has gained a significant advantage over non-aided competitors and should be restrained from exploiting this advantage to the detriment of competitors. However, rather than assisting the restoration of competition in the financial sector, such measures can in fact be detrimental to competition. Price controls applied to the aided institution may create rents for its competitors, hiring restrictions can delay recovery, restrictions on mergers and acquisitions can undermine reallocation of financial assets, while forced and rapid divestiture of assets can trigger a downward spiral of asset prices. Rather than punishing a bailed out institution, it may be better to focus on why some institutions needed government assistance in the first place, including questions of governance and regulation. Behavioural remedies imposed on aided firms might, instead, implement mechanisms to make banks internalise the costs of risky activities, for example linking capital charges to the size of the bank.

(13) Competition has a fundamental role to play in the recovery process, even in the financial sector. Policy makers should not, therefore, neglect its important role in this context. Nonetheless, while there should be no compromise on competition policy standards, there is a need for flexibility in procedural matters in order to accommodate the crisis circumstances.

Past experience in member countries such as Korea, Japan and the US demonstrates that, even in a full-blown financial crisis, it is a mistake to compromise competition when seeking recovery. Competition law and policy are flexible enough to deal with the financial crisis. NCAs are accustomed to dealing with many sectors and to applying the law in a way that reflects each of their special characteristics; competition statutes can already be interpreted with sufficient flexibility to take the special traits of the financial sector into account. There is no conceivable reason to relax standards of enforcement: to do so, or to do anything other than maintaining present objectives and standards of competition law enforcement, would jeopardise future national economic performance.

Nevertheless, while the principles and objectives of competition law enforcement must not change, the analysis has to be realistic about the conditions in the market. That means continuing the shift from a form-based analysis to a case-by-case analysis in which the context and effects of actual practices and behaviour are very much taken into consideration. Crisis circumstances and the need for emergency decisions require flexibility in procedures and the ability to carry out rapid but diligent assessments of mergers or practices. NCAs will need to act quickly, but without decreasing their standards of enforcement, and without abandoning sound, generally accepted economic principles.

The OECD should build on the lessons of previous recessions and demonstrate why a market-oriented, longer term, sustainable approach is the way forward, not only with respect to public subsidies, but also for merger control and general antitrust work. NCAs must be allowed to focus on promoting competition through well-targeted interventions while remaining mindful of the situation in the wider economy and the broader policy concerns which governments may need to address.

(14) Even in times of financial crisis, NCAs continue to have significant scope for activities within the financial sector.

Competition advocacy directed towards financial policy-makers is key to ensuring that competition considerations remain on the political agenda, even in circumstances where other public policy concerns must take precedence in the short term. While NCAs should continue to act independently, they may consider it useful to assist policy-makers in designing the least restrictive intervention measures. On the other hand, some NCAs prefer to preserve their independence by maintaining an arms' length relationship with policy-makers.

NCAs also have an important role to play when it comes to promoting consumer welfare and transparency in financial markets. Even during the crisis, competition law enforcement should continue in those areas of the financial sector in which improved competition is achievable and beneficial, for example bank switching by retail customers. Easier switching and increased transparency could increase the competitiveness of current market structures and facilitate new entry and expansion. NCAs are also well-placed to conduct competition reviews in the banking sector with a different viewpoint from those of the stability-oriented central banks and bank regulators.

In crisis circumstances NCAs should adjust their priorities to strengthen advocacy and give greater attention to cartels and mergers. International co-operation in setting and enforcing competition policy, especially in relation to the failing firm defence, is essential for ensuring consistency in troubled times, speeding up the enforcement process and giving clarity to enforcement activities. NCAs will need to consider carefully which cases they take on and how they apply their laws and policies. Conflict between prudential regulation and competition policy goals can be reduced by close co-operation, including prior consultation between the pertinent agencies.

Going Forward (I): Exit Strategies for Emergency Measures

(15) Government intervention in the financial sector should be phased out in the medium to longer term. Competition policy can inform the development of exit strategies that will make it possible for the market mechanism to be restored in the financial sector, while at the same

time avoiding the damage to the market that might follow from unplanned exit.

During the recent crisis, instances of government intervention in the financial sector were deemed necessary, on the basis that the markets were dysfunctional. In the longer term, however, government interventions distort financial markets. Such actions reduce the marginal costs of assisted institutions and encourage excessive risk taking in future. Competition remains of major importance to the health of the financial sector, and competition and the market economy are key components of an effective recovery strategy. Although the authorities' main concern during a financial crisis is to restore financial stability, once the crisis passes it becomes important to fix the potentially negative competitive effects of State aid, acquisitions, capital injections and bailouts. Over time, therefore, as stability returns to the sector, government involvement should be phased out.

One of the biggest issues in the future will be how governments can stop providing aid to financial firms and unwind the extraordinary liquidity provisions, guarantees and government capital holdings, so as to ease the sector back toward normality. Like the initial interventions, the sale by the State of stakes in financial firms back to the private sector and the lifting of guarantees has great potential to distort competition. Exit strategies that protect and promote competition are therefore essential, both when designing interventions and when phasing them out. At the same time, exit strategies must try to ensure that markets will not again become dysfunctional.

Specific competition issues arising in the context of exit strategies include:

- how NCAs should view large mergers in the financial sector and how barriers to entry can be reduced to encourage competition with the resulting large institutions
- how, if governments acquire stakes in banks that concentrate significant market power, that market power should be eliminated prior to denationalisation of the banks, and
- what incentives can be provided to encourage the introduction of private capital to release government capital.

(16) The design of exit strategies can be complex and therefore requires careful consideration. In particular, there is a need to balance flexibility with certainty in their design.

The design of exit strategies is complex and difficult, and requires a thorough consideration of the market. The timing of exit is critical. It is preferable to bring to an end State intervention in the financial sector as soon as possible, in order to minimise the resulting market distortions and to prevent aided institutions from becoming dependent on public support. At the same time, however, premature exit is undesirable, as withdrawing too early may provoke failure of the aided banks and leave competition even weaker. Any strategy for exit must, therefore, have sufficient flexibility to accommodate uncertainties regarding timing and future market performance. On the other hand, exit strategies in themselves require certainty, meaning they must be transparent and based on objective criteria. Well-designed exit strategies must balance flexibility with certainty in this manner. Giving advance notice of planned exit to market participants is likely to contribute to a successful exit strategy.

Competition and stability are among the ultimate policy goals for the financial sector. As government intervention in sector comes to an end, the structures left in place after the State has exited the market should ideally seek to balance both objectives. Effectives exit strategies are not, therefore, merely a question of the State exiting the market. It is also important that the stabilising role played by the State is replaced with a prudential regulatory scheme that is appropriate to a market-oriented approach in the financial sector.

(17) It may be appropriate for NCAs to play a role in the design and implementation of exit strategies. In particular, NCAs have specialist expertise in market assessment, as well as in identifying possible restrictions to competition and designing less restrictive alternative measures.

NCAs have a role to play in ensuring that exit strategies are built into rescue interventions so as to prevent than from harming competition in the longer term and hindering recovery. Accordingly, the NCA may have an official advocacy role in the design of both the response to the crisis and to exit strategies. Alternatively, the NCA may be able to

provide informal advice and assistance to policy makers in the design of exit strategies. In the latter case, flexible use of advocacy powers and the use of less formal tools to bring about change in the market should be made.

Going Forward (II): Designing Better Financial Markets

(18) Going forward, the key element to improving the functioning of financial markets is to improve the quality of the regulatory oversight in the sector. Prudential regulation can be a complement to competition, with each compensating for some of the deficiencies of the other, so as to ensure that financial markets work as well as possible.

Because regulatory failure led to the crisis, the key solutions must come from regulatory measures that change incentives, and not from competition policy. Better prudential regulation and supervision can improve stability going forward. Restrictions to competition would not contribute to a greater resilience of financial institutions to financial distress, but better regulation can make banks less inclined to take on excessive risk.

Going forward, therefore, a central element of the recovery process requires the establishment of a better regulatory regime for the financial sector. The regulation of financial markets should, in particular, (i) put in place incentives to ensure that market participants act in a prudential manner; (ii) curb excessive risk-taking; (iii) have the capacity to address financial innovation; and (iv) perform an effective monitoring/supervisory function with respect to activities in the sector.

On the other hand, while better regulation of the financial sector might have prevented the crisis, excessive regulation would risk losing the benefits of competition. NCAs must engage in dialogue with those who are going to amend regulation in order to help frame it and ensure that it is consistent with the aims of robust competition policy. Competition policy and prudential regulation, to the extent that both seek to prohibit undesirable behaviour, are mutually compatible. Cooperation between NCAs and sectoral regulators, including prior consultation where appropriate, can alleviate the potential for conflict between competition and regulatory policy goals.

(19) Improved regulatory oversight should ensure more and better quality capital in the funding structure of banks going forward. Separation between commercial banking and capital market activities may be needed to control risk and protect capital levels within an institution.

The funding structure of banks is important to their resilience. Banks can finance themselves with both depository funding and wholesale funding. During the recent crisis, banks that relied principally on wholesale funding have tended to be affected much more severely than banks that relied on depository funding. In the medium term, in order to reconcile stabilisation and competition issues, financial institutions need to have more, higher quality capital.

The involvement of a commercial or retail bank in capital market activities exposes that institution to two forms of risk: credit risk and portfolio risk. As it is not possible to control both types of risk at the same time, a separation between commercial banking and capital market activities may therefore be needed. Prudential regulation should be designed to reflect this need.

(20) Improvement of corporate governance frameworks is another important issue for the design of better financial markets. Incentives for firms and their officers should be structured in ways that ensure companies will operate prudently. As with regulation, corporate governance mechanisms complement competition by providing a way to deal with the complexities of competition.

Alongside better regulation, better corporate governance frameworks are a key tool for improving the functioning of financial markets.⁴ Competition law and corporate governance are two separate bodies of law. While competition law concerns primarily the relationship between corporations and other markets actors regarding horizontal and vertical relationships and mergers and acquisitions, corporate governance concerns primarily the relationship between the officers,

OECD (2010), *Competition and Corporate Governance*, Hearings on Competition Policy, No. 1, OECD, Paris, p. 17. The full set of material from this roundtable discussion can be found at http://www.oecd.org/dataoecd/28/17/46824205.pdf.

directors and shareholders of a firm.⁵ Nevertheless, both competition and corporate governance structures have been strongly involved in and affected by the crisis, and both are key aspects of the recovery.⁶ In imperfect markets – including the very suboptimal situation in the financial sector after the crisis – there is an opportunity to enhance both competition and corporate governance so that they may function more as complements.⁷ The OECD has focused on corporate governance and competition as two of the main elements in its strategic response to the financial and economic crisis,⁸ and these topics are of vital importance for national (and supra-national) policy-makers.⁹

Corporate governance can be seen as a "competition booster". It is particularly necessary where competition is weak, as it helps the market for corporate control and the market for top managers to survive. Contestable ownership structures that are complemented by robust internal governance mechanisms induce efficiency. Thus, corporate governance can help to ameliorate or lessen the negative effects of reduced competition in financial markets. The financial crisis action plan issued by the OECD Corporate Governance Committee provides a set of recommendations in the specific areas of corporate governance connected to the crisis. The areas addressed with priority in the recommendations are: (i) governance of executive remuneration; (ii) implementation of effective risk management; (iii) quality of board practices; and (iv) exercise of shareholders rights. 10 Regulations that may be implemented in the aftermath of the recent financial crisis should focus on determining and regulating the incentives that may drive the behaviour of regulated entities and their officers.¹¹

⁵ *Ibid.*, p. 5.

⁶ *Ibid.*, p.16.

⁷ *Ibid.*, p.15.

⁸ *Ibid.*, p.15.

⁹ *Ibid.*, p.16.

^{10 11:1 - 16}

¹⁰ *Ibid.*, p.16.

¹¹ *Ibid.*, p.10.

The recent financial crisis has been accompanied by a significant increase in the number of State-owned enterprises (SOEs), which raise distinct corporate governance questions. Frequently, SOEs are not concerned with profit maximisation. They perform functions that are related to non-financial goals, and there is a lack of accountability to shareholders (i.e. a country's citizens), which removes an important disciplining influence from the conduct of SOEs. Because SOEs' incentives are different from those of profit-oriented private firms, private firm competitive assumptions cannot be applied. Ideally, the institutional structure and corporate governance framework applied to an SOE would encourage it to operate as efficiently as possible, taking into account its special characteristics. This may take the form of encouraging the SOE to mimic the behaviour of private firms. Nonetheless, the optimum solution for SOEs will differ by sector and the form of entity involved.¹²

(21) The public good nature of the (ostensibly private) credit rating given by credit rating agencies has created a pressing need for reform in this market. Such reform may take the form of an increased role for investors in funding and/or monitoring the activities of credit rating agencies.

As a contributing factor to the financial crisis, the failure of the market for credit rating agencies (CRAs) is a significant public policy problem. Reform of the sector is therefore an important component of the recovery process. The solution to the CRA market problem lies primarily within the regulatory domain. In particular, there is a need to curb the issuer-pays business model and to involve the investor to a greater extent in the process of due diligence. Transparency (e.g. removing the opaqueness and monitoring the monitors) and diversification (e.g. the concurrent use of several credit risk evaluation mechanisms, including crediting ratings) are key principles in this context. A decrease of regulatory reliance on ratings may also be advisable.

Many proposals for reform call for greater government supervision of the credit ratings process, for example through registration requirements, government allocation of the initial CRA for structured finance ratings, or even the establishment of government rating agencies. On the other hand, there are risks in requiring government to

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Hearings on Competition and Corporate Governance, pp.14-15.

participate too closely in the rating process, for example political interference or lack of specialised skills. 13

(22) Increased competition in the financial markets may reduce the likelihood of a "too big to fail" problem arising. Where structural changes to the market are not possible or desirable, prudential sectoral regulation should be put in place to prevent such firms from exploiting their implicit State protection.

The issue of "too big to fail" is primarily one for financial regulation, but it also raises indirect competition issues. NCAs have a crucial role in trying to influence the framework of merger control regulations to avoid a repetition of the current sort of crisis. The approach should be co-ordinated with regulators. A key issue is how to prevent the emergence of institutions that are too big to fail. Where an institution of this magnitude already exists, behavioural remedies in the form of prudential regulation controlling the incentives of the firm should be put in place. In this regard, once again, prudential regulation and competition policy can be complementary.

Hearings on Competition and Credit Rating Agencies.

EXIT STRATEGIES 1

-- June 2010 --

Executive Summary by the Secretariat

Considering the discussion at the roundtable and the delegates' written submissions, and taking into account the hearing on Competition and Credit Rating Agencies², several key points emerge:

(1) The financial crisis was a result of inadequate regulation and credit rating, not inadequate competition.

The crisis was provoked by deficient regulation, especially of innovatory forms of financial securities with difficult-to-measure credit risk. The main ratings agencies had also become laxer in their assessments, helping to conceal the rising proportion of low quality securities. When the crisis broke, the low quality of many financial assets became easy to see but remained hard to measure. Interbank transactions fell sharply since all banks worried about the solvency of their counterparties. Interbank lending rates on unsecured loans averaged a few basis points above those on secured loans before the crisis, but the spread rose to over 200 basis points by end-2008 and even at mid-2010, the spread was over 40 basis points on loans of more than 6 months. Many large banks were perceived to be "too big to fail". This designation implies a certain measure of market dominance, but inadequate competition was not responsible for the crisis.

OECD (2010), *Exit Strategies*, Series Roundtables on Competition Policy, No. 110, OECD, Paris. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/43/51/46734277.pdf

See http://www.oecd.org/dataoecd/28/51/46825342.pdf

(2) Emergency actions taken during the financial crisis helped restore stability but caused some harm to competition as well.

During the crisis, many governments aided the financial sector in their countries on an unprecedented scale – and some non-financial sectors on a lesser scale. The emergency measures had to be taken hurriedly, sometimes at a few days' notice, to prevent the world's financial system from seizing up completely. Because of the importance of financial stability for the smooth working of the economy, financial market regulators have more powers than regulators in most other sectors.

Government help included direct participation in the capital of some banks, including outright nationalisation, injections of liquidity to encourage banks to continue lending to industry, state guarantees of banks' deposits and lending, and brokering by governments of mergers between financial institutions. Some financial authorities imposed bans on certain kinds of short selling transactions. Central banks also injected large amounts of liquidity into the system to replace the normal mutual lending and borrowing between banks, which had dried up.

The fact that governments helped some banks but not others weakened competition. State aid in itself is anti-competitive, and was often accompanied by competitive restrictions on the aided firms in the form of caps on directors' remuneration, bans on price leadership, and forced divestiture of branches or subsidiaries. On the other hand, because banks are enmeshed in a network of mutual borrowing and lending, preventing large players in the market from failure helped their competitors by reducing contagion and panic. None of this implies that competition issues were ignored. In most OECD countries, even where the competition policy agencies had no specific powers to design the emergency measures, their advocacy and experience were drawn upon, or offered by them, to help plan and implement those measures in ways that would be less harmful to competition.

(3) *Emergency measures must eventually be withdrawn.*

Because the emergency measures distorted competition, are expensive for public finances, and involve governments to an undesirable extent in running banks, they need to be wound down as markets stabilise. Furthermore, economic evidence and past experience show that rather than speeding up sustainable recovery from crises, anticompetitive measures tend to retard or even prevent recovery after the immediate crisis passes. But there are questions of timing, to what extent competition principles and agencies should or can guide the design of exit measures, and whether it is desirable to return to "business as usual." Just as the emergency measures themselves distorted competition, winding them down also affects competitive conditions in the financial sector.

The authorities in many cases set time limits at the outset on the emergency measures. For example, guarantee schemes were often applied with a limit on their duration -- either a specific date or until such a time as the markets stabilised. Participation in the capital of banks that risked failure and were judged "too big to fail" was accompanied by government pledges that they would sell their stakes when banks returned to stability and profitability.

(4) Competition principles and agencies should play a major role in the design and implementation of exit strategies.

A lesson from the crisis is that the "too big to fail" perception encouraged the relevant institutions to pursue high risk / high yield strategies in the expectation that if the risks materialised (the size of which most analysts discounted right up to the beginning of the crisis), they would be bailed out, and their beliefs were validated. As noted above, though, the bailouts interfered with competition. Receiving a bailout package usually entailed bearing part of the costs. Financial aid for private sector banks came with strings attached in the form of restrictions on their activities, while guarantee schemes were not free of charge. Therefore, banks that felt they were strong enough not to need them did not apply. Furthermore, forced mergers of failing banks with stronger ones usually resulted in the new whole being less than the sum of its constituent parts. Banks which were judged to be weak even before the crisis, and not of systemic importance, were wound down. Thus competition between banks was weakened by the crisis and by the emergency measures, and the survivors emerged even more profitable than before.

Because financial markets are international, but competition agencies and bank regulators are national, the latter need to take into account the international ramifications of their actions. A big weak bank in a small country may be perceived as meriting continued support, but it might not be of systemic importance in a wider geographical context. Governments and their financial authorities that have organised mergers between weak banks that remain fragile may be reluctant to withdraw support, even if the merged entity has no stand-alone long-term future. At the other extreme, governments that have injected public money into banks that do have a long-term future have an incentive to maximise their return by encouraging the market dominance of those banks.

The timing of exit is critical. Withdrawing too early may provoke failure of the aided banks and leave competition even weaker. Delayed withdrawal, however, could result in some institutions becoming dependent on public support.

The inherent tensions between competition principles and financial market regulatory principles are likely to become more acute. The crisis showed clearly that existing regulatory structures were inadequate to prevent the crisis occurring, and regulators throughout the OECD countries are drawing up plans to tighten regulations further. Insofar as they concern the Basel III proposals to require banks to provide more and higher quality capital better to withstand shocks, the implications for competition between existing banks are neutral, provided that they are applied uniformly within and across countries. But such moves will make it even more difficult for new banks to enter the market.

Now that financial markets are recovering from the crisis, the "too big to fail" institutions command a higher market share than previously, exacerbating moral hazard problems. Proposals to break them up, or separate their investment bank and commercial operations, do not command universal support among analysts and are strongly resisted by the big banks themselves. It is not clear what comparative advantage competition policy agencies could have in designing new regulatory structures that would discourage banks from following high risk strategies. Forbidding banks to participate in activities such as "naked" short selling, or putting permanent caps on bonus payments could reduce risk but also competition between banks. But the competition agencies should advocate regulatory structures that make

it easier for new entrants, and they should continue to raise concerns regarding mergers that result in "stronger banks" that can charge higher fees. Reforms that make it easier for households to change banks – such as making account numbers portable – would also be welcome.

(5) Credit rating agencies serve a vital purpose, but the market is a natural oligopoly.

There are great advantages for both issuers and investors in having objective assessments, comparable across issuers, instruments, countries, and over time, of the credit risk attached to the issuer of a security. Assessments by individual issuers would be clearly suspect, while assessments by the investors would be costly for them to make, if there were many instruments to be compared, and would also require full disclosure by the issuers of all relevant information. Therefore, credit rating agencies (CRAs) appeared early in the 20th century, and for many years three agencies -- Moody's, Standard and Poors (S&P), and Fitch -- have dominated the field. The CRA market is a natural oligopoly because issuers gravitate to the CRA they trust most and that has a large client base, while investors do not wish to have to interpret different types of ratings for the same instrument from a plethora of CRAs.

(6) Dangerously risky behaviour by banks was exacerbated by the actions of the main rating agencies.

As financial markets expanded in scale and scope, demand for ratings rose and banks and fund managers were increasingly required by regulators to invest in securities above a certain grade. This created some moral hazard problems. Whereas the CRAs previously employed independent firms to check the information provided by issuers, this practice gradually died out and they relied on issuers' honesty and due diligence. It also became very difficult to analyse the underlying degree of risk in securitised assets built up from large numbers of heterogeneous and individually illiquid assets. The CRAs, especially Fitch, also competed fiercely for market share and analysis shows that in the years before the crisis, the CRAs tended to inflate ratings above what their own models would have estimated. Consequently, even as the underlying riskiness of many financial assets was increasing and the average quality of the entire spectrum of

financial assets was falling, average ratings tended to rise. Rating inflation was recognised as a problem even before the crisis, as it contributed to the Asian financial crisis late last century and the internet bubble early this century.

(7) Steps must be taken to ensure that this does not happen again, though more competition may not be the solution. CRAs should increase the level of their due diligence and, ideally, switch to "investor pays" business models.

Given that CRA performance worsened when competition for market share increased, the solution may not be to encourage more CRAs to enter the market. Proposals for improvement include a governmentowned and managed CRA with no ties to issuers or investors; obliging investors rather than issuers to pay for ratings; if issuers pay, obliging them to seek a second opinion from an investor-owned CRA; obliging issuers to choose a CRA picked at random; relying on other data such as share prices, as well as ratings; and a "platform pays" model, in which a clearing house provides information based on all CRA assessments. There are objections to all of those proposals. A publicly owned CRA may come under pressure to inflate the ratings for domestic firms. History shows that investors are unwilling to pay for ratings and would not do so unless it became a legal obligation. A "second opinion" from an investor-owned CRA would be difficult given that there are very few such CRAs. Picking a CRA at random would not change the industry much, given the very small number of CRAs. It is true that share prices incorporate a great deal of publicly available information about firms - but that information is also available to the CRAs. Furthermore, share prices are volatile and the history of the stock market shows that share price analysts are just as prone to excessive optimism as the CRAs.

The conclusions were that the CRAs performed their function badly in the run-up to the crisis (but not all countries which used CRA ratings, such as Australia and Canada, experienced a crisis), that a move towards the investor pays principle is desirable, though difficult to achieve, that better monitoring of CRA performance is necessary, and that CRAs must thoroughly check the information they are given by issuers.

COMPETITION, CONCENTRATION AND STABILITY IN THE BANKING SECTOR ¹

-- February 2010 --

Executive Summary by the Secretariat

(1) Measuring competition in financial markets is complex due to their peculiar features, such as switching costs. Concentration, among other structural indicators, is not a good proxy for competition.

Although antitrust authorities use measures of market concentration, such as market shares and HHI, to make an initial assessment of competition, these structural measures are only a first step in analysing whether concentration will create or enhance the exercise of market power. Market contestability, for example, is also important for evaluating competition in financial markets. The existence of entry barriers, as well as activity restrictions and other rigidities, must be taken into account in evaluating financial firms' behaviour, both in a static and in a dynamic sense. Furthermore, factors such as switching costs, geographic constraints on customers or supplies, competition from non financial firms, and the size of competitors and customers need to be considered.

(2) It is not clear whether excessive competition contributed to the recent financial crisis. Both the country experiences and the academic debate suggest that concentration and competition have ambiguous effects on financial stability.

The resiliency of Canada and Australia to the recent financial crisis

COMPETITION ISSUES IN THE FINANCIAL SECTOR © OECD 2011

OECD (2010), Competition, Concentration and Stability in the Banking Sector, Series Roundtables on Competition Policy, No. 104, OECD, Paris. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/52/46/46040053.pdf

seems to suggest that more concentrated financial systems are more resilient to financial distress. However, the big impact that the crisis has had on other countries, such as Switzerland and the Netherlands, with very concentrated financial systems shows that the opposite is also possible.

The relationship between competition and stability is also ambiguous in the academic literature. Two opposing views can be distinguished in the theoretical work. The first one, called the "charter value" view, points to a negative relationship between competition and stability. The second, more recent one, points instead to a positive influence of competition on stability. The theoretical literature makes no distinction between competition and concentration, though. The empirical evidence provides a series of ambiguous and contrasting results, depending on the sample and period analysed, and the proxies used for competition and financial stability.

In any case, academics and practitioners agree that factors other than competition and concentration contributed to the recent crisis. Macroeconomic factors like loose monetary policy and global imbalances led to a bubble both in asset and real estate markets. Microeconomic factors such as poor regulatory and institutional frameworks and banks' funding structure also played a crucial role.

(3) Regulatory and institutional frameworks play a very important role for financial stability.

As shown in the recent financial turmoil, regulation affects the resilience of financial institutions to a crisis. Countries with strong regulatory and institutional frameworks have been less prone to financial distress. A well-designed regulatory framework can also help reduce the potential detrimental effects of competition on financial stability, in particular by improving banks' risk taking incentives. In other words, regulation can make banks less inclined to take on excessive risk.

Regulatory failures rather than excessive competition led to the crisis. Better prudential regulation and supervision can improve stability going forward. Restrictions to competition would not contribute to a greater resilience of financial institutions to financial distress. Instead,

they would just have a negative effect on efficiency. Competition authorities should engage in a dialogue with supervisory and regulatory authorities in order to help frame regulation and to ensure that it is consistent with a robust competition policy.

(4) Banks' funding structures affected banks' resilience during the crisis.

The recent financial crisis has shown that banks' funding structure is important to their resilience. Banks can finance themselves with both depository funding and wholesale funding (i.e. funding from other banks, money market funds, corporate treasuries and other non-bank investors). Banks relying mostly on wholesale funding have been severely affected by the crisis. Banks in Australia and Canada, for example, have been very resilient to the crisis because they have relied mostly on depository funding, much of which came from retail sources such as households. On the contrary, banks in countries such as the UK that have increasingly relied on wholesale funding from financial markets, have been very much affected by the recent financial turmoil.

(5) Financial innovation introduced important changes in banks' activities and made regulatory restrictions less effective.

Various financial innovations were conceived in the early 2000s as ways to improve risk sharing and risk management. However, they led to increased leverage and risk taking. Banks introduced a wide range of new instruments to transfer credit risk (i.e. CDS contracts). Initially, these instruments allowed banks to gain very large spreads. Then, they substantially decreased due to fierce global competition involving not only banks but also other financial institutions.

Financial regulation should have changed in response to financial innovation. However, that did not happen and regulatory effectiveness decreased dramatically as banks were able to use derivatives to get around regulatory requirements such as capital rules and ratings.

(6) The emergency measures adopted to remedy the crisis have the potential to harm competition in the financial sector.

What happened during the recent financial crisis requires a deep rethinking of the interaction between competition and financial stability authorities. The emergency measures taken to remedy the crisis have the potential to harm competition. Although the authorities' main concern during the crisis was to restore financial stability, it is now important to fix the potential negative competitive effects of state aid, acquisitions, capital injections and bailouts.

THE FAILING FIRM DEFENCE 1

-- October 2009 --

Executive Summary by the Secretariat

Considering the discussion at the roundtable, the delegates' written submissions and the Secretariat's background paper, several key points emerge:

(1) The failing firm defence (FFD) may arise more frequently during financial and economic crises.

During economic crises such as the one that most OECD countries are currently experiencing, more firms may find themselves in financial difficulty. Some financially distressed companies will seek to improve their condition by merging with healthier competitors. Competition agencies may therefore face an increasing number of merger reviews involving financially troubled firms, some of which may be true failing firms while others may simply be weak competitors. In some of the cases, parties may put the FFD forward as an argument in favour of approving their transaction.

(2) The basic conditions required for a successful application of the FFD are relatively similar across countries.

A merger that is expected to lead to anti-competitive effects should be prohibited when there is a causal link between the merger and the anticipated harm to competition. When one of the merging firms is 'failing' (i.e. it is likely to exit the market absent the merger), the

COMPETITION ISSUES IN THE FINANCIAL SECTOR © OECD 2011

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OECD (2009), *The Failing Firm Defence*, Series Roundtables on Competition Policy, No. 103, OECD, Paris. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/16/27/45810821.pdf.

future deterioration in competitive conditions does not necessarily result from the transaction and hence the causal link may be missing. In some circumstances, the post-merger scenario may be less anti-competitive than a counterfactual scenario in which the failing firm exited the market. In those cases, mergers involving failing firms should be approved even when the post-merger scenario is less competitive than the pre-merger scenario.

Although there are small differences between the approaches adopted by different competition authorities when applying the FFD, they all require three cumulative conditions before accepting a failing firm defence:

- Absent the merger, the failing firm will exit the market in the near future as a result of its financial difficulties;
- There is no feasible alternative transaction or reorganisation that is less anti-competitive than the proposed merger; and
- Absent the merger, the assets of the failing firm would inevitably exit the market.

The burden of proof to show that these conditions are fulfilled lies on the merging parties. They should convince the competition authority that the merger will lead to less anti-competitive effects than a counterfactual scenario in which the firm and its assets would exit the market.

One notable difference among jurisdictions is that some consider whether the failure of the firm and the liquidation of its assets could be a less anticompetitive alternative to the merger since the remaining firms in the market might compete for both the failing firm's market share and the assets that otherwise would have been transferred entirely to one purchaser. In particular, there is presently a difference of views between the stated policies of some national European competition agencies and the European Commission. The Commission has moved away from the requirement that absent the merger all the failing firm market share should accrue to the acquirer, but several EU countries have not yet reflected this change in their policies. The low frequency of the FFD and the gradual development of policy through case law may explain the lag.

(3) Not all countries have a formal FFD, but those that do have one consider it to provide legal certainty.

A few countries do not have explicit failing firm defences. In these countries, mergers involving a failing firm are reviewed using the standard causality test in merger control. If applied properly, such a test would identify those transactions that should be approved despite their anti-competitive effects. However, such an approach may be difficult and costly to administer and may lead to less predictable outcomes. Those countries with an explicit FFD have found that (a) it yields outcomes that are broadly similar to the outcomes that would obtain under the properly applied traditional causality test and (b) it provides predictability for firms that are subject to merger control regimes.

(4) Failing division defences should be subject to standards that are similar to the FFD standards, but that are applied differently in light of factual differences between failing divisions and failing firms.

In some instances, the merger under review involves the acquisition of a firm's division. In those cases, the merging parties may argue that the exit of that particular division from the market would occur (i) whether or not the merger materialises and (ii) irrespective of the financial health of the parent company. While most countries are open to the application of this so-called failing division defence (FDD), competition authorities should be aware of the possibility that parent companies may employ creative accounting methods to establish the illusion of a failing division. A division that is not currently profitable will not necessarily exit the market imminently. The losses may be temporary, and in any event the division may be important enough to the parent company that it would be unlikely to exit even if the losses continue. It may be difficult to assess the amount of money that the parent would invest in the division absent the merger, though. Consequently, parties should be required to produce clear evidence that, without the merger, the division would be likely to fail and its assets would be likely to exit the market imminently.

(5) The FFD criteria should not be relaxed in times of crisis. There may, however, be some room for streamlining the FFD review process.

As of October 2009, competition authorities had not seen an increase in the number of mergers in which the parties claimed the FFD. This

may be because there is a perception that the FFD criteria are too strict. That raises the question whether competition authorities should loosen the FFD criteria, particularly in light of the current global economic crisis. The consensus among the Committee delegates was that there is no justification for such a change. There are other policy instruments (e.g. bankruptcy law and State aid) available to help failing firms through the crisis. Competition authorities are concerned that excessively lax standards may lead to too many type II errors, i.e. false negatives.

Nevertheless, competition authorities recognise that FFD investigations may be too lengthy, which is problematic given that the position of firms in distress may rapidly deteriorate, which in turn may cause inefficient liquidations. This may justify procedural changes to ensure a speedier review of mergers involving failing firms.

(6) Whereas not all delegates agreed that mergers involving financial institutions deserve special treatment, they did agree that systemic risk considerations should be taken into account in merger proceedings.

Banks are special economic agents because of their importance for the stability of the financial system and the economy. The collapse of one key bank may have a domino effect that leads to widespread loss of confidence in the financial system and thus to a severe economic recession.

All countries acknowledge the importance and the special role of banks in their economies. Even so, while some countries do not consider that mergers involving failing financial institutions should be treated differently, others are prepared to treat mergers amongst financial institutions more leniently when bank failure is a possibility. Those against the special treatment of bank mergers argue that competition authorities should focus on promoting and preserving competition and leave prudential regulation to the Central Bank.

Some competition agencies argue that it may be more difficult to succeed with a FFD in mergers involving banks. This is because they anticipate that governments may intervene with some kind of financial support in order to prevent the failing bank from leaving the market. In other words, they consider that the assets of failing banks are unlikely to exit the market in practice.

COMPETITION AND FINANCIAL MARKETS 1

-- February 2009 --

Executive Summary by the Secretariat

Competition issues in the financial sector

(1) The financial sector is at the heart of every well-functioning market economy but it is also vulnerable to systemic loss of trust.

The financial sector is special. Banks perform intermediation functions that are critical to the real economy. In particular, they correct the asymmetry of information between investors and borrowers and channel savings into investments. These functions facilitate and contribute to the growth of the economy. Linkages between banks through inter-bank markets and payment systems are vital to the functioning of financial markets.

The loss of confidence in one major financial institution in a financial crisis can snowball into a loss of confidence in the entire market because the inability of one bank to meet its obligations can drive other, otherwise healthy, banks into insolvency. The risks then become systemic, endangering the whole banking sector. If the financial sector is not working well, then the entire market economy is not working well. For this reason governments impose significant regulation and oversight to ensure the smooth functioning of the financial sector, and, when problems arise, they must act quickly to avert systemic crises.

OECD (2009), Competition and Financial Markets, Series Roundtables on Competition Policy, No. 92, OECD, Paris. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/45/16/43046091.pdf.

(2) The current crisis resulted from failures in financial market regulation, not failure of the market itself or of competition.

Regulation did not achieve the correct balance between risk and the search for return. Leverage based on unsustainable asset prices led to solvency problems for borrowers and in the end for the banks involved in lending and securitising assets. Banks did not have enough capital to cover the resulting losses, and some faced extreme liquidity (funding) crises. Emergency measures had to be implemented involving: loans and guarantees, capital injections, mergers and supportive monetary and fiscal policies.

Because regulatory failure led to the crisis, the main solutions will come from prudential regulation and other measures that change incentives, not from competition policy. Competition authorities do have a role to play in ensuring that exit strategies are built into rescue interventions so as to prevent them from harming competition in the longer term and hindering recovery.

(3) Competition and stability can co-exist in the financial sector. In fact, more competitive market structures can promote stability by reducing the number of banks that are "too big to fail".

Policy goals for the financial sector include promoting both competition and stability. Competition encourages efficient and innovative financial services, while stability is essential to the systemic trust on which the sector depends.

Are these two goals mutually exclusive or can they be achieved at the same time? If competition between banks increases, does that make them weaker so trust in the system is undermined? Evidence of inconsistency in fact is limited. In many countries, competition in the sector is oligopolistic, so it is difficult to blame excessive competition for the instability that led to the current crisis. Indeed, in a broad sense, the oligopolistic structure contributed to the crisis; it meant that many banks were systemically important, leading to moral hazard, perceived guarantees and excessive risk taking.

While a less oligopolistic market structure should thus help stability, better prudential regulation should also limit excessive risk taking and further reduce the risk of instability.

(4) Competition helps make the financial sector efficient and ensure that rescue and stimulus packages benefit final consumers.

As in most sectors of the economy, the benefits of full, effective competition in the financial sector are enhanced efficiency, the provision of better products to final consumers, greater innovation, lower prices and improved international competitiveness. Greater competition also enables efficient banks to enter markets and expand, displacing inefficient banks.

At the retail level, competition between banks is increased when customers can easily switch providers. A number of studies, however, including a recent OFT report² and a sector inquiry report by DG Competition³, have shown that the incidence of retail customer switching is low.⁴

The potential movement of customers should help generate the best terms for customers and should lead banks to adopt more efficient processes, to keep costs to the minimum and to be more successful in the competition for consumers. For these competitive benefits to flow through the whole market, an appropriate regulatory and competitive framework for the financial sector must be identified and implemented.

Once that framework is in place, governments must ensure that short-term measures used to rescue and restructure the financial system (such as recapitalisation, nationalisation, mergers and state aids) do not restrict competition in the long term. They can then protect the goals of efficiency and stability.

Personal current accounts in the UK: an OFT market study, July 2008 - only 6 per cent of consumers surveyed had switched account providers in the previous 12 months.

Report on the retail banking sector inquiry: Commission Staff Working Document accompanying the Communication from the Commission - Sector Inquiry under Art 17 of Regulation 1/2003 on retail banking (Final Report), January 2007: 'The inquiry's analysis suggests that typically between 5.4% and 6.6% of current account customers in the EU will change provider per year.'

See also Competition and Regulation in Retail Banking, OECD (2006), http://www.oecd.org/dataoecd/44/18/39753683.pdf.

(5) Government interventions during the current crisis give rise to competition issues. Competition authorities should play a part in the design and implementation of exit strategies.

To combat the current crisis, governments have been making large-scale interventions in the banking system with important effects on competition. Measures have included brokering mergers of large financial institutions, making liquidity injections, direct asset purchases, and capital injections as well as setting up guarantee schemes to cover the liabilities of financial institutions. One of the biggest issues in the future will be how governments can stop providing aid to these firms and unwind the extraordinary liquidity provisions, guarantees and government capital holdings, so as to ease the sector back toward normality. Like the initial interventions, the sale by the state of stakes in financial firms back to the private sector and the lifting of guarantees have great potential to distort competition. Exit strategies that protect and promote competition are therefore essential, both when designing interventions and when phasing them out.

(6) Exit strategy issues for competition include dealing with (a) mergers of large financial institutions, (b) barriers to entry in financial markets, (c) the sale of government stakes and (d) ending government support.

Specific competition issues arising in the context of exit strategies include:

- how competition authorities should view large mergers in the financial sector and how barriers to entry can be reduced to encourage competition with the resulting large institutions
- how, if governments acquire stakes in banks which convey significant market power, that market power should be eliminated prior to denationalisation of the bank, and
- what incentives can be provided to encourage the introduction of private capital to release government capital
- (a) Considering large mergers that involve state funding

Mergers of large financial institutions are often combined with state funding in one or more ways and may be encouraged by the state. That funding might take the form of loan guarantees, for example. Alternatively, when governments arrange large mergers they may acquire some shares of the merged institution in what could be considered a partial nationalisation. These 'mega mergers' can easily They may involve financial institutions with distort competition. strong balance sheets merging with weaker financial institutions, for instance, which could affect the competitive equilibrium, especially for smaller players who remain in the market. Less overall competition will lead to lower deposit rates and higher loan rates.

There is no obvious way simultaneously to offset the potential anticompetitive effects of these transactions due to the highly oligopolistic structure of the banking sector in many countries. A merger which is part of a rescue package for a financially unstable institution should therefore be seen as an emergency measure, to be used only when necessary to avoid insolvency and the precipitation of a wider systemic crisis. It may be possible, however, to design exit strategies from anti-competitive mergers that have been supported in some way by a state. These strategies can be implemented when 'normal' times return. From a competition standpoint, nationalisations, either in full or in part, may be preferable to purely private mergers because it is usually easier to reverse nationalisation or to stop other forms of public support than it is to break up large conglomerates. In addition, nationalisations create or enhance market power to a lesser degree than private mergers and provide a clearer solvency guarantee. Nevertheless, full or partial nationalisations are also prone to excessive government direction over operational decisions and can add burdens to the government's balance sheet. When the sell-off of nationalised institutions occurs, consideration should be given to possibilities to improve market structure, for example by the break-up of an institution prior to sale or the sale of an institution to a foreign entrant rather than domestic buyer.

(b) Reducing barriers to entry as a response to increased concentration

To the extent that anti-competitive mergers have already happened (with or without promotion by governments), facilitating new entry is always likely to provide more competition. There is a concern that it is inequitable to undo mergers that have already been consummated if the government approved them prior to deciding that they should be undone. Encouraging new entry may therefore be better achieved by reducing regulatory barriers. Consequently, there will always be a role for strong advocacy by competition authorities to encourage governments to remove unnecessarily anti-competitive regulation and make the entry process as easy and inexpensive as possible, especially in markets where mega mergers have been allowed.

(c) Eliminating excess market power prior to and during the sale of government stakes

Government investments in commercial banks that are designed to be temporary and largely passive are unlikely to provide any kind of competitive advantage to one firm over another. Nonetheless, anticompetitive effects may occur, so public stakes in nationalised institutions should be sold back to the private sector within a time frame that is reasonable, transparent and foreseeable in order to limit the time in which nationalisation may distort competition. Any structural competition problems that arose because of nationalisation should be eliminated prior to or during the privatisation process. Apart from reducing regulatory barriers to entry, measures to reduce excessive market power may include financial incentives (subject to state aid rules, where applicable, or to other competition controls) to those acquiring government stakes. Furthermore, regulators and competition authorities must co-operate and discuss with other relevant arms of government the terms of sale of government stakes and the guidelines for potential bidders.

(d) Weaning financial institutions off government support

To protect competition as much as possible, governments should give financial institutions incentives to stop relying on government support once the economy begins to recover. In other words, rescue measures should have conditions built into them that will cause financial institutions to prefer private sources of investment to public ones when economic conditions start returning to normal. For example, governments can make it unattractive for beneficiaries to rely on public capital injections any longer than they have to by imposing restrictions on them such as escalating dividends or interest rates. At some point private sources of equity will become more desirable.

(7) Competition law and policy are flexible enough to deal with the financial crisis.

Competition authorities are accustomed to dealing with many sectors and to applying the law in a way that reflects each of their special characteristics; competition statutes can already be interpreted sufficiently flexibly to take the special traits of the financial sector into account. The adoption of different standards is not required.

Competition assessments, whether carried out only by the competition authority or in conjunction with the financial sector regulator, are always essential for mergers, state aid applications and many of the emergency measures that governments might put in place. Views differ, however, as to whether the new regulatory procedures to be introduced would allow meaningful competition assessments to be made in the time available during crises. The EU guidelines save time and make procedures more predictable for competition authorities, for regulators and for the financial institutions themselves. The biggest problem is to convince legislators or executive branches of governments that competition authorities have the ability to make timely, positive contributions in times of crisis and that competition law is flexible enough to be adapted in scope, time and focus.

(8) A good relationship between competition authorities and financial regulators is essential.

The strong desire to prevent future financial crises of similar magnitude means that regulatory intervention and reform should be undertaken. Regulation can be good or bad, however, and can give proper incentives or have the opposite effect. Better regulation of the financial sector might have prevented the crisis, but excessive regulation would risk losing the benefits of competition. Competition authorities must therefore engage in dialogue with those who are going to expand the scope of regulation in order to help frame it and ensure that it is consistent with the aims of robust competition policy.

(9) Even during the crisis, competition authorities should continue to act independently, examining issues such as transparency and switching costs in retail banking. Easier switching and increased transparency could increase the competitiveness of current market structures and facilitate new entry and expansion.

Some national competition authorities are looking closely at issues of transparency and switching costs in the financial market and at the broader concept of economic performance as it applies in the sector. Customers must have the ability and willingness to switch banks in order to drive and stimulate competition in retail banking and to return the sector to normality, but, as noted above, the degree of customer mobility is low and customer-bank relationships are typically long-term because of customer inertia and because switching costs are usually high. The process itself is not without practical difficulties.

Switching costs continue to represent an important source of market power in retail banking and to have effects on competition, through the effective locking-in of customers. Banks do compete for new customers, for example by offering higher initial deposit rates, but later reduce those rates once the customers are locked in. Solutions to switching problems may include making the process easier, promoting greater consumer education and financial literacy about prices through improved transparency, or encouraging the adoption of self-regulatory codes involving simplification of the process. Although it is not without cost and practical problems, the concept of account number portability may be worthy of further study.⁵

(10) It is unclear whether competition authorities should sit at the table where decisions as to future government interventions are taken.

Views differ as to whether competition authorities should actually sit at the table when intervention measures are being discussed. On the one hand, it may be preferable for competition authorities to participate while emergency measures are being considered and implemented. On the other hand, such a role may compromise the independence and objectivity of competition agencies. If they are to have a seat at the table, they will need to show a degree of flexibility and pragmatism, as well as a willingness to accept that competition law and policy do not necessarily take precedence over other, broader, measures.

These issues have already been explored by the OECD. See Competition and Regulation in Retail Banking, note 4 above.

(11)Within financial markets, credit rating agencies play an important role, but may have their own competition problems.

> On the investments side, internationally recognised credit rating agencies play a leading role in the market for securities, such as corporate debt and asset-backed securities. The agencies appear to compete vigorously for the business of the securities issuers, but this very competition may lower the quality of ratings by creating a bias in favour of inflated ratings. A number of competition authorities have investigated selected business practices of credit rating agencies but these have focused on whether competition between agencies was working or not, or on whether they were engaging in anti-competitive practices, rather than on any misalignment of incentives.

> In the recent past, the requirement in the US that credit rating agencies be 'nationally recognised statistical rating organisations' has created a significant barrier to entry for new agencies, although a change in regulatory approach has meant that more agencies have been able to achieve the status. Convincing investors to seek ratings from smaller firms can be difficult. Convincing issuers to provide data to credit rating agencies that they are not themselves paying is also difficult, because issuers reportedly prefer to have a client relationship with the agencies. The US Securities and Exchange Commission and the EC have both put forward proposals aimed at improving competition and at encouraging new entry. Success has, however, been limited. More regulation may be necessary in order to ensure more effective competition. While credit rating agencies abide by the rules of the International Organisation of Securities Commissions, they are, nevertheless, not subject to any supranational authority.

Competition issues in the real economy

(12)The temporary crisis framework for the real economy.

> Some governments have extended financial aid to the real sector. This may be important to enable small businesses to obtain credit. Where needed, governments should provide this aid rapidly and with minimal bureaucracy, but with clear sunset (temporary) features built in. The first part of the temporary framework in the EU, for example, has therefore been to increase the maximum level of aid to any individual firm from EUR 200,000 to EUR 500,000, for a period of two years to

the end of 2010, while retaining a competition assessment of the effects of granting the requested state aid. The second part of the EU package is to extend the allowable subsidies for loans and guarantees to all corporations for the same temporary two year window.

(13) The rationale for rescue packages in the real economy is more limited than for the financial sector. Great caution should be applied to requests for bailouts by firms that were already ailing. Propping up unproductive companies harms long-term growth.

The issue of systemic risk which justifies intervention in financial markets is not present in the real sector. If a business in the real sector goes bankrupt, its competitors pick up its market share and the sector continues to function, albeit with adjustment. But while there is less reason to intervene, the potential for job losses and plant closures push governments to act.

Some competition authorities have expressed doubts about subsidising failing non-financial industries or institutions. Subsidisation of distressed companies entails a significant risk of prolonging the existence of inefficient companies and unproductive business practices. That limits long-term economic growth and slows recovery from crisis. Governments must protect people by creating new jobs, but not jobs that exist only with the support of taxpayers' money. Empirical evidence suggests that, on balance, inefficient firms will exit markets and substantial job losses may result, but new firms may enter and create new jobs over a short duration, giving net positive employment effects and positive effects for the real economy.

As a general rule, governments should be very cautious about bailing out non-financial firms that were underperforming even before the crisis. If under-performing, inefficient and poorly managed firms are bailed out simply because of the crisis and the fact that they are large employers, then the message to industry will be simply to become too big to fail and not to be concerned about being efficient. There may be situations, however, in which governments need to make a case-by-case call on whether and how to provide some kind of assistance, depending on an analysis of the systemic, economy-wide implications of failure in a particular industry.

(14) National champions distort competition.

The creation and promotion of national champions distorts competition. Supporters of national champions see a number of benefits, including enhancing the country's national presence in worldwide markets, safeguarding jobs in bigger firms which may be regarded as too big to fail, being able to take advantage of economies of scale in relation to other multinational firms, and, in the energy market, for example, being big enough to secure supply in times of crisis. The disadvantages include the state deciding which firms should or should not succeed and taxpayers' money being used, in effect, to distort competition, a distortion paid in part through competitors' taxes. In addition, national champions are very often dominant in the domestic market, a condition that enhances the likelihood of competition being distorted by national champion policies.

Competition issues are fundamental to recovery

(15) Recoveries from past financial crises were delayed when competition enforcement was relaxed.

As governments have come to appreciate the full magnitude of the financial crisis and its impact on the real economy, they have implemented large fiscal packages to stimulate demand and other sectoral interventions to prevent collapse of significant companies and sectors. Past experience demonstrates that even in full-blown crises, it is a mistake to compromise competition when seeking recovery.

In Korea, two important lessons emerged from the 1997 financial crisis. First, government agencies tend to overlook the potential beneficial effects of competitive markets in times of economic crisis. Competition authorities should therefore be more vigorous in their competition advocacy efforts. Second, the least anti-competitive solutions to problems should always be sought. Active enforcement against cartels was necessary during periods of retrenchment, as was taking a long-term perspective to overcome the economic crisis. In the current crisis, the Korean economy is suffering as much as any other but the government has announced its intention to strengthen antitrust enforcement.

In Japan, policy measures taken to counter recessions in the 1950s and 1960s included the introduction of 'depression' or 'rationalisation' cartels, which allowed firms to co-ordinate production and service, reduce capacity, or even co-ordinate price levels. These measures were considered to have serious anti-competitive effects on the economy in the medium and long term and were later abolished.

In the US, enforcement against cartels fell away in the Great Depression. One of the measures introduced by the Roosevelt Administration under the 'New Deal' was the National Industrial Recovery Act of 1933. The Act reduced competition through antitrust exemptions and raised wages through labour provisions. The Act was declared unconstitutional in 1935, but activities implemented there under continued in the face of subsequent anti-cartel actions. A number of studies have concluded that these New Deal policies were important contributory factors to the persistence and depth of the Great Depression. For example, Cole and Ohanian concluded that 'the [New Deal] policies reduced consumption and investment during 1934-39 by about 14 per cent relative to competitive levels.' ⁶

The OECD should build on the lessons of previous recessions and demonstrate why a market-oriented, longer term, sustainable approach is the way forward not only with respect to public subsidies, but also for merger control and general antitrust work. Competition authorities must be allowed to focus on promoting competition through well-targeted interventions while remaining mindful of the situation in the wider economy and the broader policy concerns that governments may need to address.

Changing priorities for competition authorities

(16) Competition authorities should adjust their priorities to strengthen advocacy and give greater attention to cartels and mergers.

The issue of competition advocacy is now of renewed importance in competition agencies' discussions with other parts of governments. Competition advocacy could include interventions relating to the

[&]quot;New Deal Policies and the Persistence of the Great Depression: a General Equilibrium Analysis" Harold L. Cole and Lee E. Ohanian

moral hazard issues that may arise from the provision of aid, what is and is not market failure, and the importance of competition considerations in exit strategies.

International co-operation in setting and enforcing competition policy, especially in relation to failing firm defences, is essential for ensuring consistency in troubled times, speeding up the enforcement process and giving clarity to enforcement activities. Competition authorities will need to consider carefully which cases they take on and how they apply their laws and policies.

There is empirical evidence that a sudden drop in demand leads to a tendency to merge and to engage in cartel activities in order to 'stabilise markets'. Competition authorities need, it is said, to be more flexible in the current climate. However, there is no conceivable reason to relax standards of enforcement, and that to do so, or to do anything other than maintaining present objectives and standards of competition law enforcement, would jeopardise future national economic performance.

Competition authorities have a crucial role in trying to influence the framework of merger control regulations to avoid a repetition of the current sort of crisis. The approach should be co-ordinated with regulators. A key issue to be discussed is how to prevent the emergence of institutions that are too big to fail.

(17) The crisis will lead to an increase in the number of mergers and in the number of failing firm defences advanced. There are likely to be more international mergers, which sometimes have different implications.

Merger activity is expected to increase once financial markets are restored. An increase in merger activity as a result of firms losing market share or solvency, whether because they are inefficient or they are collateral victims, is also likely to result in a higher incidence of failing firm defences put forward. (This defence argues that because one of the merging parties is failing and its assets would exit the market anyway, the merger is not anti-competitive.) Greater predictability for authorities themselves, for firms and their advisers would be achieved if all competition authorities relied on similar standards for deciding what constitutes a 'failing firm'.

Divestiture, one of the remedies usually most favoured by competition authorities for eliminating or minimising the effect of competition problems resulting from mergers, may become more difficult than in the past because there are fewer potential purchasers of assets to be divested. If structural remedies are not possible, competition authorities might rely more on behavioural remedies.

International mergers with cross-border implications are also likely to increase. Aligning the way national competition authorities analyse failing firm defences might improve efficiency in assessing international mergers.

(18) Competition authorities will need to adapt to the new environment without changing their standards.

The likely increase in the number of emergency decisions, including those requiring consideration and analysis within a week or even a weekend, will require flexibility in procedures and the ability to carry out rapid but diligent assessments of mergers or practices. Competition authorities will need to act quickly, but without decreasing their standards of enforcement, and without abandoning sound, generally accepted economic principles.

There will be more cases in which the firms affected by the merger or the practice are more fragile and sensitive to abusive practices than was the case when the economy was expanding. It is likely therefore that there will be more cases in which interim measures are sought or required. That will entail flexibility in procedures, and authorities will need to make a quick assessment as to whether the merger or particular practice creates competition problems.

The principles and objectives of competition law enforcement therefore must not change, but the analysis has to be realistic about the conditions in the market. That means continuing the shift from a form-based analysis to a case-by-case analysis in which the context and effects of actual practices and behaviour are very much taken into consideration.

COMPETITION AND REGULATION IN RETAIL BANKING 1

-- October 2006 --

Executive Summary by the Secretariat

Considering the discussion, the delegates' submissions, and the background paper, several broad results emerge:

(1) Competition can improve the functioning of the retail banking sector without harming prudential regulation. The efficient functioning of the sector is important for economic performance.

The efficient functioning of the retail banking sector in all OECD countries is important to promote the economic potential of these countries' economies. Retail banking is delineated as banking services for consumers and for small and medium sized enterprises (SMEs) having a turnover of less than 10 million Euros. Consumers as well as SMEs rely heavily on the banking sector for their financial services and external finance. The access of retail customers and SMEs to finance is particularly crucial for economic growth, given that much growth in employment and GDP comes from the development of SMEs. Banking competition can play a role in improving the conditions for access to finance, such as lower interest rates for loans, or a lower degree of collateralisation. However, competition does not always seem to work properly in the retail-banking sector. Several broad results emerged on how to improve the competitive environment of retail banking without harming prudential regulation.

OECD (2006), *Competition and Regulation in Retail Banking*, Series Roundtables on Competition Policy, No. 69, OECD, Paris. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/44/18/39753683.pdf.

(2) Retail banking is a sector that in most countries is subject to a tight set of regulations.

Some retail banking regulations tend to soften competition. Examples include restrictions on the entry of new banks or limitations on the free deployment of competitive tools by banks. Other regulations restrict banking activities in space and scope, putting limitations on the bank's potential to diversify and exploit scale / scope economies. Finally there is prudential regulation that alters the competitive position of banks vis-à-vis other non-bank institutions. Using comprehensive cross-country datasets available at the World Bank and the OECD, it has been shown that restrictive regulation continues to be a major source of rents for banks in many countries. Estimates range from say 30 to 100 basis points on an average loan rate. Substantial heterogeneity in regulation is found in barriers to domestic entry, barriers to foreign entry (including restrictions on foreign ownership, screening and approval procedures of foreign entry, and other formal barriers), barriers to activity, and government ownership.

(3) The banking sector is considered special primarily because of externalities related to potential "contagion" effects stemming from (i) the withdrawal-upon-demand characteristic of some bank deposits and (ii) the role banks play in the payment system, and (iii) the fact that banks are important for the funding of consumers and SMEs.

Largely because of the possibility that increased competition may make contagion more likely, the desirability of competition in the banking sector has been questioned for a long time. Until the 1980s, the general idea was that in order to preserve financial stability, competition in the banking sector should not be too intense. That is, too intense competition would lead to excessive risk-taking such that there would be a trade-off between competition and financial stability. Recent work provides a more balanced view suggesting that there could be either a positive or negative link between competition and stability. As a result, the view has been introduced that the banking sector should be subject to a stronger, more independent antitrust regime. This view has gained support from the increased ability of supervisory authorities to control bank stability though capital regulation (Basle I and II) and banks showing considerable capital

buffers. Though branching and entry is mostly permitted now on both sides of the Atlantic, mergers and acquisitions are still sometimes blocked in Europe by regulators under the pretext of the safe and sound management doctrine. Pretexts for preventing mergers that disguise other motives should be limited. Putting competition policy issues into the hands of an authority not responsible for prudential regulation may help to promote further financial integration and greater competition.

(4) Customer mobility and choice is essential to stimulate retail-banking competition. An important observation is that the degree of customer mobility is low and the longevity of customer-bank relationships is long.

Consumers and businesses may be tied to their bankers due to the existence of switching costs. Switching costs are costs that existing customers have to incur when changing suppliers. Conceptually, we can distinguish between the fixed transactional (or technical) costs of switching a bank and informational switching costs. We take a broad definition of transactional switching costs. Examples are shoe-leather and other search costs customers incur when looking for another bank branch, the opportunity costs of her time of opening the new account, transferring the funds, and closing the old account. Also contractual costs and psychological costs may be important transactional switching costs. Many but not all of these costs are independent of the banks' behaviour, but nonetheless allow an incumbent bank to lower deposit rates to captured customers. Switching costs are directly influenced by bank behaviour when, for example, banks charge exiting customers for closing accounts (closing charges). In loan markets it is often conjectured that, in addition to these fixed transactional costs of changing banks, there are informational switching costs. Borrowers face informational switching costs when considering a switch, as the current "inside" financier is more informed about a borrower's quality and its recent repayment behaviour. Such switching costs may provide the informed relationship bank with extra potential to extract rents. 2 Switching costs bind consumers and SMEs to banks, locking them into early choices. This lock-in provides banks with considerable ex-post market power.

^{2.} See Berger and Udell (2002), Boot (2000), and Ongena and Smith (2000).

Policymakers can often do more to enable switching. We consider three different but complementary means to reduce switching costs.

- First, greater consumer education and financial literacy about financial alternatives may help to promote greater willingness of consumers to switch from one institution to another and reduce bank rents from switching costs. Information about prices and more transparency is desirable to promote consumers' possibilities to compare financial institutions.
- Second, switching "packs" that simplify the administrative steps for switching should be promoted. Setting up "switching arrangements" or "switching packs" can reduce the administrative burden and hence reduce the costs of switching.

These arrangements typically are the result of the installation of a self-regulatory code between banks that helps customers switch banks. These codes are often introduced after investigations by competition authorities. The banking associations in these countries have established voluntary codes that establish standards of good practice. The switching arrangements also imply that banks perform a considerable part of the administrative burden by preparing "switching packs" ensuring smooth transition from one account to another. Experiences from two countries show greater customer mobility and increased switching rates.

• Third, account number portability may merit further consideration if its potential benefits would clearly outweigh the undoubtedly high costs.

Although switching arrangements help in reducing switching costs, they do not remove switching costs entirely, as customers must still change account numbers. A more structural approach is account number portability. Number portability implies that customers could transfer their number from one bank to another without facing an important administrative burden. Number portability can only happen when customers "own" the account number, and when payment systems and account numbers exhibit a similar structure and are standardised on a national or international scale. While number portability almost completely removes switching costs and therefore

should result in more vigorous banking competition, it may require more standardisation and substantial fixed costs for its introduction. Number portability will only imply a level-playing field when non-discriminatory access to the payment system is implemented. The costs of investment to achieve number portability may be great. In fact, prudential authorities have suggested that the costs are likely prohibitively expensive compared to the likely benefits. One pragmatic concern with number portability is that, in many countries, the current numbering system provides features that help identify customer banks inherently through the structure of the number. Losing this ability to identify banks and branches could potentially increase the difficulty of identifying the correct bank in questions related to transaction errors.

(5) Financial information sharing platforms should be promoted and, where limited by privacy laws, privacy laws should be modified in a way that maintains the goal of protecting privacy while also allowing consumers to receive the benefits of credit ratings.

Individuals and SMEs may not be able to credibly communicate their credit quality to outside banks or other providers of external finance in the presence of asymmetric information. Asymmetric information between banks about borrower quality is therefore an important determinant of banking competition. In some countries, however, financial institutions often release limited borrower information through public credit registries, or private credit bureaus or rating agencies. Credit information sharing is an increasingly common way for banks (and other institutions for whom customer financial condition and reliability is important) to share and tap information about borrowers - and a helpful tool for reducing losses on unprofitable borrowers. Credit information sharing may alleviate some of the rents due to information asymmetries as long as the informational release contains sufficient, credible and up-to-date information, and is accessible to all parties. That is, credit information will reduce the difference in information between a customer's current bank and other potential financial service suppliers. Also, information sharing can operate as a borrower discipline device, and may reduce the possibilities for borrowers to become over-indebted by tapping loans at several banks simultaneously.

The existence of public credit registries and of private credit bureaus or rating agencies may be shaped by privacy laws. Public credit registries will take into account how much information sharing already spontaneously occurs. Private and public initiatives can be substitutes in this respect. A private credit bureau or rating agency can issue several kinds of credit reports - ranging from "black" information (such as whether the customer has defaulted) over to "white" information (i.e. outstanding loan amounts), to even more fine-grained credit scores. While public credit registries typically have a complete coverage above a certain loan-amount threshold due to the compulsory nature of reporting, private credit bureaus and rating agencies may be less complete in their coverage but provide more detailed information. Private credit bureaus or rating agencies will then more likely be established when the minimum reporting threshold at the public credit registry is high and when privacy laws allow useful and profitable operation of private rating agencies. Indeed, credit information provision often hits the boundaries of privacy protection. Privacy laws for example have shaped the access to files by potential users. More stringent privacy protection may therefore imply that customers become captive to their existing banks. Other financial institutions may have insufficient information to make competitive loan offers.

MERGERS IN FINANCIAL SERVICES 1

-- June 2000 --

Executive Summary by the Secretariat

Considering the discussion at the roundtable, the delegate submissions, and the background paper, the following key points emerge:

(1) In many OECD countries, the last few years have witnessed a substantial increase in the frequency and significance of bank mergers. The increased activity is driven by four interactive forces: regulatory reform; ongoing globalisation in both financial and non-financial markets; excess capacity/financial distress; and technological change including the development of electronic banking.

So far, most of the bank mergers have taken place among banks based in the same national market, but there is an increasing incidence of cross-border deals. Among OECD countries, there are few remaining regulatory barriers standing in the way of such take-overs. There may, however, be a number of political obstacles.

As the following points illustrate, consideration of bank mergers in OECD countries normally involves the application of economy-wide merger guidelines and practices, tailored to the specifics of the banking industry.

(2) Typically the first stage of analysis involves a preliminary assessment based on concentration ratios as to whether or not a proposed bank

COMPETITION ISSUES IN THE FINANCIAL SECTOR © OECD 2011

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OECD (2000), *Mergers in Financial Services*, Series Roundtables on Competition Policy, No. 29, OECD, Paris. The full set of material from this roundtable discussion is also available at http://www.oecd.org/dataoecd/34/22/1920060.pdf.

merger is likely to harm competition. This, in turn, requires attention to the definition of the relevant markets. Banks offer a large number of products and services to a number of different classes of customer. The size of the relevant geographic market differs among products and among different customers, and so might the identity of firms serving the different markets.

As reflected in various country submissions, market definition is a highly empirical issue that should be addressed by examining consumers' actual willingness to substitute in response to changes in relative prices. The nature of the relevant market will differ from product to product, customer to customer and country to country.

Important differences in geographic markets would be missed if competition agencies insisted on identifying a single product market such as one grouping together all the services traditionally offered by commercial banks. In addition, such a grouping could lead to errors in assigning market shares. The competition provided by firms specialising in mortgages would be ignored, for example, if the market were defined to be a commercial banking cluster.

In the case of business lending, loans to small and medium sized enterprises (SMEs) should be distinguished from loans to large businesses. This is due first and foremost to differences in the average size of loans made to the two groups of firms. Enterprises with large financial requirements are much more able to bear the substantial fixed costs associated with borrowing directly from national or even international capital markets as opposed to proceeding through a financial intermediary. It follows that loans to larger businesses may have a wider set of product substitutes than do loans to SMEs.

Not only are SMEs more dependent than larger businesses on bank loans, this is also true as regards dependence on local banks. There are three reasons for this. First, larger businesses tend to take out larger loans, hence are more willing to incur the fixed transactions and information costs required to search for and borrow from more distant banks offering more favourable terms. Second, SMEs generally have a greater need for a local depository for cash and cheques. This point acquires greater significance when it is noted that compared with a larger business, an SME's ability to obtain bank credit on reasonable terms is more likely to be improved by locating its transactions

accounts in the same bank it borrows from. Third, again as regards establishing creditworthiness, SMEs find it relatively more important to develop and maintain good personal relationships with bank managers/loan officers. This is arguably easier to do when the SME and bank are located close together.

(3) Low post-merger concentration ratios in appropriately defined antitrust markets usually indicate an absence of significant competition problems, but high concentration levels are inconclusive unless barriers to entry are also high. In considering barriers to entry in banking, particular attention should be paid to the extent to which electronic banking developments have reduced the need for extensive, expensive branch networks and lowered the cost of monitoring.

> Before the advent of automated teller machines (ATMs), electronic funds transfer at point of sale (EFTPOS), and Internet banking, it was widely believed that barriers to entry in some banking markets were reasonably high because of the need for a network of branch offices. Some commentators hold that electronic banking has greatly reduced the need for branches and simultaneously considerably widened geographic markets. Others maintain that many customers consider electronic access to their accounts and to nearby branches to be complement rather than substitute.

> If it turns out that electronic banking is more a complement than a substitute for traditional branch banking, electronic banking may not only fail to lower barriers to entry, it may actually raise them. This is because new entrants will be under competitive pressure to provide the same geographic access to ATM and EFTPOS networks as larger incumbent banks offer. That will either require significant investments in creating new networks or obtaining access on reasonable terms to existing networks. The latter option would seem to be more cost effective, but it may be difficult to negotiate. Larger banks may be in a position to charge higher access fees to smaller new entrants than the fees they charge each other.

> Since SMEs are particularly prone to suffer from anti-competitive bank mergers, it is worth noting that the impact of electronic banking on such clients is not yet clear or uniform. On the one hand, electronic banking should lower the costs of screening potential borrowers and monitoring at a distance, thereby increasing the number

of potential lenders to SMEs. Indeed, there is a growing use of computerised credit scoring models in making some types of loans to SMEs. On the other hand, SME's may find that certain kinds of loans continue to be cheaper and easier to arrange with local as opposed to distant banks. These are the loans for which a lending bank's credit assessment depends heavily on having the borrower's transactions account business, and on developing a close personal relationship with the borrower.

In the long run, the effect of electronic banking on barriers to entry will depend on more than how such developments impact on the need for local branches. It will also be linked with how standards are developed and with whether banks are permitted to merge or enter joint ventures with significant telecommunications companies and/or Internet players. Both issues are being closely watched in areas where electronic banking is currently most developed.

(4) Any examination of barriers to entry must include a look at switching costs. These could be quite significant in certain banking markets, especially for households and SMEs.

At least three countries presented evidence that many customers are reluctant to switch all or part of their business across different banks. This could be due to the administrative difficulties encountered in altering direct electronic payment arrangements and/or costs of establishing a reputation for creditworthiness. The second point is likely to be much more important for households and SMEs than for larger businesses.

In the extreme case where consumers are highly reluctant to switch, bank competition focuses only on new customers or newly established businesses.

(5) Where banks hold considerable equity positions in non-financial companies, some bank mergers can lead to a post-merger bank having considerable influence over competing enterprises. This may call for appropriate divestments in bank holdings to be made prior to a merger being approved

The most radical form of this problem arises when a bank merger directly implies a merger among non-financial companies. Traditional

merger review would apply in such cases. Less extreme situations include those in which bank shareholdings confer the power to influence rather than control the managements of downstream competing enterprises. Ideally, such problems should be addressed through divestments. A second best solution would be restrictions concerning representation on the governing bodies of affected enterprises.

(6) As in other sectors, bank mergers might create important efficiencies as well as potential anti-competitive effects. Such efficiency claims should carry little if any weight in a merger review unless they are specific to the merger, and there is good reason to believe the efficiencies will be realised post-merger.

Bank mergers posing risks for competition are often justified on the basis of certain efficiency benefits such as economies of scale and scope and/or reductions in risk obtained through loan diversification. Existing research underlines the need for caution in assessing such claims, including in determining whether savings in back office costs may be obtainable through other arrangements less anti-competitive than a proposed merger.

Experience has shown that bank mergers are more likely to deliver on claimed efficiencies if the more efficient of the merging banks will be in firm control post-merger, and that enterprise has already been involved in a successful bank acquisition.

(7) Branch divestiture and behavioural constraints are both used to attenuate the anti-competitive effects associated with some bank mergers. Competition agencies have good reasons for generally preferring divestitures, but these must be carefully executed to ensure that clients rather than merely bricks and mortar are passed on to the purchaser.

Behavioural remedies, such as requiring certain terms and conditions to be applied to loans post-merger or obtaining commitments that the management of an acquired bank will enjoy some continued autonomy are notoriously difficult to monitor and enforce. As a result competition authorities typically prefer some form of divestiture, i.e. a "structural" solution. In banking mergers, however, even the

structural approach typically calls for a considerable investment in time and effort by the competition agency.

Branch divestitures seek to create new or stronger competition for a merging bank. To achieve that result, a competition agency must be closely involved in choosing exactly which branches are divested and who is permitted to buy them. It should also devote attention to constraining for some transitional period what the merging bank is permitted to do in terms of trying to retain or win back staff or clients associated with the divested branches. Such constraints are particularly relevant in the typical case of divestments being made with the intention of reducing competition problems in local markets. In such situations, customers of the surviving bank may have the option of remaining with that institution by switching to another nearby branch.

When the post-merger bank will carry the name of a pre-existing bank, it would be helpful to concentrate any necessary divestment on branches bearing name(s) that will be eliminated by the merger.

(8) In most countries, bank mergers are subject to review by prudential regulators as well as competition offices. To the extent both agencies act proscriptively rather than prescriptively, there should be little conflict between them. Formal co-operation accords exist in many countries and have played a constructive role in reducing uncertainties associated with multiple agency review.

Competition policy and prudential regulation, to the extent that both seek to prohibit undesirable behaviour, are mutually compatible. In particular, as long as both prudential and competition authorities confine themselves to blocking undesired (rather than forcing or requiring) mergers, banks will have no difficulty abiding by both agencies' merger decisions.

As regards certain mergers, prudential regulation and competition policy can be complementary. A prominent example is mergers creating "too big to fail" banks, i.e. banks that are so large that market participants assume the government would take whatever steps might be necessary to preserve their solvency in a crisis. Such banks might be inclined to take what regulators regard as excessive risks. Banks seen by consumers as too big to fail could also give rise to competitive

distortions since they may have an artificial advantage in raising funds, especially in markets where deposit insurance is inadequate.

There is a limited potential for conflict between prudential and competition policy goals when it comes to mergers designed to shore up a failing or weakened bank. Even in such cases, however, it will normally be possible to avoid competition problems by choosing the right partner, or by structuring the merger so as to minimise its effects on local market concentration. In any case, conflict between prudential and competition policy goals can be reduced by close cooperation, including prior consultation between the pertinent agencies.

ENHANCING THE ROLE OF COMPETITION IN THE REGULATION OF BANKS ¹

-- February 1998 --

Executive Summary by the Secretariat

In the light of the country submissions and the oral discussion, the following points emerge:

(1) The last two decades have witnessed a significant change in banking regulation. On the one hand, there has been a substantial relaxation in certain regulations such as direct controls on interest rates, fees and commissions, as well as restrictions on lines of business, ownership and portfolios. On the other hand, there has been a strengthening of prudential regulation focused on controls on the capital or "own funds" of banks and an expansion of the number and coverage of deposit insurance schemes. A few countries retain regulations which may restrict competition and are no longer viewed as necessary from a prudential perspective.

All countries reported significant deregulatory moves in the banking sector. Concurrent with these deregulatory moves, however, were actions to strengthen, or at least harmonise, prudential regulation and, in many cases, to introduce or extend the coverage of deposit insurance.

Although the vast majority of countries have removed controls on interest rates, fees and commissions there remain a few minor

OECD (1998), Enhancing the Role of Competition in the Regulation of Banks, Series Roundtables on Competition Policy, No. 17, OECD, Paris. The full set of material from this roundtable discussion can be found at http://www.oecd.org/dataoecd/34/58/1920512.pdf.

exceptions². Those countries which still maintain strict line of business restrictions are taking steps to relax these controls.

Although there is a trend towards allowing banks discretion over the contents of their portfolio of assets (in order to assist diversification and risk-reduction) some countries retain quantitative limits on the type or geographical location of assets in which the bank can invest. Certain broad restrictions, such as limits on lending to a single counter-party, are still viewed as necessary.

Most countries have abolished reserve requirements, on the grounds that they are no longer considered essential for carrying out monetary policy. Requirements to hold government securities are typically unnecessary from a prudential perspective and in some cases are little more than revenue-raising measures. In a few countries reserve requirements (and other residual regulations) are not applied in a competitively-neutral manner.

Although all OECD countries regulate entry to the industry, this appears to be primarily as a tool of prudential regulation and is, generally speaking, not used as a mechanism for constraining entry in order to preserve bank profitability. Some countries require, as a condition for licensing, that a new bank demonstrate how it will make a contribution to the existing market environment. In others, regulatory requirements are stiffer for new firms than for incumbents. In general, trade liberalisation trends (e.g., due to the OECD, WTO, EC and NAFTA) have opened banking markets to foreign firms, through freedom of establishment or cross-border trading. Certain restrictions remain (such as the limit on foreign bank market shares in Mexico).

(2) Bank regulation, like other forms of regulation, is justified as necessary to correct a "market failure". In the case of banks, the market failure arises from the difficulty for banks to credibly demonstrate their level of risk to depositors and other lenders. It is argued that, as a result, in the absence of regulatory intervention,

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The exceptions include the prohibition on interest on cheque accounts in France and Japan. In some countries ceilings on interest rates result from usury laws.

banks would take on more risk than is prudent, bank failures would be more common than is necessary and the financial system would be unstable. In some countries bank regulation may also be separately justified on the grounds of being necessary to protect depositors from the consequences of bank failure or necessary to preserve the stability of the payments system.

Public policy concerns arise from the combination of liabilities and assets that banks choose to hold (banks are largely funded with shortterm debt but hold as assets illiquid, long-term loans) and the lack of transparency over a typical bank's risk profile. If banks could credibly communicate their risk profile to depositors, riskier banks would (in the absence of deposit insurance) expect to pay a premium to attract funds. The desire to minimise borrowing costs would provide an incentive to bank managers to maintain risk-management procedures. It is argued that banks cannot credibly communicate their risk profile to depositors. As a result banks do not have to compensate depositors for increasing their risk and the desire to maximise profits pushes managers to increase returns even when that implies an increase in risk.³ Furthermore, it is argued, the financial system is unstable in that depositors may at any time lose confidence and seek to withdraw their funds to cash. This would lead to the failure of a large number of banks and would cause significant disruption in the real economy. Since such a run on the banking system as a whole could be triggered by the failure of any one bank, the risk-taking by banks has an "external" effect in that it threatens all the other banks. Whether, in fact, depositors are able to distinguish sound from unsound banks has not yet been firmly established empirically.

Some arguments for bank regulation hinge upon the role of banks in the payments system. Under conventional payments systems, banks can build up large exposures to one another during a trading day, which are settled at the end of the day. The failure of one bank to settle could, it is argued, have significant "knock-on" consequences for other banks, even other healthy banks. As a consequence, it is

Banks increase risk, in part, by increasing the debt/equity ratio. In other words, the market failure makes debt (especially debt in the form of deposits) preferred over equity. This is reflected in the view in the industry that "capital is expensive".

argued that access to payments systems should be restricted to carefully regulated institutions. Many countries are currently implementing so-called "real-time" payments systems which eliminate the build-up of exposures through the day.

In some contexts, it appears that bank regulation arises simply from the desire to protect depositors from loss in the event of the insolvency of their bank.

(3) Whether or not this market failure is important, certain regulatory interventions in this sector cause banks to take on more risk than is prudent. In particular, most deposit insurance schemes and other government policies such as "too big to fail" insulate the depositor from the need to be aware of the financial condition of their bank and, in the absence of other interventions, encourage risk-taking. Offsetting these drawbacks, these schemes may have the advantage that they reduce systemic risk.

In many cases whether or not banks would, in the absence of other interventions, adopt a prudent level of risk is an irrelevant question as the presence of certain interventions have a tendency to cause banks to take on more risk than is prudent.

The most common example is the typical flat-rate deposit insurance scheme, which compensates depositors (in whole or in part) in the event of insolvency. A consequence of the insurance is that deposits are largely risk free from the viewpoint of depositors. Since banks do not need to compensate depositors for their risk, they have access to a pool of funds independent of the risk that they take on. In the absence of other restrictions, competition between banks would lead banks to take on higher risk in search for higher returns. In principle, these incentives would be reduced or eliminated if the insurance premium for the deposit insurance properly reflected the risk faced by the bank. In practice, relatively few countries implement a risk-based premium. Another alternative is to limit the insurance coverage so that depositors retain some risk of loss.

In a few countries the deposit insurance is not applied in a competitively-neutral manner. In these countries the deposit insurance premium varies between banks in a manner that is unrelated to the risk of the bank.

Deposit insurance may have certain advantages. In the presence of the market failure discussed above, deposit insurance addresses one of the two symptoms of that market failure. Although deposit insurance does not enhance the incentives on banks to behave in a prudent manner, deposit insurance reduces the likelihood of a generalised loss of confidence in the banking system.

(4) In general, insolvent banks should be allowed to fail. Policies which prevent banks from exiting from the marketplace in the normal manner will distort competition. Policies which seek to prevent bank failures may also deter entry into the industry. The use of the statutory powers of the state to assist a failing bank may constitute a form of "state aid" which may likewise distort competition.

In some countries there is an expectation that certain banks will not be allowed to fail. To the extent that depositors in these banks consider that their deposits will be protected, they are insulated from risk and, once again, the bank may be induced to take on higher risk than is prudent. Furthermore, if such a policy favours certain banks in the market place (such as large banks over small banks, or domestic banks over foreign banks) it is also likely to distort competition. A policy of "too big to fail" is an example of such a policy which is likely to favour large (and possibly domestic) banks over other banks.

The direct or indirect use of public funds to support failing banks (such as those which are too big to fail) is a form of public subsidy which may also distort competition. Such subsidies, in the case of the EC, may violate the Treaty of Rome. The EC notes: "State aid for rescuing or restructuring firms in difficulty, in particular, tend to distort competition and affect trade between Member States. This is because they affect the allocation of economic resources, providing subsidies to firms which in a normal market situation would disappear or have to carry out thorough restructuring measures. Aid may, therefore, impede or slow down the structural adjustment...". The lifting of certain regulatory restrictions for a bank in difficulty is another example of a form of subsidy which may distort competition.

In some circumstances deposit insurance, by increasing the political acceptability of allowing a bank to fail and by applying in a competitively neutral manner, may both "level the playing field"

between banks and may eliminate the need to adopt other less desirable forms of aid for failing banks.

(5) In some countries the state is directly involved in the banking sector, either through ownership or through the provision of state guarantees to certain banks. In a few countries banks are also tools for the implementation of social objectives.

In several countries, the state retains a direct ownership interest in the banking sector. The competition effects of state-ownership may be further complicated in the banking sector by a desire to use the ownership interest to pursue banking sector objectives such as the stability of the banking system and to protect depositors. As the EC notes: "State interventions into State-owned banks have often been proved to fulfil more a public goal (maintenance of the entity for social or political reasons) than a private one (return on investment). The goal of defending the conditions for a levelling of the playing field has been too often set aside. This typically generates a vicious circle of insufficient restructuring, repetition of aid and therefore excessive aid and insufficient compensation to competitors. The confusion of roles of the State becomes apparent. ... where the State is the main shareholder of the bank in crisis, its role as shareholder must be separated from its role as the supervisory authority required to safeguard confidence in the banking system. This latter task may lead the State to take measures in support of the bank that are additional to what is really necessary to restore the bank's viability. If we want to assure a level playing field between private and public banks, no different treatment should be allowed between private and public banks."

In some countries certain banks receive state guarantees from national, regional or city governments. Unless these banks are charged a fee for this service (or, more precisely, an appropriate insurance premium based on the risk of the bank) competition will be distorted with other private banks.

In some countries banks serve certain social objectives (such as the directing of credit towards favoured sectors or the promotion of new enterprises). Such social objectives, through a lack of transparency and cross-subsidisation from the public obligations to the competitive business may distort competition.

(6) In most countries risk-taking by banks is controlled through controls on the capital or "own funds" of banks, typically following the Core Principles established by the Basle Committee. Under more recent developments the regulatory capital requirements on banks are determined by more sophisticated "in-house" models of banks' risks.

Recent regulatory reform efforts in the banking sector have tended to focus on enhancing capital requirements for banks. These establish a minimum level of "equity" or "own funds" for banks which provide both a buffer against adverse shocks and enhance the incentives on shareholders to act prudently. In principle the level of regulatory capital should depend upon the risk of the bank which depends in turn, on the portfolio of loans and other assets and liabilities held by the bank. Under the Core Principles advocated by the Basle Committee the loans of banks are grouped into different classes. Banks must hold a different amount of capital for the different classes of loans, varying from zero per cent in the case of loans to governments, to eight per cent in the case of normal commercial lending. This approach, although an advance on earlier practices, has been criticised, in part for not taking account of other forms of risk, such as the risks arising from the portfolio of assets traded by the bank. Partly in response to these criticisms the Basle Committee has extended the original Core Principles. For example the Committee has recently accepted the use of bank's own "in-house" models of the bank's overall risk to determine the level of regulatory capital to be applied to the bank.

(7) Many countries seek to facilitate monitoring by depositors through regulatory disclosure requirements. There also appears to be a increasing focus upon enhancing the corporate governance of banks.

Some countries require banks to publicly disclose certain information to customers. Where the customers have some incentive to take note of this information (i.e., where they bear some of the risk of loss, because they are not fully insured) the availability of information on the risk of a bank can enhance the incentives on banks to minimise their overall risk. Although information typically plays a secondary role in the regulatory regime of most countries, it plays a primary role in the case of one country (New Zealand) where there is no deposit insurance protecting depositors.

There is a trend towards increased focused on the corporate governance of banks and placing more responsibility directly on bank directors and managers.⁴ In contrast to this trend, many countries reported that they enforce a dispersed shareholding of banks by limits on the size of the shareholding of any one shareholder.

(8) Virtually all OECD countries appear to apply national competition law to the banking sector without exception or exemption. In most countries, the competition law is enforced by the competition authority, although in a few, competition law is enforced by the banking regulator. In virtually every country, major structural changes in the banking sector (i.e., mergers and acquisitions) fall under the jurisdiction of both the banking regulators and the competition authority, giving rise to a need for some mechanism for resolving possibly conflicting regulatory decisions.

Most countries reported that the national competition law applies to the banking sector. A few countries reported that there are specific rules which govern how the general competition laws are applied in this sector. In some cases the competition law itself contained specific restrictions applying to this sector (such as ownership restrictions) that were, in other cases, contained in the banking law. In most countries the objective of "stability" of the banking sector is placed alongside the objective of enhancing competition. Thus, in most countries, the banking supervisors are involved in decisions involving mergers. This gives rise for a need to establish co-ordination, consultation and (possibly) dispute resolution procedures, in the event of differing decisions.

In at least one country competition law enforcement is carried out by the banking regulator. For most countries it appears that the economies of specialisation in competition enforcement outweigh the advantages of detailed industry knowledge, so that competition enforcement in banking is made the responsibility of the competition authority.

COMPETITION ISSUES IN THE FINANCIAL SECTOR © OECD 2011

The New Zealand government has sought to enhance the incentives on directors and managers of banks by making them certify the truth of information contained in disclosure statements and testify that the bank has an adequate risk management system in place.

(9) Nearly all OECD countries are currently experiencing a large number of mergers in the financial sector which are likely to be, in part, a response to recent deregulation and trade liberalisation trends. Although some jurisdictions have, in the past, adopted a "cluster market" approach, the present trend appears to be to define separate product and geographic markets for each of a bank's important services. Most countries noted that Internet and telephone banking had yet to make a significant impact on market definition issues.

The important developments in deregulation and trade liberalisation have both enabled banks to expand geographically and across product lines and have simultaneously enhanced the incentives to do so in order to exploit economies of scale and scope.

The consensus of the roundtable is that the geographic scope of markets may be quite different for different banking products and therefore there is a tendency to reject the cluster market approach. There was some consensus that greatest competition concerns focus on the market for the provision of banking services to small businesses. Although most countries noted the existence of telephone and/or Internet banking, this has not yet progressed to the extent that the relevant markets are national (or international) in scope. Australia notes that: "A number of problems are still associated with, for example, Internet banking, that limit its effectiveness as a constraint on the activities of the firms in the various markets. Internet security issues that have not yet been settled, and customer perceptions of security, are significant hurdles yet to be overcome; international specification for authentication of electronic transactions has not yet been endorsed by the relevant authorities; and at present, existing Internet sites are generally promotional."

(10) Banks seek to enter co-operative arrangements with other banks for a variety of reasons, many of which may give rise to competition concerns. Some countries noted competition concerns associated with bank distribution of insurance products.

A partial list of the reasons for entering into co-operative arrangements would include the following:

- the interconnection of networks (such as networks of Automatic Teller Machines, EFTPOS networks);
- the operation of international credit card systems or national debit transfer systems;
- the operation of payments clearing systems;
- the establishment of a system for the joint maintenance of a database of the credit history of consumers;
- joint development and promotion of new products (e.g., Banksys / Belgacom smart card);

In some cases the co-operative arrangements would have natural monopoly characteristics. These would, in turn, give rise to concerns over foreclosure of entrants and the need for mechanisms for guaranteeing access. Where a bank, as a result of its large retail base, has a dominant position in a local area, an exclusive dealing arrangement with a particular insurer may foreclose entry by other insurers and therefore may give rise to competition concerns.

BIBLIOGRAPHY *

1. Exit Strategies (2010)

- Thorsten Beck, "Bank Competition and Financial Stability: A Fresh Look after the Crisis" [DAF/COMP/WD(2010)29].
- Thorsten Beck, Diane Coyle, Mathias Dewatripont, Xavier Freixas, Paul Seabright, "Bailing out the Banks: Reconciling Stability and Competition" http://www.cepr.org/pubs/other/Bailing_out_the_banks.pdf
- OECD (2009), Competition and Financial Markets http://www.oecd.org/dataoecd/45/16/43046091.pdf
- OECD (2009) Finance, Competition and Governance: Strategies to phase out emergency measures http://www.oecd.org/dataoecd/52/23/42538385.pdf
- OECD (2009), The Financial Crisis: Reform and Exit Strategies

 http://www.oecd.org/document/20/0,3343,en_2649_34813_43726868_1
 http://www.oecd.org/document/20/0,4348_1
 <a href="http://www.oecd.org/docu
- OECD (2008), Dealing with the Financial Crisis and thinking about the Exit Strategy http://www.oecd.org/dataoecd/3/7/43002511.pdf
- OECD Background note: The Application of Antitrust law to State Owned Enterprises [DAF/COMP/WP3(2009)2].

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^{*} This bibliography is divided according to the roundtable to which it relates.

2. Competition, Concentration and Stability in the Banking Sector (2010)

- Acharya V., D. Gale and T. Yorulmazer (2009). "Rollover Risk and Market Freezes," working paper, Stern Business School, New York University.
- Acharya V., D. Gromb and T. Yorulmazer (2009). "Imperfect Competition in the Inter-Bank Market for Liquidity as a Rationale for Central Banking," working paper, Stern Business School, New York University.
- Adrian, T. and M. Brunnermeier (2009). "Covar," mimeo, Federal Reserve Bank of New York, New York.
- Allen F., A. Babus and E. Carletti (2009a). "Financial Crises: Theory and Evidence," *Annual Review of Financial Economics*, forthcoming.
- Allen F., A. Babus and E. Carletti (2009b). "Financial Connections and Systemic Risk," mimeo, European University Institute, Florence.
- Allen F. and E. Carletti (2006). "Credit Risk Transfer and Contagion," Journal of Monetary Economics, 53, 89-111.
- Allen F. and E. Carletti (2008). "The Role of Liquidity in Financial Crises," forthcoming in *Maintaining Stability in a Changing Financial System*, Federal Reserve Bank of Kansas City's 2008 Economic Symposium proceedings.
- Allen F. and E. Carletti (2009). "An overview of the crisis: causes, consequences and solutions," *International Review of Finance*, forthcoming.
- Allen F., E. Carletti, D. Gale (2009). "Interbank Market Liquidity and Central Bank Intervention," *Journal of Monetary Economics*, forthcoming.
- Allen F. and D. Gale (1998). "Optimal Financial Crises," *Journal of Finance*, 47, 1245-1284.
- Allen, F. and D. Gale (2004). "Competition and Stability," *Journal of Money, Credit and Banking*, 36(3), 453-480.
- Bagehot, G. (1873), *London Street: A description of the money market*, H.S. King, London.

- Beck, T. (2009). "Bank competition and financial stability; Friends or Foes?," Policy Research Working Paper, 4656, The World Bank, Washington.
- Beck, T., A. Demirguc-Kunt, and R. Levine (2006). "Bank Concentration, Competition and Crises," *Journal of banking and Finance*, 30, 1581-1603.
- Behr, P., R.H. Schmidt and R. Xie (2009). "Market structure, capital regulation and bank risk taking," *Journal of Financial Service Research*, forthcoming.
- Berger, A., A. Demirgüc-Kunt, J. Hausbrich and R. Levine (2004) "Bank concentration and competition: An evolution in the making," *Journal of Money, Credit and Banking*, 36, 433-51.
- Berger, A., L.F. Klapper and R. Turk-Ariss (2009). "Bank Competition and Financial Stability," *Journal of Financial Service Research*, 35, 99-118.
- Bikker, J.A. and L. Spierdijk (2007). "How banking competition changed over time," Mimeo, De Nederlandsche Bank, Amsterdam.
- Bikker, J.A. and L. Spierdijk (2009). "Measuring and Explaining Competition in the Financial Sector" Tjalling C. Koopmans Research Institute Discussion Paper Series, 09-01.
- Bikker, J.A., L. Spierdijk and P. Finnie (2006). "The impact of bank size on market power", DNB working paper 120, De Nederlandsche Bank, Amsterdam.
- Bordo, M., A. Redish and H. Rockoff (1995). "A comparison of the United States and Canadian banking systems in the twentieth century: stability v. efficiency" in M. Bordo and R. Sylla (eds), *Anglo–American Financial Systems: Institutions and Markets in the Twentieth Century*, New York: Irwin, 11-40.
- Boyd, J. and G. De Nicoló (2005). "The theory of bank risk-taking and competition revisited," *Journal of Finance*, 60 (3), 1329-1343.
- Boyd, H.J., G. De Nicoló and A.M. Jalal (2009). "Bank Competition, Risk and Asset Allocations," IMF working paper 09/143, Washington.

- Boyd, J., G. De Nicoló and B.D. Smith (2004), Crises in competitive versus monopolistic banking systems, *Journal of Money, Credit and Banking*, 36(3), 487-506.
- Boyd J. and M. Gertler, 1993, "U.S. Commercial Banking: Trends, Cycles and Policy", NBER working paper, n. 4404.
- Boyd, J. and S. Graham (1991). "Investigating the banking consolidation trend", *Federal Reserve Bank of Minneapolis Quarterly Review*, Spring, 1-15.
- Boyd, J. and S. Graham (1996). "Consolidation in US banking: implications for efficiency and risk", Federal Reserve Bank of Minneapolis Working Paper 572, December.
- Boyd, J.H. and D.E. Runkle (1993). "Size and performance of banking firms: testing the predictions of theory", *Journal of Monetary Economics*, 31, 47-67.
- Caminal, R. and C. Matutes (2002). "Market Power and Banking Failures", *International Journal of Industrial Organization*, 20(9), 1341-1361.
- Cargil, T. (1999). "Crisis and Changes in the Japanese Financial System," mimeo, University of Nevada.
- Carletti, E. (2008). "Competition and regulation in banking," in A. Thakor and A. Boot (eds.), *Handbook of Financial Intermediation and Banking*, Elsevier, 449-482.
- Carletti, E. (2009). "Competition and financial markets," http://www.eui.eu/Personal/Carletti/Competition_and_Financial_Markets.pdf
- Carletti, E., and P. Hartmann (2003). "Competition and Stability: What's Special About Banking?", in P. Mizen (ed.), *Monetary History, Exchange Rates and Financial Markets: Essays in Honour of Charles Goodhart*, vol. 2, Cheltenham, UK: Edward Elgar, 202-229.
- Carletti, E., P. Hartmann and G. Spagnolo (2002). "Implications of the Bank Merger Wave for Competition and Stability," in *Risk Measurement and Systemic Risk*, Proceedings of the Third Joint Central Bank Research Conference (Board of Governors of the Federal Reserve System, Bank of Japan, European Central Bank), 38-50.

- Carletti E. and X. Vives (2008). "Regulation and Competition Policy in the Banking Sector" in X. Vives (ed.), *Assessment and Perspectives of Competition Policy in Europe*, Oxford University Press.
- Chari V.V. and R. Jagannathan (1988). "Banking Panics, Information and Rational Expectations Equilibrium," *Journal of Finance*, 43, 749-763.
- Claessens, S. and L. Laeven (2004). "What Drives Bank Competition? Some International Evidence," Journal of Money, Credit, and Banking, 563-583.
- Chong, B.S. (1991). "The effects of interstate banking on commercial banks' risk and profitability," *Review of Economics and Statistics*, 73, 78-84.
- Claessens S. (2009). "Competition in the Financial Sector: Overview of Competition Policy," The World Bank Research Observer, 24, 83-118.
- Craig, B and J C Santos (1997): "The risk effects of bank acquisitions", Federal Reserve Bank of Cleveland Economic Review, 33, 25-35.
- Davis, P. (2009). "Financial stability in the United Kingdom: Banking on prudence," OECD Economics Department working paper, 717, Paris.
- Demsetz, R. and P.E. Strahan (1995). "Historical patterns and recent changes in the relationship between bank holding company size and risk", *Federal Reserve Bank of New York Economic Policy Review*, 13-26.
- Demsetz, R. and P.E. Strahan (1997). "Diversification, size, and risk at bank holding companies", *Journal of Money, Credit, and Banking*, 29, 300-13.
- Demirgüc-Kunt, A. and E. Detragiache (1998). "The determinants of banking crises in developing and developed countries," IMF Staff Papers, 45, 81-109.
- Demirgüc-Kunt, A. and E. Detragiache (1999). "Financial Liberalization and Financial Fragility," in B. Pleskovic and J. Stiglitz (eds.), *Annual World Bank Conference on Development Economics*, 198, Washington, DC: World Bank.
- Demirgüc-Kunt, A. and E. Detragiache (2002). "Does deposit insurance increase banking system stability? An empirical investigation," *Journal of Monetary Economics*, 49, 1373-406.

- De Nicoló, G. (2000). "Size, charter value and risk in banking: an international perspective", International Finance Discussion Paper, no 689, Board of Governors of the Federal Reserve System, December.
- De Nicoló, G and M Kwast (2001). "Systemic risk and financial consolidation: are they related?," Finance and Economics Discussion Paper 2001-33, Board of Governors of the Federal Reserve System, Washington.
- Diamond, D.W. and P.H. Dybvig (1983). "Bank Runs, Deposit Insurance and Liquidity", *Journal of Political Economy*, 91, 401-419.
- Diamond, D. and R. Rajan (2009). "Fear of fire sales and the credit freeze," working paper University of Chicago.
- Drees, B. and C. Pazarbasioglu (1998). "The Nordic Banking Crises: Pitfalls in Financial Liberalization?," IMF Occasional Paper, 161, Washington DC.
- Duffie, D. (2008). "Innovations in credit risk transfer: Implications for financial stability", Bank for International Settlement Working Paper 255, Basel.
- Fungacova, Z. and L. Weill (2009). "How market power influences bank failures: Evidence from Russia," working paper, University of Strasbourg.
- Goldstein, I. and A. Pauzner (2005). "Demand deposit contracts and the probability of bank runs," *Journal of Finance*, 60, 1293-1328.
- Goodhart C.A.E. (1987). "Why do Banks need a Central Bank?," *Oxford Economic Papers*, 39, 75-89.
- Gorton G. (1988). "Banking panics and business cycles", *Oxford Economic Papers*, 40, 751-781.
- Group of Ten (2001). "Report on Consolidation in the Financial Sector (Ferguson Report)", BIS/IMF/OECD, January.
- He Z. and W. Xiong (2009). "Rollover risk and credit risk," working paper, University of Chicago.
- Heider, F., M. Hoerova and C. Holthausen (2009): "Liquidity Hoarding and Interbank Market Spreads: The Role of Counterparty Risk," mimeo European Central Bank, Frankfurt.

- Hellman, T.F., K. Murdock and J. Stiglitz (2000). "Liberalization, Moral Hazard in Banking and Prudential Regulation: Are Capital Requirements Enough?," *American Economic Review*, 90(1), 147-165.
- Hellwig, M. (1999) "Allowing for risk choices in Diamond's financial intermediation as delegated monitoring," discussion paper 98-04, Sonderforschungsbereich 504, University of Mannheim.
- Hoggarth, G., A. Milne and G. Wood (1998). "Alternative routes to banking stability: a comparison of UK and German banking systems," *Financial Stability Review*, 5, 55-68.
- Honkapohja, S. and E. Koskela (1999). "The economic crisis of 1990s in Finland," Economic Policy, 14, 401-436.
- Hoshi, T. and A. Kashyap (1999). "The Japanese Banking Crisis: Where did it come from and how will it end?," *NBER Macroeconomics Annual*, 14, 129-201.
- Hughes, J.P., W.W. Lang, L.J. Mester and C.G. Moon (1999). "The dollars and the senses of bank consolidation," *Journal of Banking and Finance*, 23, 291-324.
- Hughes, J.P. and L.J. Mester (1998). "Bank capitalization and cost: evidence of scale economies in risk management and signalling," *Review of Economics and Statistics* 80, 314-25.
- Instefjord, N. (2005). "Risk and hedging: do credit derivatives increase bank risk?," *Journal of Banking and Finance*, 29, 333-345.
- Jacklin C.J. and S. Bhattacharya (1988). "Distinguishing Panics and Information-based Bank Runs: Welfare and Policy," *Journal of Political Economy*, 96, 568-592.
- Jimenez, G., J. Lopez, and J. Saurina (2007). "How Does Competition Impact Bank Risk-Taking?," Federal Reserve Bank of San Francisco Working Paper Series 2007-23.
- Kanaya, A. and D. Woo (2000). "The Japanese Banking Crisis of the 1990s: Sources and Lessons," IMF working paper.
- Keeley, M. (1990). "Deposit Insurance, Risk and Market Power in Banking," *American Economic Review*, 80, 1183-1200.

- Matutes, C. and X. Vives (1996). "Competition for Deposits, Fragility, and Insurance," *Journal of Financial Intermediation*, 5, 184-216.
- Matutes, C. and X. Vives (2000). "Imperfect Competition, Risk Taking and Regulation in Banking," *European Economic Review* 44. 1, 1–34.
- Nagarajan, S. and C.W. Sealey (1995). "Forbearance, deposit insurance pricing and incentive compatible bank regulation", *Journal of Banking and Finance*, 19, 1109-1130.
- OECD (2006). "Competition and regulation in retail banking", available at http://www.oecd.org/dataoecd/44/18/39753683.pdf.
- OECD (2007). "Review of competition in the Dutch retail banking sector", available at http://www.oecd.org/dataoecd/16/54/39347699.pdf.
- OECD (2009). "Competition and financial markets", available at http://www.oecd.org/dataoecd/45/16/43046091.pdf.
- Perotti, E. and J. Suarez (2002), Last bank standing: what do I gain if you fail?, *European Economic Review*, 46(9), 1599-1622.
- Ratnovski, L. and R. Huang (2009) "Why are Canadian banks more resilient?," IMF working paper, 09/152, Washington DC.
- Repullo, R. (2004). "Capital requirements, market power and risk-taking in banking," *Journal of Financial Intermediation*, 13, 156-182.
- Reserve Bank of Australia (2009). "The Australian Financial System," *Financial Stability Review*, March.
- Rochet, J. and X. Vives, (2004). "Coordination Failures and the Lender of Last Resort: Was Bagehot Right after All?" *Journal of the European Economic Association* 2, 1116-1147.
- Schaeck, K., M. Cihak, and S. Wolfe (2009). "Are Competitive Banking Systems more Stable?" *Journal of Money, Credit and Banking* 41, 713-734.
- Staikouras, C. and G. Wood (2000) "Competition and banking stability in Greece and Spain," *Journal of International Banking Regulation*, 1, April.

- Shin H. (2009). "Securitization and Financial Stability," *Economic Journal*, 119, 309-332.
- Strahan, P. (2003) "The real effects of US banking deregulation," *Federal Reserve Bank of St. Louis Review*, 85, 111-28.

3. The Failing Firm Defence (2009)

- Vincenzo Baccaro, "The Failing Firm Defence and Lack of Causality: Doctrine and Practice in Europe of Two Closely Related Concepts," 25 European Competition Law Review 11 (2004).
- Antonio Bavasso & Alistair Lindsay, "Causation in EC Merger Control," 3 Journal of Competition Law and Economics 181 (2007).
- Judith A. Chevalier, "Do LBO Supermarkets Charge More? An Empirical Analysis of the Effects of LBOs on Supermarket Pricing?" 50 Journal of Finance 1095 (1995).
- Robert Gertner, David Scharfstein & Jeremy C. Stein, "Internal Versus External Capital Markets", 109 Quarterly Journal of Economics 1211 (1994).
- Ioannis Kokkoris, "Failing Firm Defence: A Success or Failure for Corporate Restructuring?" 4 International Corporate Rescue 149 (2007).
- Ioannis Kokkoris, "Failing Firm Defence under the Clayton Act," 28 European Competition Law Review 158 (2007).
- Ioannis Kokkoris, "Failing Firm Defence in the European Union: A Panacea for Mergers?" 27 European Competition Law Review 494 (2006).
- Robin Mason & Helen Weeds, "The Failing Firm Defence: Merger Policy and Entry," CEPR Discussion Paper No. 3664 (2002), available at http://ssrn.com/abstract=369521
- OECD, Failing Firm Defence, OCDE/GD(96)23 (1996), available at www.oecd.org/dataoecd/35/6/1920253.pdf
- Lars Persson, "The Failing Firm Defense," 53 Journal of Industrial Economics 175 (2005).

- Vicente Salas & Jesus Saurina, "Deregulation, market power and risk behaviour in Spanish banks", 47 European Economic Review 1061 (2003).
- Ramsey Shehadeh, Joseph Larson & Ilene Knable Gotts, "The Effect of Financial Distress on Business Investment: Implications for Merger Reviews", 23 Antitrust 12 (2009).
- William F. Shughart II & Robert D. Tollison, "The Welfare Basis for the Failing Company Doctrine", 30 Antitrust Bulletin 357 (1985).
- Spencer Weber Waller, "A Comparative Look at Failing Firms and Failing Industries," 64 Antitrust Law Journal 703 (1996).

4. Competition and Financial Markets (2009)

- Akerlof, G. (1970). "The Market for `Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 89, 488-500.
- Allen F. and E. Carletti (2006). "Credit Risk Transfer and Contagion," *Journal of Monetary Economics* 53, 89-111.
- Allen F. and E. Carletti (2008a). "Mark-to-Market Accounting and Cash-in-the-Market Pricing," *Journal of Accounting and Economics*, 45(2-3), 358-378.
- Allen F. and E. Carletti (2008b). "Should Financial Institutions Mark to Market?," Banque de France Financial Stability Review, 12, 1-6.
- Allen F. and E. Carletti (2008c). "The Role of Liquidity in Financial Crises," forthcoming in *Maintaining Stability in a Changing Financial System*, Federal Reserve Bank of Kansas City's 2008 Economic Symposium proceedings.
- Allen F. and D. Gale (1998). "Optimal Financial Crises," *Journal of Finance*, 47, 1245-1284.
- Allen F. and D. Gale (2000). "Financial Contagion," *Journal of Political Economy*, 108, 1-34.

- Allen, F. and D. Gale (2004a). "Competition and Stability," *Journal of Money, Credit and Banking*, 36(3), 453-480.
- Allen, F. and D. Gale (2004b). "Financial Fragility, Liquidity and Asset Prices," Journal of the European Economic Association, 2, 1015-1048.
- Bagehot, G. (1873), London Street: A description of the money market, H.S. King, London.
- Barth J.R., G. Caprio and R. Levine (2004). "Bank Regulation and Supervision: What Works Best?," *Journal of Financial Intermediation*, 13, 205-248.
- Beck, T., A. Demirguc-Kunt, and R. Levine (2004). "Bank Concentration, Competition and Crises," *Journal of banking and Finance*, 30, 1581-1603.
- Bianco, M., F. Ghezzi and P. Magnani (1998). "L'Applicazione della Disciplina Antitrust nel Settore Bancario Statunitense", in M. Polo (ed), *Industria Bancaria e Concorrenza*, Bologna: Il Mulino, 143-258.
- Blundell-Wignall, A. and Atkinson, P. (2008) "The Sub-prime Crisis: Causal Distortions and Regulatory Reform." In *Lessons from the Financial Turmoil of 2007 and 2008*, Ed. Reserve Bank of Australia, pp. 55-102.
- Boyd J. and M. Gertler, 1993, "U.S. Commercial Banking: Trends, Cycles and Policy", NBER working paper, n. 4404.
- Boyd, J.H. and G. De Nicoló (2005). "The theory of bank risk-taking and competition revisited," *Journal of Finance*, 60 (3), 1329-1343.
- Broecker, T. (1990). "Creditworthiness tests and interbank competition", *Econometrica*, 58, 429-452.
- Brusco S. and F. Castiglionesi (2007). "Liquidity Coinsurance, Moral Hazard and Financial Contagion," *Journal of Finance*, 62, 2275-2302.
- Caminal, R. and C. Matutes (2002). "Market Power and Banking Failures", *International Journal of Industrial Organization*, 20(9), 1341-1361.

- Carletti, E. (2008). "Competition and Regulation in Banking," in A. Thakor and A. Boot (eds.), *Handbook of Financial Intermediation and Banking*, Elsevier, 449-482.
- Carletti, E., and P. Hartmann (2002). "Competition and Stability: What's Special About Banking?", in P. Mizen (ed.), *Monetary History, Exchange Rates and Financial Markets: Essays in Honour of Charles Goodhart*, vol. 2, Cheltenham, UK: Edward Elgar, 202-229.
- Carletti E., P. Hartmann and S. Ongena (2007). "The Economic Impact of Merger Control," European University Institute.
- Carletti E. and X. Vives (2008). "Regulation and Competition Policy in the Banking Sector" in X. Vives (ed.), *Assessment and Perspectives of Competition Policy in Europe*, Oxford University Press.
- Chari V.V. and R. Jagannathan (1988). "Banking Panics, Information and Rational Expectations Equilibrium," *Journal of Finance*, 43, 749-763.
- Cifuentes, R., G. Ferrucci, and H. Shin (2005). "Liquidity Risk and Contagion," *Journal of European Economic Association* 3.
- Coffee, J. C. (2008) "Turmoil in the U.S. Credit Markets: The Role of the Credit Rating Agencies," Testimony before the United States Senate Committee on Banking, Housing and Urban Affairs, April 22.
- Cole H. and L. Ohanian (2004). "New Deal Policies and the Persistence of the Great Depression: A General Equilibrium Analysis," Journal of Political Economy, 112, 779-816.
- Degryse, H. (1996). "On the Interaction Between Vertical and Horizontal Product Differentiation: An Application to Banking", *Journal of Industrial Economics*, 44(2), 169-182.
- Degryse H. and S. Ongena (2007). Background Note," in Competition and Regulation in Retail Banking, OECD, 15-58.
- Degryse H. and S. Ongena (2008), "Competition and Regulation in the Banking Sector: A Review of the Empirical Evidence on the sources of bank rents," in A. Thakor and A. Boot (eds.), Handbook of Financial Intermediation and Banking, Elsevier, 483-542.

- Dell'Ariccia, G. (2001). "Asymmetric Information and the Structure of the Banking Industry," *European Economic Review*, 45, 1957-1980.
- Diamond, D.W. and P.H. Dybvig (1983). "Bank Runs, Deposit Insurance and Liquidity", *Journal of Political Economy*, 91, 401-419.
- Fingleton, J. (2009). "Competition Policy in Troubled Times," speech given on 20 January 2009, available at www.oft.gov.uk/shared_oft/speeches/2009/spe0109.pdf.
- Edwards F. and F. Mishkin, 1995, "The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy", Federal Reserve Bank of New York Economic Policy Review, 1, 27-45.
- Freixas, X. and B. Parigi and J. Rochet (2000). "Systemic Risk, Interbank Relations and Liquidity Provision by the Central Bank," *Journal of Money, Credit and Banking* 32, 611-38.
- Goldstein, I. and A. Pauzner (2005). "Demand deposit contracts and the probability of bank runs," *Journal of Finance*, 60, 1293-1328.
- Goodhart C.A.E. (1987). "Why do Banks need a Central Bank?," *Oxford Economic Papers*, 39, 75-89.
- Gorton G. (1988). "Banking panics and business cycles", *Oxford Economic Papers*, 40, 751-781.
- Hanazaki K. and A. Horiuchi (2003). "A Review of Japan's Bank Crisis from the Governance Perspective", *Pacific-Basin Finance Journal*, 11, 305-325.
- Hayashi F. and E. Prescott (2002). "The 1990s in Japan: A Lost Decade," *Review of Economic Dynamics*, 5, 206-235.
- Hellman, T.F., K. Murdock and J. Stiglitz (2000). "Liberalization, Moral Hazard in Banking and Prudential Regulation: Are Capital Requirements Enough?," *American Economic Review*, 90(1), 147-165.
- Jacklin C.J. and S. Bhattacharya, 1988, "Distinguishing Panics and Information-based Bank Runs: Welfare and Policy," *Journal of Political Economy*, 96, 568-592.

- Jensen M. and W. Meckling (1976). "Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure," *Journal of Financial Economics*, 3, 305-360.
- Keeley, M. (1990). "Deposit Insurance, Risk and Market Power in Banking," *American Economic Review*, 80, 1183-1200.
- Lagunoff, R. and S. Schreft (2001). "A Model of Financial Fragility," *Journal of Economic Theory* 99, 220-264.
- La Porta, R. F. Lopez-De-Silanez, and A. Shleifer (2002). "Government Ownership of Banks," Journal of Finance 57, 265-301.
- Matutes, C. and A.J. Padilla (1994). "Shared ATM Networks and Banking Competition," *European Economic Review*, 38, 1057-1069.
- Matutes, C. and X. Vives (1996). "Competition for Deposits, Fragility, and Insurance," *Journal of Financial Intermediation*, 5, 184-216.
- Matutes, C. and X. Vives (2000). "Imperfect Competition, Risk Taking and Regulation in Banking," *European Economic Review* 44. 1, 1–34.
- Porter, M., H.Takeuchi and M. Sakakibara (2000). "Can Japan Compete?," Basingstoke, England: Macmillan and Basic Books and Perseus Publishing, New York.
- Porter M. and M. Sakakibara (2004). "Competition in Japan," *Journal of Economic Perspectives*, 18, 27-50.
- Rochet J.C. and J. Tirole (1996), "Controlling Risk in Payment Systems", *Journal of Money, Credit and Banking*, 28, 832-862.
- Rochet, J.C. and J. Tirole (2002). "Cooperation Among Competitors: The Economics of Credit Card Associations," *RAND Journal of Economics*, 33(4), 1-22.
- Sharpe S.A. (1990) "Asymmetric Information, Bank Lending, and Implicit Contracts: A Stylized Model of Customer Relationships," Journal of Finance, 45, 1069-1087.
- Vives, X. (2001b. "Restructuring Financial Regulation in the European Monetary Union", *Journal of Financial Services Research*, 19(1), 57-82.

5. Competition and Regulation in Retail Banking (2006)

- Agarwal, S., and R. Hauswald, 2006. "Distance and Information Asymmetries in Lending Decisions," American University, Mimeo.
- Aintablian, S., and G.S. Roberts, 2000, "A Note on Market Response to Corporate Loan Announcements in Canada," Journal of Banking and Finance 24, 381-393.
- Andre, P., R. Mathieu, and P. Zhang, 2001, "A Note on: Capital Adequacy and the Information Content of Term Loans and Lines of Credit," Journal of Banking and Finance 25, 431-444.
- Angelini, P., R. Di Salvo, and G. Ferri, 1998, "Availability and Cost of Credit for Small Businesses: Customer Relationships and Credit Cooperatives," Journal of Banking and Finance 22, 925-954.
- Bae, K.H., J.K. Kang, and C.W. Lim, 2002, "The Value of Durable Bank Relationships: Evidence from Korean Banking Shocks," Journal of Financial Economics 64, 181-214.
- Barth, J.R., G. Caprio, and R. Levine, 2001. "The Regulations and Supervision of Banks Around the World: a New Database," World Bank, Mimeo.
- Barth, J.R., G. Caprio, and R. Levine, 2004, "Bank Regulation and Supervision: What Works Best?," Journal of Financial Intermediation 13, 205-248.
- Beck, T., A. Demirguc-Kunt, and R. Levine, 2004. "Bank Concentration and Crises," World Bank, Mimeo.
- Beitel, P., D. Schiereck, and M. Wahrenburg, 2004, "Explaining M&A Success in European Banks," European Financial Management 10, 109-140.
- Berger, A.N., S.D. Bonime, L.G. Goldberg, and L.J. White, 2004, "The Dynamics of Market Entry: The Effects of Mergers and Acquisitions on Entry in the Banking Industry," Journal of Business 77, 797-834.
- Berger, A.N., Q. Dai, S. Ongena, and D.C. Smith, 2003, "To What Extent Will the Banking Industry be Globalized? A Study of Bank Nationality and Reach in 20 European Nations," Journal of Banking and Finance 27, 383-415.

- Berger, A.N., R. Demsetz, and P. Strahan, 1999, "The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future," Journal of Banking and Finance 23, 135-194.
- Berger, A.N., and R. Deyoung, 2001, "The Effects of Geographic Expansion on Bank Efficiency," Journal of Financial Services Research 19, 163-184.
- Berger, A.N., R. Deyoung, H. Genay, and G. Udell, 2000, "Globalization of Financial Institutions: Evidence from Cross-Border Banking Performance," Brookings-Wharton Papers on Financial Services 3, 23-120.
- Berger, A.N., N.M. Miller, M.A. Petersen, R.G. Rajan, and J.C. Stein, 2005, "Does Function Follow Organizational Form? Evidence From the Lending Practices of Large and Small Banks," Journal of Financial Economics 76, 237-269.
- Berger, A.N., A. Saunders, J.M. Scalise, and G.F. Udell, 1998, "The Effects of Bank Mergers and Acquisistions on Small Business Lending," Journal of Financial Economics 50, 187-230.
- Berger, A.N., and G.F. Udell, 1996, "Universal Banking and the Future of Small Business Lending," in A. Saunders, and W. Ingo, eds.: Financial System Design: The Case for Universal Banking (Irwin Publishing, Homewood IL).
- Berger, A.N., and G.F. Udell, 2002, "Small Business Credit Availability and Relationship Lending: The Importance of Bank Organisational Structure," Economic Journal 112, 32-53.
- Berry, T., S. Byers, and D. Fraser, 2006, "Do Bank Loan Relationships Still Matter?," Journal of Money, Credit, and Banking Forthcoming.
- Best, R., and H. Zhang, 1993, "Alternative Information Sources and the Information Content of Bank Loans," Journal of Finance 48, 1507-1522.
- Bharath, S., S. Dahiya, A. Saunders, and A. Srinivasan, 2006, "So What Do I Get? The Bank's View of Lending Relationships," Journal of Financial Economics Forthcoming.
- Biehl, A.R., 2002, "The Extent of the Market for Retail Banking Deposits," Antitrust Bulletin 47, 91-106.

- Billett, M.T., M.J. Flannery, and J.A. Garfinkel, 1995, "The Effect of Lender Identity on a Borrowing Firm's Equity Return," Journal of Finance 50, 699-718.
- Black, S.E., and P.E. Strahan, 2002, "Entrepreneurship and Bank Credit Availability," Journal of Finance 57, 2807-2834.
- Bonaccorsi Di Patti, E., and G. Gobbi, 2005, "Winners or Losers? The Effects of Banking Consolidation on Corporate Borrowers," Journal of Finance Forthcoming.
- Bonin, J.P., I. Hasan, and P. Wachtel, 2005, "Privatization Matters: Bank Efficiency in Transition Countries," Journal of Banking and Finance 29, 2155-2178.
- Boot, A.W.A., 2000, "Relationship Banking: What Do We Know?," Journal of Financial Intermediation 9, 3-25.
- Boscaljon, B., and C.C. Ho, 2005, "Information Content of Bank Loan Announcements to Asian Corporations during Periods of Economic Uncertainty," Journal of Banking and Finance 29, 369-389.
- Bouckaert, J., and H. Degryse, 2006a, "Entry and Strategic Information Display in Credit Markets," Economic Journal 116, 702-720.
- Bouckaert, J., and H. Degryse, 2006b. "Opt In Versus Opt Out: A Free-Entry Analysis of Privacy Policies," TILEC, Discussion Paper.
- Brewer, E., H. Genay, W.C. Hunter, and G.G. Kaufman, 2003, "The Value of Banking Relationships During a Financial Crisis: Evidence from Failures of Japanese Banks," Journal of Japanese and International Economies 17, 233-262.
- Buch, C.M., 2003, "Information or Regulation: What is Driving the International Activities of Commercial Banks?," Journal of Money, Credit, and Banking 35, 851–869.
- Buch, C.M., and G.L. Delong, 2004, "Cross-Border Bank Mergers: What Lures the Rare Animal?," Journal of Banking and Finance 28, 2077-2102.

- Buch, C.M., and S.M. Golder, 2001, "Foreign versus Domestic Banks in Germany and the US: a Tale of Two Markets?," Journal of Multinational Financial Management 11, 341-361.
- Cabral, L.M.B., 2002, "Comment on Clemons, Hitt, Gu, Thatcher, and Weber," Journal of Financial Services Research 22, 91-93.
- Campa, J.M., and I. Hernando, 2004, "Shareholder Value Creation in European M&As," European Financial Management 10, 47-81.
- Carletti, E., 2007, "Competition and Regulation in Banking," in A. W. A. Boot, and A. V. Thakor, eds.: Handbook of Corporate Finance: Financial Intermediation and Banking (North Holland, London), Forthcoming.
- Carletti, E., and P. Hartmann, 2003, "Competition and Stability: What's Special About Banking?," in P. Mizen, ed.: Monetary History, Exchange Rates and Financial Markets: Essays in Honour of Charles Goodhart (Edward Elgar, Cheltenham), 202-229.
- Carletti, E., P. Hartmann, and S. Ongena, 2006. "The Economic Impact of Merger Control: What Is Special About Banking?," Tilburg University, Mimeo.
- Cavalluzzo, K.S., L.C. Cavalluzzo, and J.D. Wolken, 2002, "Competition, Small Business Financing, and Discrimination: Evidence from a New Survey," Journal of Business 75, 641-680.
- Chiou, I., 1999. "Daiwa Bank's Reputational Crisis: Valuation Effects on Bankfirm Relationships," New York University Stern School of Business, Mimeo.
- Claessens, S., A. Demirguc-Kunt, and H. Huizinga, 2001, "How Does Foreign Entry Affect Domestic Banking Markets?," Journal of Banking and Finance 25, 891-911.
- Claeys, S., and R. Vander Vennet, 2005. "Determinants of Bank Interest Margins in Central and Eastern Europe: A Comparison with the West," Ghent University, Mimeo.
- Clarke, G., R. Cull, M. Soledad Martinez Peria, and S.M. Sanchez, 2003, "Foreign Bank Entry: Experience, Implications for Developing

- Economies, and Agenda for Further Research," World Bank Research Observer 18, 25-59.
- Corvoisier, S., and R. Gropp, 2001. "Contestability, Technology, and Banking," European Central Bank, Mimeo.
- Corvoisier, S., and R. Gropp, 2002, "Bank Concentration and Retail Interest Rates," Journal of Banking and Finance 26, 2155-2189.
- Cruickshank, D., 2000. "Competition in UK Banking: A Report to the Chancellor of the Exchequer," Chancellor of the Exchequer, Report.
- Crystal, J.S., B.G. Dages, and L.S. Goldberg, 2002, "Has Foreign Bank Entry Led to Sounder Banks in Latin America?," Current Issues in Economics and Finance 8, 1-6.
- Cyrnak, A.W., and T.H. Hannan, 1999, "Is the Cluster Still Valid in Defining Banking Markets? Evidence from a New Data Source," Antitrust Bulletin 44, 313-331.
- De Haas, R., and I. Lelyveld, 2005, "Foreign Banks and Credit Stability in Central and Eastern Europe. A Panel Data Analysis," Journal of Banking and Finance Forthcoming.
- De Serres, A., S. Kobayakawa, T. Sløk, and L. Vartia, 2006. "Regulation of Financial Systems and Economic Growth," Organisation for Economic Cooperation and Development, Economics Department Working Paper.
- Degryse, H., L. Laeven, and S. Ongena, 2006. "The Impact of Organizational Structure and Lending Technology on Banking Competition," CentER-Tilburg University, Mimeo.
- Degryse, H., N. Masschelein, and J. Mitchell, 2005. "SMEs and Bank Lending Relationships: the Impact of Mergers," CentER Tilburg University, Mimeo.
- Degryse, H., and S. Ongena, 2003. "Distance, Lending Relationships, and Competition," Center for Economic Studies KU Leuven & CentER Tilburg University, Discussion Paper.

- Degryse, H., and S. Ongena, 2005, "Distance, Lending Relationships, and Competition," Journal of Finance 60, 231-266.
- Degryse, H., and S. Ongena, 2007, "Competition and Regulation in the Banking Sector: A Review of the Empirical Evidence on the Sources of Bank Rents," in A. W. A. Boot, and A. V. Thakor, eds.: Handbook of Corporate Finance: Financial Intermediation and Banking (North-Holland, London), Forthcoming.
- Degryse, H., S. Ongena, and M.F. Penas, 2006a. "Between Lisbon and London: Financial Sector Consolidation in the Context of the Lisbon Agenda," AEI Brookings Joint Center, Working Paper/Policy Brief.
- Degryse, H., S. Ongena, and M.F. Penas, 2006b, "Consolidation of the European Banking Sector: Impact on Innovation," in Luc Renneboog, ed.: Advances in Corporate Finance and Asset Pricing (North Holland/Elsevier, London), 161-186.
- Degryse, H., and P. Van Cayseele, 2000, "Relationship Lending Within a Bank-Based System: Evidence from European Small Business Data," Journal of Financial Intermediation 9, 90-109.
- Delong, G.L., 2001, "Stockholder Gains from Focusing versus Diversifying Mergers," Journal of Financial Economics 59, 221-252.
- Demirguc-Kunt, A., and H. Huizinga, 2000, "Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence," World Bank Economic Review 13, 379-408.
- 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 36, 563-583.
- Dermine, J., 2003, "European Banking: Past, Present, and Future," in V. Gaspar, P. Hartmann, and O. Sleijpen, eds.: The Transformation of the European Financial System (ECB, Frankfurt), 31-95.
- Dewatripont, M., and J. Tirole, 1994. The Prudential Regulation of Banks (MIT, Cambridge MA).

- Deyoung, R., L.G. Goldberg, and L.J. White, 1999, "Youth, Adolescence, and Maturity of Banks: Credit Availability to Small Business in an Era of Banking Consolidation," Journal of Banking and Finance 23, 463-492.
- Deyoung, R., and D.E. Nolle, 1996, "Foreign-Owned Banks in the United States: Earning Market Share or Buying It?," Journal of Money, Credit, and Banking 28, 622-636.
- Djankov, S.D., J. Jindra, and L. Klapper, 2005, "Corporate Valuation and the Resolution of Bank Insolvency in East Asia," Journal of Banking and Finance 29, 2095-2118.
- Fama, E.F., 1985, "What's Different about Banks?," Journal of Monetary Economics 15, 5-29.
- Farinha, L.A., and J.A.C. Santos, 2002, "Switching from Single to Multiple Bank Lending Relationships: Determinants and Implications," Journal of Financial Intermediation 11, 124-151.
- Farrell, J., and P. Klemperer, 2006. "Coordination and Lock-In: Competition with Switching Costs and Network Effects," University of California, Berkeley, Mimeo.
- Fery, J., D. Gasborro, D.R. Woodliff, and J.K. Zumwalt, 2003, "Market Reaction to Published and Non-Published Corporate Loan Announcements," Quarterly Review of Economics and Finance 43, 1-10.
- Fischer, K., 1990. "Hausbankbeziehungen als Instrument der Bindung zwischen Banken und Unternehmen Eine Theoretische und Empirische Analyse," Universität Bonn, PhD Dissertation.
- Fischer, K.H., and C. Pfeil, 2004, "Regulation and Competition in German Banking," in J. P. Krahnen, and R. H. Schmidt, eds.: The German Financial System (Oxford University Press, Frankfurt), 291-349.
- Focarelli, D., and F. Panetta, 2003, "Are Mergers Beneficial to Consumers? Evidence from the Market for Bank Deposits," American Economic Review 93, 1152-1171.

- Focarelli, D., and A.F. Pozzolo, 2001, "The Patterns of Cross-Border Bank Mergers and Shareholdings in OECD Countries," Journal of Banking and Finance 25, 2305-2337.
- Garmaise, M.J., and T.J. Moskowitz, 2005, "Bank Mergers and Crime: The Real and Social Effects of Credit Market Competition," Journal of Finance Forthcoming.
- Garrett, T.A., G.A. Wagner, and D.C. Wheelock, 2004. "A Spatial Analysis of State Banking Regulation," Federal Reserve Bank of St. Louis, Working Paper.
- Giannetti, M., and S. Ongena, 2006. "Financial Integration and Entrepreneurial Activity: Evidence from Foreign Bank Entry in Emerging Markets," CentER Tilburg University, Mimeo.
- Gilbert, R.A., and A.M. Zaretsky, 2003, "Banking Antitrust: Are the Assumptions Still Valid?," Review of the Federal Reserve Bank of St. Louis 29-52.
- Gogoi, P., 2003, "The Hot News in Banking: Bricks and Mortar," BusinessWeek 51-52.
- Goldberg, L.G., and A. Saunders, 1981, "The Determinants of Foreign Banking Activity in the United States," Journal of Banking and Finance 5, 17-32.
- Golub, S.S., 1003. "Measures of Restrictions on Inward Foreign Direct Investment for OECD Countries," Organisation for Economic Cooperation and Development, Economics Department Working Paper.
- Green, C.J., 2003. "Are Foreign Banks in Central and Eastern Europe More Efficient Than Domestic Banks," Loughborough University, Mimeo.
- Guiso, L., P. Sapienza, and L. Zingales, 2004, "Does Local Financial Development Matter?," Quarterly Journal of Economics 119, 929-970.
- Hannan, T., 1997, "Market Share Inequality, the Number of Competitors, and the HHI: An Examination of Bank Pricing," Review of Industrial Organization 12, 23-35.

- Hannan, T.H., 1991, "Bank Commercial Loan Markets and the Role of Market Structure: Evidence from Surveys of Commercial Lending," Journal of Banking and Finance 15, 133-149.
- Heitfield, E.A., 1999, "What Do Interest Rate Data Say About the Geogarphy of Retail Banking Markets," Antitrust Bulletin 44, 333-347.
- Heitfield, E.A., and R.A. Prager, 2004, "The Geographic Scope of Retail Deposit Markets," Journal of Financial Services Research 25, 37-55.
- Hwan Shin, G., D.R. Fraser, and J.W. Kolari, 2003, "How Does Banking Industry Consolidation Affect Bank-Firm Relationships? Evidence from a Large Japanese Bank Merger," Pacific-Basin Finance Journal 11, 285-304.
- James, C., 1987, "Some Evidence on the Uniqueness of Bank Loans," Journal of Financial Economics 19, 217-235.
- James, C., and D.C. Smith, 2000, "Are Banks Still Special? New Evidence on Their Role in the Corporate Capital Raising Process," Bank of America Journal of Applied Corporate Finance 13, 52-63.
- Jappelli, T., and M. Pagano, 2002, "Information Sharing, Lending and Defaults: Cross-Country Evidence," Journal of Banking and Finance 26, 2017-2045.
- Jayaratne, J., and P.E. Strahan, 1996, "The Finance-Growth Nexus: Evidence from Bank Branch Deregulation," Quarterly Journal of Economics 111, 639-670.
- Jayaratne, J., and P.E. Strahan, 1998, "Entry Restrictions, Industry Evolution, and Dynamic Efficiency: Evidence from Commercial Banking," Journal of Law and Economics 41, 239-274.
- Kallberg, J.G., and G.F. Udell, 2003, "The Value of Private Sector Business Credit Information Sharing: The US Case," Journal of Banking and Finance 27, 449-469.
- Karceski, J., S. Ongena, and D.C. Smith, 2005, "The Impact of Bank Consolidation on Commercial Borrower Welfare," Journal of Finance 60, 2043-2082.

- Kim, M., D. Kliger, and B. Vale, 2003, "Estimating Switching Costs: The Case of Banking," Journal of Financial Intermediation 12, 25-56.
- Kim, M., E.G. Kristiansen, and B. Vale, 2005, "Endogenous Product Differentiation in Credit Markets: What Do Borrowers Pay For?," Journal of Banking and Finance 29, 681-699.
- Kindleberger, C.P., 1983, "International Banks as Leaders or Followers of International Business," Journal of Banking and Finance 7, 583-595.
- Kiser, E.K., 2002, "Predicting Household Switching Behavior and Switching Costs at Depository Institutions," Review of Industrial Organization 20, 349-365.
- Klemperer, P., 1995, "Competition when Consumers have Switching Costs: an Overview with Applications to Industrial Organization, Macroeconomics, and International Trade," Review of Economic Studies 62, 515-539.
- Kroszner, R.S., and P.E. Strahan, 1999, "What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions," Quarterly Journal of Economics 124, 1437-1467.
- La Porta, R., F. Lopez-De-Silanes, and A. Shleifer, 2002, "Government Ownership of Banks," Journal of Finance 57, 265-301.
- La Porta, R., F. Lopez-De-Silanes, and G. Zamarripa, 2003, "Related Lending," Quarterly Journal of Economics 128, 231-268.
- Laeven, L., 2001, "Insider Lending and Bank Ownership: The Case of Russia," Journal of Comparative Economics 29, 207-229.
- Levine, R., 2003. "Denying Foreign Bank Entry: Implications for Bank Interest Margins," University of Minnesota, Mimeo.
- Liberti, J.M., 2004. "Initiative, Incentives and Soft Information: How Does Delegation Impact the Role of Bank Relationship Managers?," Kellogg School of Management Northwestern, Mimeo.
- Lummer, S.L., and J.J. Mcconnell, 1989, "Further Evidence on the Bank Lending Process and the Capital Market Response to Bank Loan Agreements," Journal of Financial Economics 25, 99-122.

- Magri, S., A. Mori, and P. Rossi, 2005, "The Entry and the Activity Level of Foreign Banks in Italy: An Analysis of the Determinants," Journal of Banking and Finance 29, 1295-1310.
- Mallett, T., and A. Sen, 2001, "Does Local Competition Impact Interest Rates Charged on Small Business Loans? Empirical Evidence from Canada," Review of Industrial Organization 19, 437-452.
- Mian, A., 2006, "Foreign, Private Domestic, and Government Banks: New Evidence from Emerging Markets," Journal of Banking and Finance Forthcoming.
- Mikkelson, W.H., and M.M. Partch, 1986, "Valuation Effects of Security Offerings and the Issuance Process," Journal of Financial Economics 15, 31-60.
- Miller, M.J., 2003, "Credit Reporting Systems around the Globe: The State of the Art in Public Credit Registries and Private Credit Reporting Firms," in M. J. Miller, ed.: Credit Reporting Systems and the International Economy (MIT Press, Cambridge MA), 25-79.
- Miyajima, H., and Y. Yafeh, 2003. "Japan's Banking Crisis: Who Has the Most to Lose?," Center for Economic Institutions, Working Paper.
- Morgan, D., 2002. "How Big are Bank Markets: Evidence Using Branch Sale Premia," Federal Reserve Bank of New York, Mimeo.
- Morgan, D.P., and P.E. Strahan, 2003. "Foreign Bank Entry and Business Volatility: Evidence from US States and Other Countries," National Bureau of Economic Research, Working Paper.
- Mortimer-Schutts, I., 2005. "EU Regulatory and Supervisory Convergence: The Case for a Dual System with Choice," AEI-Brookings Joint Center for Regulatory Studies, Policy Discussion Paper.
- Naaborg, I., B. Scholtens, J. De Haan, H. Bol, and R. De Haas, 2004, "How Important Are Foreign Banks in the Financial Development of European Transition Countries," Emerging Market Finance 3, 99-125.

- Neumark, D., and S.A. Sharpe, 1992, "Market Structure and the Nature of Price Rigidity: Evidence from the Market for Consumer Deposits," Quarterly Journal of Economics 107, 657-680.
- OECD, 2005. "Improving Financial Literacy: Analysis of Issues and Policies," OECD.
- Olegaria, R., 2003, "Credit Reporting Agencies: A Historical Perspective," in M. Miller, ed.: Credit Reporting Systems and the International Economy (MIT Press, Cambridge MA).
- Ongena, S., and D.C. Smith, 2000, "Bank Relationships: a Survey," in P. Harker, and S. A. Zenios, eds.: The Performance of Financial Institutions (Cambridge University Press, London), 221-258.
- Ongena, S., and D.C. Smith, 2001, "The Duration of Bank Relationships," Journal of Financial Economics 61, 449-475.
- Ongena, S., D.C. Smith, and D. Michalsen, 2003, "Firms and their Distressed Banks: Lessons from the Norwegian Banking Crisis (1988-1991)," Journal of Financial Economics 67, 81-112.
- Peek, J., and E.S. Rosengren, 1996, "Small Business Credit Availability: How Important Is the Size of Lender?," in A. Saunders, and W. Ingo, eds.: Financial System Design: The Case for Universal Banking (Irwin Publishing, Homewood IL).
- Petersen, M.A., 2004. "Information: Hard and Soft," Northwestern University, Mimeo.
- Petersen, M.A., and R.G. Rajan, 1994, "The Benefits of Lending Relationships: Evidence from Small Business Data," Journal of Finance 49, 3-37.
- Petersen, M.A., and R.G. Rajan, 1995, "The Effect of Credit Market Competition on Lending Relationships," Quarterly Journal of Economics 110, 406-443.
- Petersen, M.A., and R.G. Rajan, 2002, "Does Distance Still Matter? The Information Revolution in Small Business Lending," Journal of Finance 57, 2533-2570.

- Radecki, L.J., 1998, "The Expanding Geographic Reach of Retail Banking Markets," FRBNY Economic Policy Review 15-34.
- Rajan, R.G., 1992, "Insiders and Outsiders: the Choice between Informed and Arm's-length Debt," Journal of Finance 47, 1367-1400.
- Rajan, R.G., and L. Zingales, 1998, "Financial Dependence and Growth," American Economic Review 559-586.
- Rosengren, E., 2003, "Comment on J. Dermine "European Banking: Past, Present, and Future"," in V. Gaspar, P. Hartmann, and O. Sleijpen, eds.: The Transformation of the European Financial System (ECB, Frankfurt), 109-116.
- Sapienza, P., 2002, "The Effects of Banking Mergers on Loan Contracts," Journal of Finance 329-368.
- Sapienza, P., 2004, "The Effects of Government Ownership on Bank Lending," Journal of Financial Economics 72, 357-384.
- Scott, J.A., 2003. "Soft Information, Loan Officers, and Small Firm Credit Availability," Temple University, Mimeo.
- Scott, J.A., and W.C. Dunkelberg, 2001. "Competition and Credit Market Outcomes: A Small Firm Perspective," Temple University, Mimeo.
- Seth, R., D.E. Nolle, and S.K. Mohanty, 1998, "Do Banks Follow their Customers Abroad?," Financial Markets, Institutions, and Instruments 7, 1-25.
- Sharpe, S.A., 1990, "Asymmetric Information, Bank Lending and Implicit Contracts: a Stylized Model of Customer Relationships," Journal of Finance 45, 1069-1087.
- Shy, O., 2002, "A Quick-and-Easy Method for Estimating Switching Costs," International Journal of Industrial Organization 20, 71-87.
- Slovin, M.B., S.A. Johnson, and J.L. Glascock, 1992, "Firm Size and the Information Content of Bank Loan Announcements," Journal of Banking and Finance 16, 35-49.

- Slovin, M.B., M.E. Sushka, and J.A. Polonchek, 1993, "The Value of Bank Durability: Borrowers as Bank Stakeholders," Journal of Finance 48, 289-302.
- Sohn, W., 2002. "Banking Relationships and Conflicts of Interest: Market Reactions to Lending Decisions by Korean Banks," Columbia University, Mimeo.
- Soledad Martinez Peria, M., A. Powell, and I. Vladkova Hollar, 2003. "Banking on Foreigners: The Behavior of International Bank Lending to Latin America, 1985-2000," World Bank, Mimeo.
- Stanley, T.O., C. Roger, and B. Mcmanis, 1993, "The Effects of Foreign Ownership of U.S. Banks on the Availability of Loanable Funds to Small Businesses," Journal of Small Business Management 31.
- Stein, J., 2002, "Information Production and Capital Allocation: Decentralized versus Hierarchical Firms," Journal of Finance 57, 1891-1922.
- Unite, A.A., and M.J. Sullivan, 2003, "The Effect of Foreign Entry and Ownership Structure on the Philippine Domestic Banking Market," Journal of Banking and Finance 27, 2323-2345.
- Vives, X., 1991, "Regulatory Reform in Europe," European Economic Review 35, 505-515.
- Von Thadden, E.L., 2004, "Asymmetric Information, Bank Lending, and Implicit Contracts: the Winner's Curse," Finance Research Letters 1, 11-23.
- Wrighton, J., 2003, Why Unity in Europe Hasn't Yet Extended to the Banking System, Wall Street Journal Europe (Paris).
- Yasuda, A., 2005, "Do Bank Relationships Affect the Firm's Underwriter Choice in the Corporate-Bond Underwriting Market?," Journal of Finance 60, 1259-1292.
- Zarutskie, R., 2004. "New Evidence on Bank Competition, Firm Borrowing and Firm Performance," Duke University, Mimeo.

6. Mergers in Financial Services (2000)

- Akhavein, Jalal D., Allen N. Berger and David B. Humphrey (1997) "The Effects of Megamergers on Efficiency and Prices: Evidence from a Bank Profit Function", <u>Review of Industrial Organisation</u>, Vol. 12, No. 1 (February), pp. 95-139.
- Amel, Dean F. and Nellie J. Liang (1997) "Determinants of Entry and Profits in Local Banking Markets", <u>Review of Industrial Organisation</u>, Vol. 12, No. 1 (February), pp. 59-78.
- Amel, Dean F. and Timothy H. Hannan (1999) "Establishing banking market definitions through estimation of residual deposit supply equations", Journal of Banking & Finance, Vol. 23, pp. 1667-1690.
- Andrews, Edmund L. (2000) "Deutsche Bank and Dresdner Set to Create a Powerhouse Deal is Expected to Lead to Dramatic Job Cuts", <u>International Herald Tribune</u>, March 8, page 1.
- Asahi Bank (1999) "Establishment of Financial Holding Company Formation of the first "Multi-Regional Bank" in Japan", Press Release, October 7 http://www.csweb.co.jb/TBK/asahibke/presse8/presse8a.htm
- Asahi Bank (2000) "Regarding Consolidation of Asahi Bank, Sanwa Bank & Tokai Bank", Press Release, March 14, http://www.asahibank.co.jp/ENGLISH/news/news000314.html
- Australian Competition & Consumer Commission (ACCC) (1996) "Merger Guidelines: A guide to the Commission's administration of the merger provisions (ss. 50, 50A) of the Trade Practices Act" (July).
- Australian Competition & Consumer Commission (ACCC) (1997) "Westpac Banking Corporation/Bank of Melbourne Limited Background to Decision on Merger Proposal", http://www.accc.gov.au/merger/fr_mergers.html
- Avkiran, Necmi Kemal (1999) "The evidence on efficiency gains: The role of mergers and the benefits to the public", <u>Journal of Banking & Finance</u>, Vol. 23, No. 7 (July), pp. 991-1013.

- Ayres, Ian (1985) "Rationalising Antitrust Cluster Markets", <u>Yale Law Journal</u>, Vol. 95, pp. 109-125.
- Baillie, A. Charles (Chairman and CEO of Toronto-Dominion Bank) (2000a)

 Letter to Konrad von Finckenstein (Commissioner of Competition)
 dealing "Proposed Acquisition of CT Financial Services Inc. by the
 Toronto-Dominion Bank Retail Banking", January 28,

 "http://strategis.ic.gc.ca/pics/ct/undre/pdf"
- Baillie, A. Charles (Chairman and CEO of Toronto-Dominion Bank) (2000b)

 Letter to Konrad von Finckenstein (Commissioner of Competition)

 dealing "Proposed Acquisition of CT Financial Services Inc. by the
 Toronto-Dominion Bank Credit Cards", January 28,

 "http://strategis.ic.gc.ca/pics/ct/undcce/pdf"
- Barber, Tony (2000) "Breuer's bet Deutsche Bank's planned merger with Dresdner Bank is an audacious effort to break free of German tradition and claim a place in the global investment banking elite", <u>Financial</u> Times, March 8, page 12.
- Barros, Pedro Pita (1999) "Multimarket competition in banking, with an example from the Portuguese market", <u>International Journal of Industrial</u> Organisation, Vol. 17, pp. 335-352.
- Berger, Allen N. and David B. Humphrey (1992) "Megamergers in banking and the use of cost efficiency as an antitrust defence", <u>The Antitrust Bulletin</u> (Fall), pp. 541-600.
- Berger, Allen N., John H. Leusner and John J. Mingo (1997) "The efficiency of bank branches", <u>Journal of Monetary Economics</u>, Vol. 40, pp. 141-162.
- Berger, Allen N., Anthony Saunders, Joseph M. Scalise and Gregory F. Udell (1997), "The Effects of Bank Mergers and Acquisitions on Small Business Lending", Federal Reserve Board, <u>Finance and Economics</u> Discussion Series (May).
- Berger, Allen N and Timothy H. Hannan (1998) "The Efficiency Cost of Market Power in the Banking Industry: A test of the "quiet life" and related hypotheses", <u>The Review of Economics and Statistics</u>, Vol. 80, No. 3 (August), pp. 454-465.

- Berger, Allen N., Rebecca S. Demsetz and Philip E. Strahan (1999) "The consolidation of the financial services industry: Causes, consequences, and implications for the future", <u>Journal of Banking & Finance</u>, Vol. 23, Issue 2-4 (February), pp. 135-194.
- Berger, Allen N., Robert DeYoung, Hesna Genay and Gregory F. Udell (2000) "Globalization of Financial Institutions: Evidence from Cross-Border Banking Performance", mimeo, forthcoming in <u>Brookings-Wharton</u> Papers on Financial Services, Vol. 3.
- Bhattacharya, Sudipto and Anjan V. Thakor (1993) "Contemporary Banking Theory", Journal of Financial Intermediation, Vol. 3, No. 1 (Oct.), pp. 2-50.
- Biggar, Darryl (2000) "Does Competition Law Enforcement Conflict with other Public Policy Objectives in the Banking Sector?", notes for a speech delivered at a conference entitled, "Regulation and Competition the role of a competition authority in a developing economy". This conference was joint hosted by the South African Competition Commission and Competition Tribunal and took place in Pretoria, April 17-18, 2000. Conference background materials, including notes for Mr. Biggar's speech, have been gathered together in a proceeding volume, which may be available from the South African Competition Commission (contact can be made over the Internet at "http://www.compcom.co.za".
- Boot, Arnoud W. A. (1999) "European lessons on consolidation in banking", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (February), pp. 609-613.
- Bruzzone, Ginevra and Michele Polo (1998) "Sources of Market Power in Banking: Theory and Implications for Antitrust Analysis" (December) unpublished mimeo [forthcoming as "Fonti di potere di mercato nel settore bancario: teoria e implicazioni per l'analisi economica", in M. Polo, editor, Industria Bancaria e Concorrenza, (Bologna: Il Mulino)].
- Buerkle, Tom (2000a) "A big leap for banking in Europe Britain's HSBC Buys CCF of France to gain foothold in Euro Zone", <u>International Herald Tribune</u>, April 3, pp. 1-15.
- Buerkle, Tom (2000b) "Click by Click, Finns Build the World's Largest Online Bank", <u>International Herald Tribune</u>, April 19, pp. 1 & 16.

- Burke, Jim (1998) "Divestiture as an antitrust remedy in bank mergers", Federal Reserve Board, <u>Finance and Economics Discussion Series</u>, 1998-14 (February).
- Canada, Office of the Superintendent of Financial Institutions Canada (1998)
 Report to the Minister of Finance Proposed Mergers between the Royal
 Bank of Canada and the Bank of Montreal, and the Canadian Imperial
 Bank of Commerce and the Toronto-Dominion Bank, December 10.
- Canada, Task Force on the Future of the Canadian Financial Services Sector (1998) "Organisational Flexibility for Financial Institutions: A Framework to Enhance Competition", <u>Background Paper #2</u> (September). Available through the Internet at: http://finservtaskforce.fin.gc.ca.
- Canadian Competition Bureau (1998) "The Merger Enforcement Guidelines as Applied to a Bank Merger", mimeo released July 15.
- Case Associates (1999) "Banking Mergers transactions costs and market definition", Casenote Competition Research Issue 16 (May).
- Cetorelli, Nicola (1999) "Competitive analysis in banking: Appraisal of the methodologies", Federal Reserve Bank of Chicago, <u>Economic</u> Perspectives, Vol. 23, #1 (1st Quarter), pp. 2-15.
- CNN (2000) "Deutsche, Dresdner merge German banks to form world No. 1; consumer unit to float amid strategy overhaul", "http://www.cnnfn.com/2000/03/09/europe/deutsche", March 9.
- Cruikshank, Don(1999) "Competition and Regulation: An Interim Report", and accompanying letter sent by Mr. Cruikshank, on July 22, 1999, to Gordon B. Brown, Chancellor of the Exchequer.
- Cyrnak, Anthony W. and Timothy H. Hannan (1999) "Is the cluster still valid in defining bank markets? Evidence from a new data source", <u>The Antitrust Bulletin</u>, Vol. 44, No. 2 (Summer), pp. 313-331.
- Dai-Ichi Kangyo Bank (1999) "Foundation of the Mizuho Financial Group...Through the Consolidation of the DKB, Fuji Bank, and IBJ", Press Release, December 22 "http://www.dkb.co.jp/english/press/199912/991222_1.html"

- Das, Sanjiv R. and Ashish Nanda (1999) "A theory of banking structure", <u>Journal of Banking & Finance</u>, Vol. 23, pp. 863-895.
- European Commission (1998) Commission Decision of 24/06/98 declaring a concentration to be compatible with the common market (Case No. IV/M.1172 Fortis AG/Generale Bank) according to Council Regulation (EEC) No 4064/89.
- Fels, Allen (1998) "Mergers and Acquisitions in the Banking Industry: the ACCC Perspective", presentation to the Credit Suisse First Boston, Australasian Banking Conference, Melbourne, September 25.
- <u>Financial Times</u> (2000a) "Deutsche and Dresdner set to merge in search for growth Allianz involved in three-way swap that will transform Europe's financial landscape", March 8, page 1.
- Financial Times (2000b) "Deutsche and Dresdner" (lead editorial), March 8, p.12.
- Flannery, Mark J. (1999) "Comment on Milbourn, Boot, and Thakor", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (February), pp. 215-220.
- German Federal Ministry of Economics and Technology (BMWI) (1992)
 "Report on Experience with Ministerial Approval Proceedings for Company Mergers", Supplement to Monthly Report 7.
- Goddard, Garry K. (2000) "Bank Mergers Policy and Competition Law Enforcement: A Comparison of Recent Experience in Australia and Canada", <u>Banking and Finance Law Review</u>, Vol. 15 (Winter), pp. 181-247.
- Guerin-Calvert, Margaret E. (1996) "Current merger policy: banking and ATM network mergers", <u>The Antitrust Bulletin</u>, Vol. 44, No. 2 (Summer), pp. 289-321.
- Gugler, Philippe (2000) "Merger Review in Switzerland: the United Bank of Switzerland (UBS) Case", forthcoming in the <u>International Business Law Journal</u> (No. 5, 2000).
- Hall, William (2000) "Credit Suisse to focus on e-commerce Swiss bank sets sights on becoming Europe's top financial services brand", <u>Financial Times</u>, March 3, page 15.

- Hancock, Diana, David B. Humphrey and James A. Wilcox (1999) "Cost reductions in electronic payments: The roles of consolidation, economies of scale, and technical change", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (Feb.) pp. 391-421.
- Hanweck, Gerald A. and Bernard Shull (1999) "The bank merger movement: efficiency, stability and competitive policy concerns", <u>The Antitrust Bulletin</u>, Vol. 44, No. 2 (Summer), pp. 251-284.
- Hargreaves, Deborah and Tony Barber (1999) "EU attack on German support for banks to create a furor", Financial Times, October 22.
- Harnischfeger, Uta (2000) "Merger puts spotlight on retail weaknesses", Financial Times, March 8, page 16.
- Heitfield, Erik A. (1999) "What do interest rate data say about the geography of retail banking markets?", <u>The Antitrust Bulletin</u>, Vol. 44, No. 2 (Summer), pp. 333-347.
- Hughes, Joseph P., William W. Lang, Loretta J. Mester, Choon-Geol Moon (1999) "The dollars and sense of bank consolidation", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (February), pp. 291-324.
- Humphrey, David and Santiago Carbo Valverde (1999) "Cost & Profits Plus Convenience & Prices: Measuring the gains from financial institution mergers", unpublished manuscript (November).
- <u>International Herald Tribune</u> (2000) "Deutsche Bank Cuts 1 200 Jobs Branches are Reduced to Invest More in Internet Services", January 5, page 13.
- Iskandar and Charles Pretzlit (2000) "HSBC wins race for French Bank UK-based group trumps Dutch Bancassurer ING with \$ten bn bid for Credit Commercial de France", April 3, page 1.
- Jayaratne, Jith and John Wolken (1999) "How important are small banks to small business lending? New evidence from a survey of small firms", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (February) pp. 427-458.
- Kramer, Robert (1999) "Mega-Mergers" in the Banking Industry", address before the ABA Antitrust Section, Washington, D. C., April 14.

- Kwast, Myron L. (1999) "Bank mergers: What should policymakers do?", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (February), pp. 629-636.
- Kwast, Myron L, Martha Starr-McCluer, and John D. Wolken (1997) "Market definition and the analysis of antitrust in banking", <u>The Antitrust Bulletin</u> (Winter), pp. 973-995.
- Mandel-Campbell, Andrea (2000) "Competition to buy banks intensifies", Financial Times, March 6, page 2.
- Milbourn, Todd T., Arnound W. A. Boot and Anjan V. Thakor (1999)
 "Megamergers and expanded scope: Theories of bank size and activity diversity", <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4, pp. 2-4.
- Moore, Jacqueline (2000) "European banks set out online plans", <u>Financial Times</u>, March 15, page 14.
- Nehmzow, Claus (1997) "The Internet Will Shake Banking's Medieval Foundations", <u>Journal of Internet Banking and Commerce</u>, Vol. 2, "http://www.arraydev.com/commerce/JIBC/9702-01.htm".
- OECD (1997) <u>The OECD Report on Regulatory Reform Summary</u> (Paris: OECD, June 1997).
- OECD (2000a) "Cross-Border Trade in Financial Services: Economics and Regulation", <u>Financial Market Trends</u>, No. 75 (March), pp. 23-60. This article is the joint work of a Steering Group under the Committee on Financial Markets.
- OECD (2000b) "Mergers and Acquisitions in the Financial Services Sector", <u>Financial Market Trends</u>, No. 75 (March), pp. 123-140. This article was prepared by Stephen Lumpkin, Senior Economist in the Financial Affairs Division of the OECD's Directorate for Financial, Fiscal, and Enterprise Affairs.
- OECD/CLP (1992) "Strategic Alliances: The Implications for Competition Policy".
- OECD/CLP (1996) "Failing Firm Defence", <u>Series Roundtables on Competition Policy</u>, No. 2 available at "http://www.oecd.daf/clp/roundtables/fail00.htm".

- OECD/CLP (1998a) Executive Summary to WP2 Roundtable, "Enhancing the role of competition in the Regulation of Banks" in <u>Series Roundtables on Competition Policy</u>, No. 17 available at "http://www.oecd.daf/clp/roundtables/bank00.htm".
- OECD/CLP (1998b) "Enhancing the role of competition in the Regulation of Banks", Series Roundtables on Competition Policy, No. 17 available at "http://www.oecd.daf/clp/roundtables/bank00.htm".
- OECD/CLP (1999a) "Relationship between regulators and competition authorities", Series Roundtables on Competition Policy, No. 22 available at "http://www.oecd.daf/clp/roundtables/oligo00.htm"
- OECD/CLP (1999b) "Oligopoly", <u>Series Roundtables on Competition Policy</u>, No. 25 available at "http://www.oecd.daf/clp/roundtables/relat00.htm".
- Office of Fair Trading (1999) "Market Definition", Guideline issued in relation to the Competition Act 1998", OFT 403 (March).
- Peristiani, Stavros (1997), "Do Mergers Improve the X-Efficiency and Scale Efficiency of US Banks? Evidence from the 1980s", <u>Journal of Money</u>, <u>Credit and Banking</u>, (August), pp. 326-337.
- Petersen, Mitchell A. (1999) "Comment on Jayaratne and Wolken(1999), <u>Journal of Banking & Finance</u>, Vol. 23, Issues 2-4 (February), pp. 459-462.
- Pilloff, Steven J. (1999a) "Multimarket Contact in Banking", <u>Review of Industrial Organisation</u>, Vol. 14, No. 2 (March), pp. 163-182.
- Pilloff, Steven J. (1999b) "Does the Presence of Big Banks Influence Competition in Local Markets?", <u>Journal of Financial Services Research</u>, Vol. 15, No. 3 (May), pp. 159-178.
- Pilloff, Steven J. (1999c) "Money market mutual funds: are they a close substitute for accounts at insured depository institutions?", <u>The Antitrust Bulletin</u>, (Summer), pp. 365-385.
- Prager, Robin A.and Timothy H. Hannan (1998) "Do Substantial Horizontal Mergers Generate Significant Price Effects? Evidence from the banking industry", <u>Journal of Industrial Economics</u>, Vol. XLVI, No. 4 (December), pp. 433-452.

- Pretzlik, Charles and Uta Harnischfeger (2000) "Deutsche Bank and Dresdner to tackle branch networks", <u>Financial Times</u>, March 8, page 16.
- Prowse, S. (1997) "Corporate control in commercial banks", <u>The Journal of Financial Research</u>, Vol. 4, pp. 509-52.
- Radecki, Lawrence J. (1998) "The Expanding Geographic Reach of Retail Banking Markets", Federal Reserve Board of New York, <u>Economic</u> Policy Review, Vol. 4, No. 2 (June), pp. 15-34.
- Rhoades, Stephen A. (1997) "Have barriers to entry in retail commercial banking disappeared?", <u>The Antitrust Bulletin</u> (Winter), pp. 997-1013.
- Rhoades, Stephen. A. (1998) "The efficiency effects of bank mergers: An overview of case studies of nine mergers", <u>Journal of Banking & Finance</u>, Vol. 22, No. 3 (March), pp. 273-291.
- Robinson, Constance K. (1996) "Bank Mergers and Antitrust", address before the 31st Annual Banking Law Institute, Washington, D.C., May 30.
- Rodrigues, Winston (1999) "The ACCC Approach in Recent Bank Mergers", Consumer Law Centre Victoria, Financial Services Network Conference 1999, Melbourne, March 18.
- Rozanski, George (1999) Unpublished notes for a workshop on competition law applied to the Russian financial sector, Moscow, December 1-3.
- Rozanski, George and Dan Rubinfeld (1997), "Mergers and Other Competition Policy Issues in Banking", an Appendix to the United States Submission to the OECD Competition Law and Policy (Working Party 2) Roundtable held in February 1998. The version cited in this paper is included in OECD/CLP, (1998b).
- Schmid, John (2000a)"German Bank Deal Raises Job Alarms", <u>International Herald Tribune</u>, March 9, page 11.
- Schmid, John (2000b) "Dresdner Calls Off Deutsche Merger Plan that would dismantle Kleinwort Benson Sinks Deal", <u>International Herald Tribune</u>, April 6, page 1.

- Schmid, John and Philip Segal (1999) "Giant Banks Prepare for a US Onslaught Deregulation to Unleash New Competition", <u>International Herald</u> Tribune, October 25, page 1.
- Tait, Nikki (2000) "Oil groups and banks to form internet link", <u>Financial Times</u>, March 22, page 20.
- Tett, Gillian (2000) "Three more banks likely to merge as Japan consolidates", Financial Times, March 14, page 1.
- United States, Department of Justice and Federal Trade Commission (1997)
 "Horizontal Merger Guidelines" (Issued: April 2, 1992; revised: April 8, 1997). Can be downloaded from
 "www.usdoj.gov/atr/public/guidelines/horiz_book/hmg1.htr".
- United States, Federal Trade Commission (1999) "A study of the Commission's divestiture process" (August),

 "http://www.ftc.gov/os/1999/9908/divestiture.pdf"
- United States, Office of the Comptroller of the Currency (OCC) (1995) "Bank Merger Competitive Review Introduction and Overview", OCC Advisory Letter AL 95-4, issued July 18.
- Von Finckenstein, Konrad (1998a) Letter of December 11 to John E. Cleghorn (Chairman and CEO, Royal Bank of Canada) and Matthew W. Barrett (Chairman and CEO, Bank of Montreal).
- Von Finckenstein, Konrad (1998b) Letter of December 11 to Mr. A. L. Flood (Chairman and CEO, Canadian Imperial Bank of Commerce) and Mr. A. Charles Baillie (Chairman and CEO, Toronto-Dominion Bank).
- Von Finckenstein, Konrad (2000) Letter of January 28 to A. Charles Baillie (Chairman and CEO of Toronto-Dominion Bank) and Edmund Clark (President and CEO of Canada Trust)

 "http://strategis.ic.gc.ca/SSG/ct01687e.html"
- White, Lawrence J. (1996) "Banking, mergers and antitrust: historical perspectives, and the research tasks ahead", <u>The Antitrust Bulletin</u>, Vol. 41, No. 2 (Summer), pp. 323-337.