INTERNATIONAL COMPETITION NETWORK
ANTITRUST ENFORCEMENT IN REGULATED SECTORS
SUBGROUP 1

AN INCREASING ROLE FOR COMPETITION IN THE REGULATION OF BANKS

BONN, JUNE 2005

This Report has been drafted by Darryl Biggar (Australian Competition and Consumer Commission, ACCC) and Alberto Heimler (Italian Antitrust Authority and co-chair of subgroup 1 of the AERS Working Group). The competition authorities of Brazil, Hungary, Indonesia, Mexico, South Africa and South Korea provided very useful inputs. Comments and suggestions were received from ICN members and from the following individuals: Ginevra Bruzzone (Assonime), Frédéric Jenny (Professor of economics at ESSEC and co-chair of subgroup 1 of the AERS Working Group), Paul Wachtel (New York University) and, in particular, Massimo Marchesi. The ICN AERS Working Group, subgroup 1, thanks very much those that contributed.

I. INTRODUCTION

1. Banking regulation originates from microeconomic concerns over the ability of bank creditors (depositors) to monitor the risks originating on the lending side and from micro and macroeconomic concerns over the stability of the banking system in the case of a bank crisis. In addition to statutory and administrative regulatory provisions, the banking sector has been subject to widespread "informal" regulation, i.e., the government's use of its discretion, outside formalized legislation, to influence banking sector outcomes (for example, to bail out insolvent banks, decide on bank mergers or maintain significant State ownership).

2. Banks in one form or another have been subject to the following non exhaustive list of regulatory provisions: 1) restrictions on branching and new entry; 2) restrictions on pricing (interest rate controls and other controls on prices or fees); 3) line-of-business restrictions and regulations on ownership linkages among financial institutions; 4) restrictions on the portfolio of assets that banks can hold (such as requirements to hold certain types of securities or requirements and/or not to hold other securities, including requirements not to hold the control of non financial companies); 5) compulsory deposit insurance (or informal deposit insurance, in the form of an expectation that government will bail out depositors in the event of insolvency); 6) capital-adequacy requirements; 7) reserve requirements (requirements to hold a certain quantity of the liabilities of the central bank); 8) requirements to direct credit to favored sectors or enterprises (in the form of either formal rules, or informal government pressure); 9) expectations that, in the event of difficulty, banks will receive assistance in the form of "lender of last resort"; 10) special rules concerning mergers (not always subject to a competition standard) or failing banks (e.g., liquidation, winding up, insolvency, composition or analogous proceedings in the banking sector); 11) other rules affecting cooperation within the banking sector (e.g., with respect to payment systems).

3. In recent years regulation in banking has become less pervasive and has shifted from structural regulation to other more market oriented forms of regulation. As a consequence competition has come to play a very important role in the allocation of credit and in the improvement of financial services. The capital requirements framework created in the context of the Basel committee paved the way to the development of stronger competition in banking. It is unquestionable that all over the world banks now face greater competition both from new entrants in the banking sector and from other financial companies.

4. Competition authorities have not been much involved in the process of liberalization of banking. Moreover, in several countries the enforcement of antitrust rules until very recently has not been applicable to banking because of sectoral exceptions.

5. In this light, the purpose of this report is:

- to assist policy makers and enforcement authorities (in their competition advocacy function) in their efforts to promote competition oriented regulatory reform in banking;

- to assist policy-makers and enforcement authorities (in their competition advocacy function) in promoting an environment where competition law is fully applicable to banking and where there is an appropriate institutional setting to that end; and

- to assist competition enforcement authorities in the enforcement of competition law in this sector, with a special emphasis on merger control.

6. The structure of the report is as follows. First, it briefly reviews the recent history of banking regulation (section II). Second, it discusses (under the perspective of competition authorities) the market failures banking are exposed to, their macroeconomic consequences (section III), and the most common regulatory instruments introduced to address them (section IV). Then, the report examines the impact of recent liberalizations on market power in banking (section V). A brief description of banking issues in developing countries follows (section VI). Finally, the report turns to competition issues, addressing first the application and scope of competition law (section VII) and then examining issues of enforcement of competition law, with a particular emphasis on merger control (section VIII). The final section concludes with a number of recommendations.

II THE RECENT HISTORY OF REGULATORY REFORM IN BANKING

7. In the early 70s financial systems "were characterized by important restrictions on market forces which included controls on the prices or quantities of business conducted by financial institutions, restrictions on market access, and, in some cases, controls on the allocation of finance amongst alternative borrowers. These regulatory restrictions served a number of social and economic policy objectives of governments. Direct controls were used in many countries to allocate finance to preferred industries during the post-war period; restrictions on market access and competition were partly motivated by a concern for financial stability; protection of small savers with limited financial knowledge was an important objective of controls on banks; and controls on banks were frequently used as instruments of macroeconomic management".[1]

8. Since the mid 70s there has been a significant process of regulatory reform in the financial systems of most countries. This process involved a shift towards more market-oriented forms of regulation and involved partial or complete liberalization of the following:

- *interest rate controls*

  Until the early 1970s controls on borrowing and lending rates were pervasive in most countries. These controls typically held both rates below their free-market levels. As a result, banks rationed credit to privileged borrowers. By 1990 only a handful of countries retained these controls.

- *quantitative investment restrictions on financial institutions*

  Investment restrictions on banks took a variety of forms, including requirements to hold government securities, credit allocation rules, required lending to favored institutions and controls on the total volume of credit expansion. Compulsory holdings of government securities, as well as having a prudential justification, also acted as a disguised form of taxation in that it allowed governments to keep security yields artificially low. With some exceptions these controls were largely eliminated by the early 1990s.

[1] Edey and Hviding (1995), p4.

- *line-of-business restrictions and regulations on ownership linkages among financial institutions*

  Although important line-of-business restrictions still remain in place in many countries, the role of these restrictions has been significantly eroded or, in some cases, entirely eliminated. For example, the separation of savings-and-loans and commercial banks has been largely eliminated in many countries, as has the distinction between long-term and short-term credit institutions in Italy and the legal separation of various types of credit suppliers in Japan. Bank branching restrictions were phased out in a number of European countries by the early 1990s. In the US "breaking down the barriers imposed by the (1933) Glass-Steagall Act the Gramm-Leach-Bliley Financial Service Modernization Act of 1999 permits banks, securities firms, and insurance companies to affiliate within a new structure – the financial holding company"[2].

- *restrictions on the entry of foreign financial institutions*

  There has been significant liberalization of cross-border access to foreign banks. In particular, there are now in place a number of international agreements on trade in banking services, including GATS, NAFTA and the EC. In particular, in the European Union, the second banking directive (89/646/EEC) forbade the obligation for banks established in one Member State to seek authorization from other Member States when they intended to establish a branch in their territory. In many countries however the entry of foreign banks is still made more difficult than that of domestic ones.

- *controls on international capital movements and foreign exchange transactions*

  Liberalization of controls on capital movements is now virtually complete in OECD countries and in many developing countries as well[3]. Some controls remain on long-term capital movements, particularly with respect to foreign ownership of real estate and foreign direct investment. There also remain important restrictions on international portfolio diversification by pension and insurance funds.

The origins of regulatory reform

9. Regulatory reform was driven by a number of inter-related factors, including:

- the diminishing effectiveness of traditional controls due to financial innovation (including the difficulty of isolating domestic markets) and rapid technological development;
- the development of various types of regulatory avoidance (such as the development of offshore financial centers and off-balance-sheet methods of financing);
- competition between international financial centers;

[2] See Crockett *et al.* (2003)
[3] The beneficial effects of capital movements liberalization for developing countries are still controversial.

- competition with non banks for many services (consumer credit; small business loans; mortgages; etc.);

- competition between financial institutions under different regulatory environments; and, finally,

- multilateral agreements liberalizing cross-border banking activities.

Benefits from regulatory reform

10. Regulatory reform has raised efficiency and lowered costs in the financial services sector:
    - First, the removal of regulatory restrictions gave financial firms more freedom to adopt the most efficient practices and to develop new products and services.

    - Second, regulatory reform increased the role of competition, which in turn spurred reductions in margins in financial services and raised efficiency by forcing the exit or consolidation of relatively inefficient firms and by encouraging innovation[4].

11. Regulatory reform furthermore contributed to:

    - declining relative prices for financial services and productivity growth well in excess of that for the economy as a whole[5];

    - considerable improvements in the quality, variety and access to new financial instruments and services;

    - improved world allocation of resources due to the removal of the barriers to international capital flows;

    - significant improvements in growth performance in a number of developing countries[6].

Regulation has been maintained but has progressively been reformed

12. The progressive liberalization from structural regulatory restrictions such as the ones mentioned above has not led to the deregulation of banking activity, but to the adoption of new instruments of prudential regulation more compatible with competition in the banking sector. The first and most known milestone of this new trend in regulation is the Basel Accord of July 1988 which required the major international banks in a group of 12 countries to attain an 8% ratio between capital and risk-weighted assets from the beginning of 1992.

13. Subsequently, the increasing range and sophistication of financial instruments made the limitations of the probably too simple design of the 1988 capital-adequacy framework become apparent. Already in 1997 the Basel Committee on Banking Supervision, seeking to further enhance banking supervision in both G10 countries and a number of emerging economies, released a set of "Core Principles" which set out minimum requirements for banking

---

4 OECD (1997[a]), p83.

5 "Estimates indicate that overall financial service sector productivity increased at an annual rate of nearly 4 per cent in the US over 1980-93, nearly three times the rate of the economy as a whole". OECD (1997[a]), p. 84.

6 See among others and more recently Claessens amd Laeven (2005).

supervision. The document also sets out an extensive list of recommended powers of banking supervisory authorities.

14. Finally, in June 2004 the Basel Committee on Banking Supervision issued a revised framework (Basel 2) for measuring capital adequacy and for identifying new minimum capital requirements for banks (Pillar 1). The new framework encourages banks to develop their own in-house risk-management systems to compute in a much more precise and sophisticated way their minimum capital requirements , with supervisory oversight present in the endorsement of the adequacy of the system. The proposals of the Committee, expected to be progressively implemented from the end of 2006, also introduce two additional pillars for banking regulation that are expected to become more and more important in complementing capital adequacy requirements. Pillar 2 introduces a continuous dialogue between banks and their supervisor in order to follow and accommodate changing and evolving business practices. Pillar 3 calls for improving the flow of information to the public on banks financial conditions, so that market discipline can exercise a greater role in reducing excessive risks in banking activities.

III. BANKING REGULATION: THE RISK OF BANK RUNS AND OF MORAL HAZARD IN BANKING AND THEIR EFFECTS ON THE ECONOMY

15. It is widely accepted that in the absence of market failures, open and competitive markets yield strong incentives to efficiently meet the demands of consumers and to adapt to changing demands and technology over time. With very few exceptions, in the absence of a market failure there is no economic justification for regulation.

16. The most important rationale for regulation in banking is to address concerns over the safety and stability of financial institutions, the financial sector as a whole, or the payments system. The description and the evaluation that follows necessarily reflect the views of competition authorities. With only one exception, no bank regulator has reviewed this Report which, therefore, does not necessarily reflect the positions and the opinions of bank regulators.

The risk of bank runs

17. All banks operate in conditions of fractional liquidity reserve. The great majority of banks liabilities are very liquid deposits redeemable on demand. The great majority of their assets are instead much more illiquid loans. This situation leads to the problem that if all depositors demanded their deposits back at the same time, any bank (even if perfectly solvent) would face serious problems in meeting its obligations *vis à vis* its depositors. A single bank might obtain refinancing on the financial market but the problem would severely persist in cases of low liquidity on the market or if the issue concerned a big portion of the banking sector.

18. It is well known in the literature that whenever depositors start fearing the insolvency of their bank, their first most common reaction is to go and withdraw their deposits creating serious problems to the banks. Such behavior is normally referred to as a bank runI[7].

[7] There are two alternative theories that have been proposed for explaining bank runs. Some authors, for example Diamond and Dybvig (1983), consider bank runs as a sunspot phenomenon, unrelated to any underlying economic variables. Others, for example Bryant (1980), suggest that bank runs originate from some negative information (either right or wrong) depositors have on the quality of the assets of their bank.

The risk of excessive risk taking (moral hazard) in banking

19. Banks grant loans normally financed by the deposits they received. This is by itself a powerful incentive for banks to grant credit in a not sufficiently prudent way and to take in too much risk. In fact it is well known in the literature that with debt financing, while the risk of failure of the financed investment is mostly carried out by the bank depositors, in the case of success profits accrue mostly to the bank[8]..A good example of this deviating behavior is the Asian financial crisis of 1997 that is mentioned further below. In general, however, this incentive is somehow mitigated by the possibility that the market, both via depositors and other banks, could monitor the risks assumed by the bank's management.

20. The main purpose of regulation is to avoid the highly negative consequences for the economy of widespread bank failures. There are two main strands of arguments for banking regulation. – The first focuses on the systemic dangers of bank failures, while the second on the need for security and stability in the payments system.

Systemic dangers of a bank failure

21. The main argument for bank regulation focuses on the possibility of systemic or system-wide consequences of a bank failure. i.e., the possibility that the failure of one institution could lead to the failure of others. This argument is summarized by Feldstein as follows:

> "The banking system as a whole is a 'public good' that benefits the nation over and above the profits that is earns for the banks' shareholders. Systemic risks to the banking system are risks for the nation as a whole. Although the management and shareholders of individual institutions are, of course, eager to protect the solvency of their own institutions, they do not adequately take into account the adverse effects to the nation of systemic failure. Banks left to themselves will accept more risk than is optimal from a systemic point of view. That is the basic case for government regulation of banking activity and the establishment of capital requirements".[9]

22. It is possible to distinguish two mechanisms by which the failure of one bank could lead to the failure of other banks or other non-bank firms:

(a) the failure of one bank leading to a decline in the value of the assets sufficient to induce the failure of another bank ("consequent failure") and

(b) the failure of one bank leading to the failure of another fully solvent bank, through some contagion mechanism ("contagion failure")

Consequent failure

23. The failure of a bank, like the failure of any other firm in the economy, may, of course, lead to the failure of other firms exposed towards the failing bank. The loss of value associated with the failure leads to a reduction in the value of assets held by its stakeholders. If this loss in value is sufficiently large and/or the stakeholders themselves are near enough to failure, the stakeholders may, in turn, fail.[10]

---

[8] See Dewatripont and Tirole (1994).
[9] Feldstein (1991),
[10] See Kaufman (1996) , p. 25.

29. Although there are, in general, strong incentives to diversify, in the case of a large firm there may be a number of other firms (such as its suppliers) who are unable to diversify adequately and whose survival is threatened by the large firm's insolvency. However, in general, banks *are* able to diversify. They are not constrained to retain their assets with a bank that is in difficulty. The decision to invest in a distressed bank is a risk-management decision like all other investment decisions. Provided the investing bank is aware of the risk it is taking, there is no externality. The externality can however originate from the fact that full information on potential risk is not immediately, correctly and easily achievable.

Contagion failure

24. A majority of authors argue that there is an important asymmetry between the information available to banks and the information available to depositors and other outside investors. "Banks can utilize economies of scale and specialization to reduce the transactions costs of determining the probability that a borrower will not repay a loan as promised, to monitor the borrower's performance and circumstances, and to take effective actions to reduce the probability and cost of defaults. Thus banks have information about the value of loans that depositors and other outside investors do not have.".[11]

25. In the most extreme case of this information asymmetry, depositors cannot distinguish solvent from insolvent banks. As a result, news that one institution is failing can be interpreted as information that other institutions are in difficulty. "Depositors rush to make withdrawals from solvent as well as insolvent banks since they cannot distinguish between them".[12] It is possible that the failure of one institution may lead to a generic flight of funds from all institutions. The available evidence does not always suggests that this has happened.

Dangers to the soundness of the payments system

26. We turn now to the arguments relating to the stability and soundness of the payments system. These arguments are summarised in the following comment:

> "An efficient payments system, in which transferability of claims is effected in full and on time, is a prerequisite for an efficient macroeconomy. Disruptions in the payments system carry the risk of resulting in significant disruptions in aggregate economic activity. To some observers, instability in the payments system is more threatening than instability in deposits. This fear appears to reflect the larger dollar volume of daily payments, the speedy movement of the funds and the unfamiliarity of the clearing process". [13]

27. Until recently the standard form of settlement between banks was end-of-day net settlement. Banks would accumulate their obligations to other banks throughout the day in order to settle the smaller net obligations at the end of the trading day. The risk of this form of settlement is that it usually requires participants to grant unsecured and unlimited credit to other participants during the day until final settlement occurs. Credit extended to a single party can sometimes exceed a bank's entire capital. Like other forms of credit, the potential exists for default. If the expected payment to the bank extending credit does not materialize in full and on

[11] Benston and Kaufman (1995), p216.
[12] Mishkin (1991),.
[13] Benston and Kaufman (1995), p37.

a timely basis, previous payments may need to be reversed or unwound. "This may be complex and time-consuming and cause 'gridlock' in the payments system that interrupts the smooth flow of trade. Moreover, if the losses to the paying bank from customer defaults were large enough to drive it into insolvency, the receiving banks would experience losses, which might be sufficient to drive them to insolvency if these losses exceed their capital".[14]

28. An obvious candidate solution to this kind of problems is to prevent the intraday build-up of credit exposures by insisting that inter-bank payments occur at the same time as the exchange of the corresponding assets. This is known as "real-time" settlement. Such "real-time" trading systems have already been implemented in some countries.

29. In the case of international transactions, the problem of intra-day exposure is however somewhat more complicated. The problem arises because of the different timing for daily settlement in each national bank system. For example, in a NZ Dollar/US Dollar foreign exchange transaction, the NZ$ leg must be settled even before the US system for settling the US$ leg is open for the day. This gives rise to what is known as "Herstatt risk", named after the failure of a small German bank, Bankhaus Herstatt in 1974. This bank was active in the foreign exchange markets. It defaulted after receiving deutschmarks from international banks but before the matching US dollar leg was processed later in the day. This left its counterparties exposed to the full value of the Deutsche marks delivered. This event severely disrupted CHIPS, the main clearing system for US dollars, led to a collapse in trading in the US dollar/deutsche mark market and even resulted in disorder in the inter-bank money markets. This problem is widely recognised and is a focus of attention of central banks around the world.

IV. STANDARD INSTRUMENTS OF BANK REGULATION

30. This section of the paper provides a description of the most standard instruments of bank regulation: deposit insurance, capital adequacy requirements and lender of last resort. These three policies are linked one with the other. Deposit insurance protects the smallest depositors from a bank bankruptcy and prevents bank runs. Capital adequacy requirements are necessary in order to make sure that bank managers follow a responsible credit policy, in the absence of an effective control on the part of depositors. Lender of last resort policies further reduce the risk of banks bankruptcies providing banks with Emergency Liquidity Assistance facilities that are designed to avoid that temporary situations of illiquidity lead to the insolvency of the bank.

Deposit insurance

31. Deposit insurance is a guarantee that all or part of a depositor's debt with a bank will be honored in the event of bankruptcy. The specific form of insurance schemes can vary in a number of ways, including the fee structure (flat fee versus variable, risk-related fees); the degree of coverage (full versus partial coverage, maximum limits); funding provisions (funded versus unfunded systems); public versus private solutions; compulsory versus voluntary participation.

32. Deposit insurance reduces (and in most cases eliminates entirely) the incentive to "run" on the bank in the event of financial difficulty. Therefore it reduces the possibility that a

[14] Benston and Kaufman (1995), p37.

temporary situation of illiquidity and rumors on the insolvency of the bank actually lead to the failure of the bank. Furthermore, deposit insurance prevents the "chain reaction" that can also be started associated by the run on a single bank, so that it reduces the possibility of contagion in the banking system.

33. A drawback of its introduction is however the fact itself that from the point of view of the depositor, deposit insurance makes all banks equally attractive. It almost completely removes the incentive on the depositor to determine the risk of a bank and the need for the bank to compensate the depositor for bearing bank-specific risk by including a bank-specific risk premium in the interest paid to the depositor. Similarly, the depositor faces little incentive to diversify her portfolio of assets held in banks.[15]

34. The effect of deposit insurance on the incentives of the bank depends upon the nature of the insurance contract (and also on any other complementary regulatory measures). In particular, the effect of the deposit insurance on the bank will depend on whether or not the insurance premium paid by the bank depends on the individual bank's risk.

35. In the case where the premium is completely unrelated to the risk of a particular bank (i.e., the "fixed fee" system), there is clearly an incentive for the bank to attempt to increase its profits by either increasing its revenues (by lending to higher return but riskier projects) or by reducing its costs (by reducing its reserves). Both actions increase its risk. This is the well-known "moral hazard" problem of deposit insurance. Fixed fee deposit insurance creates incentives for banks to take on more risk in their operations than they would without deposit insurance. "This effect was apparent almost as soon as deposit insurance was adopted in the 1930s, when bank capital ratios dropped from 15% to around 6%"[16].

36. Deposit insurance, especially if extended to all deposits, by reducing the market incentives for prudent management, may have the perverse incentive of making banks riskier.[17] When this moral hazard extends across all financial institutions, the macroeconomic consequences can be very significant. .

37. The problem of moral hazard and the need for additional regulatory measures can be reduced if the insurance premium is related to the risk of the insured bank. "An efficiently organized insurer would graduate insurance premia according to the risk of the bank's asset portfolio and the adequacy of its capital holdings. Such a system would minimize the danger of

[15] At least as long as the size of the deposit is less than any "ceiling" on the amount per deposit insured (100,000 dollars in the US). Note however how this "ceiling" is only 20,000 Euros in the EU exactly in the attempt not to exacerbate such problem.

[16] Parry (1992) , p 14. The consequences of the "moral hazard" can be clearly seen in the "S&L crisis" in the US of the early 1980s. In the case of S&Ls "the insurance premium was set by statute in 1950 at 1/12 of 1% of the assessable deposits and was the same for all insured institutions regardless of the riskiness of their assets or the size of their equity capital or the capability of their management. "The holder of an insured account had no reason to be concerned with the safety or soundness of the particular institution in which he had invested, or to require a higher return commensurate with higher risk. ... From the standpoint of the management and owners of an insured S&L, this system created a constant inducement to take added risks with their expected higher returns, depositors would not demand higher interest and the FSLIC could not raise its premium in response". Scott (1989), p37.

[17] "Ironically, the introduction of government regulations and institutions in the US intended to provide protection against the fragility of banks appears to have unintentionally increased both the fragility of banks and their breakage rate. By providing a poorly designed and mis-priced safety net under banks for depositors, first through the Federal Reserve's discount window lender of last resort facilities in 1914, and then reinforced by the FDIC's deposit guarantees in 1934, market discipline on banks was reduced substantially. As a result, the banks were permitted, if not encouraged, to increase their risk exposures both in their asset and liability portfolios and by reducing their capital ratios. …. T(t)his represents a classic and predictable moral hazard behavior response". Kaufman (1996), p22.

adverse incentive effects ... Under such a system, the individual bank bears the consequences of a higher risk portfolio or a lower capital-deposit ratio, in the form of a higher insurance fee."[18]

Capital adequacy requirements

38. One regulation which exists in most countries is some form of capital adequacy requirement. "Capital adequacy requirements can take a variety of forms. Most countries know a minimum level of required capital (an absolute amount). Beyond that, many countries require the maintenance of some capital - or solvency - ratio; that is, a minimum ratio between capital and an overall balance sheet magnitude, such as total assets or liability, or some weighted measure of risk assets."[19]

39. However, capital-adequacy requirements do have certain difficulties:

(a) First, it is difficult to design capital-adequacy requirements in a sufficiently sophisticated way. For example even though the 1988 Basel rules on capital adequacy for banks categorizes assets and assigned a "risk-weighting" inevitably differences in risk were overlooked between individual assets. One consequence was that banks tended to search for the most risky assets within a risk class, encouraging "banks to go up the yield curve in pursuit of a return on capital".[20] In effect, the moral hazard problem re-emerged within the constraints of each regulatory risk class.

(b) A particular problem can arise with inter-bank lending. If inter-bank lending is treated favorably for capital-adequacy purposes in order to promote the liquidity on the market, banks may, perversely, be given incentives to lend to other banks in difficulty, increasing the risk of contagion and removing one of the more important disciplines on bank risk-taking.

(c) Third, with technological advances, innovation in financial products is rapid. Regulations, in contrast, might be changed not sufficiently frequently and only "catch up" with current developments.

(d) Fourth, in some cases the adoption of new financial products is hindered by lagging regulatory developments, delaying and stifling the pace of innovation.

40. Partly as a result of an increasing recognition of these problems, the Basel Accord was modified in 2004 introducing more sophisticated ways of computing capital requirements and increasing the focus on risk-management policies and systems in banks. In particular the new regulation, which will start to be implemented from the end of 2006, encourages banks to develop, with supervisory oversight, their own systems to compute minimum capital requirements. Furthermore Basel 2, by improving the flow of information to supervisors and the public on banks financial conditions, assigns a greater role to supervisory and market oversight in reducing excessive risks in banking activities.

[18] Baltensperger (1989), p8.
[19] Baltensperger (1989), p13.
[20] Charles Dallara, Chief Executive of the Institute of International Finance, reported in Financial Times, Wednesday, November 19, 1997.

Lender of last resort

41. In most countries the central bank or the government have an explicit (or implicit) policy of providing assistance to banks facing financial difficulties

42. These lender of last resort interventions should be strictly limited to illiquid banks, easing only very temporary liquidity problems faced by banks (Emergency Liquidity Assistance), not extending also to help insolvent banks. In fact, whenever the lender of last resort assists insolvent banks, its intervention has the same consequences of a flat-rate unfunded deposit insurance, giving banks a strong incentive to adopt a riskier position than otherwise.[21] As with deposit insurance, when such incentives extend across the financial system, the macroeconomic consequences can be severe.

Moral hazard and the Asian financial crisis

In the mid 1990's, several countries in South-East Asia experienced a severe currency and financial crisis, on a scale that was almost entirely unforeseen, involving collapses in domestic asset markets, widespread bank failures, bankruptcies on the part of many firms and a very severe economic downturn.

The crisis represents something of a puzzle for macroeconomists. None of the fundamentals that drive traditional currency crises seem to have been present in any of the afflicted Asian economies. On the eve of the crisis all of the governments were more or less in fiscal balance; nor were they engaged in irresponsible credit creation or runaway monetary expansion.

In a paper written at the bulk of the crisis, Paul Krugman attempts to explain this puzzle, focusing on problems with bank (non) regulation in these countries. He argues that a key common feature was that the liabilities of financial intermediaries in these countries were perceived as having an implicit government guarantee, but that the financial institutions themselves were essentially unregulated and therefore subject to severe moral hazard problems.

To be sure, the government guarantees were not explicit. "However, press reports do suggest that most of those who provided Thai finance companies, South Korean banks, and so on with funds believed that they would be protected from risk - an impression reinforced by the strong political connections of the owners of most such institutions. In practice, moreover, these beliefs seem to have been for the most part validated by experience".

In the presence of government guarantees and a complete absence of prudential regulation, Krugman shows that banks have an incentive to continue lending as long as there remains any possibility at all that the lending will yield a positive return. This has the effect of bidding up asset prices to the point where they reflect their highest possible return, which can be several times higher than prices in an efficient market. The inflated value of assets improves that apparent financial position of the financial institutions, permitting more lending, and so on.

Krugman argues that a widespread perceived risk that government would decide to abandon the implicit debt guarantees is sufficient to lead to a financial crisis in which plunging asset prices undermine banks, and the collapse of the banks in turn ratifies the drop in asset prices. The "self-fulfilling prophecy" component of this story can help explain why an asset value down-turn in one country can rapidly spread

[21] It must however be said that it may be very difficult in practice to immediately distinguish an illiquid from an insolvent bank.

to others, in what is traditionally been called “contagion”. The moral of the story is either to impose stringent prudential regulatory controls or abolish the government guarantees.

V. REFORM OF BANK REGULATION AND MARKET POWER

43. On the credit side competition between banks has led to lower spreads and greater care in financing sound projects. Claessens and Laeven (2005) write:

> “More competitive banking systems are better in providing financing to financially dependent firms. …. There is support for the view that more competition may reduce hold up problems and lower the cost of financial intermediation, making financially dependent firms more willing to seek (and more able to obtain) external financing”

Furthermore in most countries, including developing ones, recent market developments have led to strong rivalry by non bank financial institutions for the supply of some banking services, for example consumer credit or factoring services to small and medium size firms. This implies that banks market power is somehow disciplined also by non banks.

Ensuring that banks are properly informed of the debt exposure of potential borrowers

44. Especially in developing countries, however, competition among banks may be impaired because information on the credit worthiness of potential borrowers is not readily available. Without a proper supplier of information on borrowers credit worthiness, each single bank has an informational advantage over any other bank on the credit worthiness of its customers. New banks will be very reluctant to lend to customers of other banks, if they are not fully and readily informed on the total debt exposure of each potential borrower. A competitive financial market, where banks compete for customers and potential borrowers choose among alternative banks as suppliers of funds, can only develop if banks are fully informed on the total exposure of each customer. Otherwise, if information is privately held by each bank, the market for credit will be segmented and banks will only lend to customers they personally know.

45. Relationship banking is particularly efficient when firms are small and accounting rules are not very effective. On the other hand a marked based system is particularly effective when firms are relatively large and accounting statements transparent. Moreover, “limitations on competition in a relationship-based system do not just give the financier (market) power, but also strengthen his incentive to cooperate with the borrower”[22]. This implies that a relationship-based system tends to smooth firm specific shocks intertemporally, while an arm’s length system is much less able to provide such contingent insurance. On the other hand relationship-based systems, because of the illiquidity of the financed assets, have an incentive to increase financial risk more than arm’s length systems. Market based financing “permits more flexibility in explicit contracts, which allows the system to absorb adverse shocks. Moreover the healthy can be distinguished from the terminally ill after a shock and can be dealt with differently – not everyone has to sink or swim together as in the relationship system”[23].

[22] See Rajan and Zingales (2003) p. 12.
[23] See Rajan and Zingales (2003) p. 19.

46. Relationship banking does not imply that potential borrowers do not have but one choice with respect to the bank that would assist them. There can be strong competition among banks also with relationship banking. In fact, in some countries, where the banking industry is sufficiently competitive and the industrial sector is sufficiently developed, each local bank may be willing to invest in order to develop a credit relationship with each local firm.

47. In many ways the two systems (arms-length and relationship banking) coexist in the same economy. Regulators should therefore not impose or favor one system over the other and should introduce regulatory provisions that are as much as possible neutral with respect to the type of relationship between banks and their creditors.. Regulators should therefore maintain a centralized system of monitoring the full exposure of different firms with respect to the banking system, and more in general with respect to the financial sector at large, requiring all financial institutions to communicate to the regulator all loans granted to a given (consolidated) borrower and their degree of utilization. The increase in transparency that such a system of centralized monitoring of debt exposure would provide, may help the development of arm's-length financing, and in any case reduce the market power of each bank with respect to its customers.

48. Antitrust authorities should use their advocacy powers to ask for such centralized reporting of debt exposure to be undertaken. Their role can be very important because they would advice on how to collect the information centrally without, at the same time, promoting collusion among market players.

Regulatory reform, competition and depositors' switching costs

49. While, in many countries banks benefited from the new opportunities originating from regulatory reform by offering new and improved financial services to customers, switching costs for consumers remained quite high, so that competition between banks did not increase proportionately. There is now substantial evidence that the widening range of services offered by banks was not associated with a significant increase in the elasticity of each bank residual demand (as should have been expected because of greater competition). The effect of liberalization on the market power of banks with respect to customers of banking services was probably not too strong.

50. In recent decades, besides the traditional deposit-taking banks have entered quite a number of new related markets, such as (among others):

- Credit cards services, paying bills for depositors
- Consumer loans
- Mortgages
- Life insurance
- Financial consulting; Management of investment funds; Asset management

By providing all these services under one roof, banks reduce the transaction costs depositors would have faced had they been obliged to negotiate for receiving these services with a number of different providers. At the same time, however, by offering all these services, banks have made it more costly for depositors to switch bank. In fact should depositors decide to move to a new bank they would need to: 1) receive new credit cards (with a different number and expiry date) that would need to be communicated to any service provider, for example the cable TV company, should its bills being paid by credit card; 2) inform the new bank about all utilities whose bills were being paid by debiting the depositor checking account; 3) transfer the deposit of all purchased stocks or bonds to the new bank; 4) maintain the checking account of the old bank just to service the mortgage; 5) communicate to all correspondents the new banking coordinates. The increase in switching costs tends to make steeper the residual demand curve each bank faces, so, even though competition may be increased in each of the markets where the bank expanded, the overall market power of each bank is increased, at least with respect to existing depositors. Or, to say it differently, in order for a bank to convince depositors of another bank to switch, the improvements in the quality of services it offers must be much larger than it would be the case in the absence of switching costs.

51. Depositors may also face switching costs because of strategic behavior on the part of banks. For example while opening a checking account may be free, banks may require that a high fee be paid when closing an account. There are good reasons why a policy of charging for closing an account would be followed by all banks and would not be competed away: Each bank benefits by market segmentation and no bank benefits by unilaterally reducing exit costs.

52. This is why it is unlikely that banks would engage autonomously in switching costs reducing activities, given that this would imply reducing profits for each bank and also for the industry as a whole. Pro-competitive rules and regulations may contribute to make switching easier, so as to ensure that all the benefits originating from greater competition actually reach consumers.

53. Regulation could impose on all banks disclosure rules with respect to all the costs involved in switching, so that consumers are made aware of these costs and competition among banks may indeed prove to be very useful.

54. With the advent of the internet, banking is no longer necessarily a local industry, not even for the smallest depositor, at least in countries with widespread internet literacy. Since banking technology is the same across the world it is extremely important that regulation does not limit the extent of the market with unjustified restrictions. This is particularly important in jurisdictions that use the same currency. For example, the introduction of the Euro in 2002 could have made depositors indifferent as to the nationality of the bank where they would deposit their savings, leading to a very significant enlargement of consumer choices and of competition. Notwithstanding the regulatory interventions in such directions, such as with regulation (EC) 2560/2001 on cross-border payments in the Euro area, the high costs traditionally associated with dealing with foreign banks have remained. As a consequence, the residual demand of a bank localized in one country remained substantially equal to what it was before the Euro, while the removal of the higher costs associated with cross border transactions would have probably led to a significant increase of the elasticity of its residual demand.

55. Antitrust authorities should use their advocacy powers to push forward the pro-consumer agenda.

VI. BANKING AND THE FINANCING OF DEVELOPMENT

56. Cross country comparisons show the importance of a well developed banking sector for achieving both long term economic growth and the reduction of poverty. Countries with better developed banking systems and capital markets have shown higher growth rates[24]. However the

[24] See World Bank (2001)

direction of causality is not always clear. In particular, need property rights and contract laws be firmly in place before a viable financial sector is developed? Is the modernization of the banking sector a prerequisite for economic growth or is the other way round? What is the role of the public sector in the financing of development? This section will try to provide the competition authorities view, drawing on the existing literature and on the responses to a questionnaire delivered to six countries: Brazil, Hungary, Indonesia, Mexico, South Africa, South Korea.

57. Finance is always necessary for growth. In particular ongoing business need finance for operation and for expansion. The same is true for launching new business enterprises. Households need to have safe deposits, access to the payment system, to mortgages and consumer loans. In this respect the experience of many developing countries show that the banking sector is generally responding well to the needs of the wealthy households and of the established firms. More in general, banking seems to develop well with firms and people that are able to offer a collateral or have formal employment so as to provide some guarantee with respect to future income, less well with people and firms that are unable to offer guarantees. However, while in developed countries this second group of customers is relatively small, in developing countries it represents the majority, so that banks tend to provide services only to the minority of the population. In banking, while the competitive solution with little regulation is appropriate for these existing banks so as to eliminate distortions, favoritism and high interest rate spreads. As ana example, the Pakistani competition Authority in its submission to the OECD Global Forum on Competition in February 2005 writes:

> "The financial sector was deregulated and … with the economic liberalization, new banks, financial institutions, leasing companies, housing finance, investment companies and foreign banks have come up, which has created a competitive milieu"[25].

58. Regulatory reform and competition are able to expand the reach of banking to the underprivileged. On the one hand, especially in countries where the majority of potential borrowers do not have a collateral to offer, conventional banking may lead to a non optimal equilibrium, where quite a number of low risk project are not financed and high-risk borrowers end up having to pay higher interest payments. On the other hand technical progress and flexible regulation have made it possible to provide banking services also to the poor. For example Dymski (2003) writes:

> "Lemon Bank (a microcredit bank)… offers credit and debit cards and savings accounts to the unbanked. Its minimum amount are tiny, and checking services are available without annual fees. … Lemon Bank, which has 3600 access points, many in favelas and in drugstores, is about to launch a media campaign aimed at opening 100,000 new accounts by year's end."

59. As for the lending side, in recent years in many developing countries specialized lending institutions started to use unconventional methods to lend successfully to the poor, starting what is now known as microcredit. Considerable evidence shows that such unconventional lenders were able to lend to borrowers that no conventional borrower was willing to attract and nonetheless performed much better, in terms of financial self sufficiency and repayment rates, than would conventional banks in comparable loans. The reason of this success, that is not limited to the Grameen Bank in Bangladesh, is the use of unconventional methods of risk reduction: forming groups of borrowers that are jointly responsible for each other's loans (joint liability) and intense monitoring of clients, relying heavily on the promise of repeating the loan.

[25] See OECD (2005)

60. A recent World Bank report on rural financial services[26], comparing the competitive low interest rates that microcredit offers with the regulatory solution of subsidized low interest rate, concludes that the competitive solution of allowing microcredit institutions to develop is far superior. Indeed subsidized credit leads to excess demand and the decision on which firm to lend does not depend so much on the relative profitability of the underlying project, but mainly on other considerations (political connections, corruption etc.). The World Bank report outlines in the following table, the cost and benefits of the old and the new paradigm:

Table 1 Primary features of the old and new paradigms in rural finance

Features	***Directed Ag. Credit Paradigm***	***Financial Systems Paradigm***
1. Chief aims	Boost agricultural production Reduce poverty	Reduce market imperfections and Transaction costs for income expansion and poverty reduction
2. Role of financial markets	Help the poor Stimulate production	Intermediate efficiently
3. View of users	Beneficiaries: borrowers	Clients: borrowers and depositors
4. Subsidies	Heavily subsidy dependent	Increasingly independent of subsidies
5. Sources of funds	Vertical: governments and donors	Horizontal: primarily voluntary deposits
6. Associated information systems	Dense, fragmented, and vertical	Less dense and mainly horizontal
7. Sustainability	Largely ignored	Major concern
8. Outreach	Mostly ignored	Primary concern
9. Evaluations	Credit impact on beneficiaries – mainly primary data	Performance of financial institutions – Mostly secondary information

Source: World Bank (2003)

61. In the past decade many micro-credit supplying institutions, which originally were State owned and loss making, were progressively privatised and deregulated, increasing both their efficiency and their profitability. Besides the Grameen Bank in Bangladesh which is well known, BancoSol in Bolivia, Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand, Bank Rakyat Indonesia (BRI) and the National Micro-finance Bank (NMB) in Tanzania are all successful examples of efficient micro-credit. They all show the important role micro-credit institutions in developing countries can play in fostering rural development and how more effective market based institutions can be with respect to direct Government interventions for directing credit to specific markets at regulated low interest rates. Important conditions for success include "independence of decision-making and a high level of accountability for financial performance"[27].

Three examples of successful micro-credit

Banco Sol started in Bolivia in 1987 as a non-profit foundation and in 1992 was turned into a private bank, the first bank in the world dedicated exclusively to microfinance. By 2002 Banco Sol became the

[26] World Bank (2003)
[27] See World Bank (2003)

largest institution in Bolivian financial markets in terms of the number of loan contracts (35% of the total) with an outstanding loan portfolio of $ 67 million (see Santos 2003). The profitable strategy of Banco Sol was to lend to previously unbanked firms and individuals, reducing risk with joint liability contracts and, as a consequence, charging much lower rates than those available on the informal money market, before its entry the only available source of funds for its clients. (Andersen and Nina, 2000).

The experience of BAAC in Thailand shows the important role that competition oriented regulatory reform in banking can have on the profitability of microcredit institutions. BAAC depended initially exclusively on capital from government, and in the early 1970's displayed a chronic funding shortage and loan recovery rates as low as 51%. At that time the solution was additional regulation and the Bank of Thailand adopted an agricultural credit policy in 1975, by which commercial banks were obliged to lend a share of their portfolio to agricultural sector. Many of these banks, instead of lending directly to agriculture, deposited their funds with BAAC. As a consequence, the structural shortage of funds suffered by BAAC disappeared. Banking reforms undertaken between 1988 and 1996 eliminated interest rate ceilings and restrictions on the opening on new branches, eliminating also the constraints on commercial banks on agricultural lending. Nonetheless the efficiency of Baac strongly increased and rural deposits became its main source of funds. By the late nineties its branches had grown from 82 to 535, its outreach and savings mobilization had raised at such point that it did not even suffer from the financial crisis of 1997 (see Seibel, 2000).

BRI in Indonesia has been a major provider of microfinance since 1984. By 1989 BRI was able to finance its lending activity with rural deposits. According to Seibel (2000)

> "BRI benefited form interest rate deregulation and a management initiative to commercialize operations by transforming its sub-branches into self-sustaining profit centers. For example it offered its staff profit-sharing incentives. The bank covers its costs form the interest rate margin and finances expansion from its profits; its long term loss ratio is only 2.1 percent."

BRI, like BAAC, remained profitable even during the Asian crisis. As Seibel (2000) reports it was the only profitable entity among the government-owned banks. .

NMB was created in Tanzania after the privatisation in 1997 of the loss making rural branches of the National Bank of Commerce. After an internal restructuring and a thorough reform of NMB pricing policy, by 2002 NMB had become profitable without having to close any of its branches. As the World Bank (2003) reports:

> "A key initiative has been the development and rolling out of microfinance products, mainly small (average $400). As of June 2002, 10.000 loans had been disbursed through 36 of the bank's 104 branches, with a level of arrears below 2%."

VII. THE SCOPE AND ROLE OF COMPETITION LAW IN BANKING

62. We turn now to the interaction between competition law and banking regulation and, in particular,to an explanation of why the full application of competition law in the banking sector by a national competition authority is desirable, and in no way incompatible with an effective regulatory framework.

- *Competition law should fully apply to banks(in parallel with banking regulation)*

Item 4 of the OECD Policy Recommendations on Regulatory Reform specifies that sectoral gaps in coverage of competition law should be eliminated “unless evidence suggests that compelling public interests cannot be served in better ways”. This is echoed in the Financial Services chapter:

“It is important that the rigorous concern for the pursuit of competition policies that has been a key element of past policies toward the financial services industry be continued. Basic principles of competition policy should be applied in financial services as should competition law, subject only to clearly justified exceptions needed for prudential reasons or other overriding public policy objectives”.[28]

As an aside it is, of course, necessary that the national competition laws are up to the task[29]. In particular, the national competition laws must be generally-applicable, flexible enough to take full account of differences in different sectors, and must be designed to promote economic efficiency objectives.

- *Banks should not be subject to their own, “special” competition rules but should be subject to general competition rules.*

  Very often it is proposed that a sector be subject to its own particular set of competition rules on the grounds that the sector is unusually important or in some other sense ‘special’. The proposal should be treated cautiously. Violations of competition rules fall within very general categories and are flexible enough to accommodate any sector specific characteristics. Special competition rules are not only unnecessary, but they may also undermine enforcement. There is a very thin line between sector-specific competition rules and continued regulation, especially if the special rules are to be enforced by the former regulator. There is a danger that sector-specific enforcers may adopt an understanding of competition that is overly congenial to the industry’s traditional mode of operation instead of promoting a competitive regime.[30] As explained in the following box, sector-specific laws are more vulnerable to being changed and enforced in the interest of the regulated industry, rather than in the interest of the economy at large. General laws, on the other hand, tend to be more immune and therefore more robust and long-lived.

Sector-Specific Or Generic Regulation?

Are sector-specific competition rules preferable to generic competition rules? Is it preferable to have a sector-specific competition enforcer or an economy-wide competition authority? The answer is that, wherever possible, generic regulation and generic enforcement is preferred to the sector-specific approach.

The reason is straightforward. Sector-specific institutions encourage sectoral lobbying and are more vulnerable to industry capture. Experience suggests that firms in a regulated industry will, over time, seek to influence their governing regulatory regime to their own purposes - for example, to restrict competition. In particular, the regulated firms will seek to use political pressure - on policymakers and regulators - to influence the legislation or the enforcement of the regime.

[28] OECD (1997b), p98.
[29] See OECD (1997b) p255.
[30] OECD (1997b), p256.

In contrast to an economy-wide regulatory regime, sector-specific regulation is much more vulnerable to this form of lobbying. The larger and more diverse are the affected firms, the harder it is to form the coalition of common interests necessary to maintain a sustained lobbying effort. Generic legislation, which applies to a large number of firms with different interests, is therefore more stable and more immune to the tendency for regulation, over time, to operate for the benefit of the regulated industry.

The same is true for the regulatory body itself. Experience suggests that over time, through the sustained lobbying efforts of the industry, sectoral regulators tend to be influenced by the specific interests of the industry they regulate. That is, it becomes increasingly harder for the regulatory body to distinguish the public interest from the interest of the industry. "Regulators, in direct contact with those whom they regulate rather than with consumers, tend to identify more with suppliers and their problems than with the general public and its problems".[31] A generic regulator with experience in a large number of industry sectors is able to more easily discern self-interest in the arguments of the regulated firms and is less likely to be peopled with staff who see a bright future for themselves in the regulated industry.

Importantly, a sector-specific regulator may also become an obstacle for regulatory reform. Over time, the interests of the regulatory body and the regulated industry may converge - both have a strong interest in the continuation of the sector-specific regulation, even where the underlying reason for the regulation no longer exists. Indeed, where the underlying reason for the regulation disappears, sector-specific regulators have a strong incentive to find alternative reasons for regulation, in order to ensure its continued survival. A generic regulator, in contrast, has little interest in the continuation of any specific regulation and therefore can act as an important influence, where appropriate, for regulatory reform.[32]

More generally, a sector-specific regulator has incentives to argue against structural reforms or other policy actions which the expand the role of competition (and therefore reduce the responsibility of the regulator) within the regulated sector.[33]

In addition, a generic law is likely to develop a larger body of case law more quickly than a sector-specific law.

Where generic competition rules apply to the financial sector, banking supervision authorities, if charged with their enforcement, may be naturally led to take into account, in a non-transparent way, concerns relating to the stability of banks and to adopt an improper regulatory approach in the application of competition rules, for instance, as far as the choice of remedies is concerned.

Finally, also due to the removal of most regulatory line of business restrictions in many countries, it is becoming increasingly difficult to design an effective and stable system in which a subset of markets or firms is not under the jurisdiction of the economy-wide competition authority but of a sector-specific competition law enforcer.

- *Antitrust law should be enforced by the general antitrust authority, not by the specialized sectoral regulator*

[31] Benston (1973), p221.

[32] "Sector-specific agencies may resist the pro-competitive thrust of reform because of self-interest. An agency whose chief purpose is to regulate an industry ensures its own survival by keeping regulation in place. The general jurisdiction competition-enforcement agency, which has no such concern with respect to any particular industry, may be able to assess competitive conditions and opportunities more impartially". OECD (1997b), p256.

[33] There are other arguments in favour of generic legislation. For example, the development of a body of case law is likely to be more rapid under industry-generic legislation, enhancing industry certainty. It might be argued that industry-specific measures are preferable when there are serious shortcomings in the generic competition law. In this case, however, rather than introduce sector-specific rules, these shortcomings should be addressed as soon as possible.

Again, as the box emphasizes, there are strong reasons for preferring that competition rules be applied by the antitrust authority and not by the sector-specific regulator. Should sectoral expertise be necessary for competition decisions, this can be addressed through formal or informal consultation of the sector regulator by the competition authority. The OECD Report on Regulatory Reform notes:

"Reformers should pay special attention to experiences of agencies such as the US Interstate Commerce Commission and the Civil Aeronautics Board. Though originally charged with ensuring competition, these two regulators became means for maintaining cartels. The problems persisted after the old agencies were abolished. For several years after the US airline industry was deregulated, jurisdiction over airline mergers rested with the Department of Transportation, rather than the antitrust agencies. The Department approved several combinations leading to significant market power in several city-pair markets, despite vigorous objections from the antitrust authorities. The same thing happened in the case of a railroad merger approved by a special Board within the US Department of Transportation".[34]

63. The process of regulatory reform in the banking sector, which has occurred over the past two decades, has significantly increased the role of competition in the banking sector. At the same time, there has been a movement (in those countries which had partially or totally exempted their banking systems) to extend the jurisdiction of national competition laws to include banks:

- Finnish legislation has been largely emended in 1998, removing special provisions for bank mergers. The Irish Competition Act 2002 assigns to the Irish competition Authority all powers on mergers, including banks.
- In France bank mergers fall now fully under the general antitrust provisions. The French Authorities have to consult with the banking regulator before taking a decision and should provide a full explanation, should they decide to deviate.
- In Canada the Competition Act of 1986 brought bank mergers and interbank agreements within the scope of the general competition law (subject to a general right of authorization of mergers by the Minister of Finance). Prior to this new Act, interbank agreements and mergers involving banks were exempted from competition law.
- In Germany special treatments for banks under the competition Act have been progressively eroded and all remaining privileges have been lifted as of January 1 2000.
- In Portugal the new Competition Act applies fully to banks.
- The European Court of Justice confirmed in 1981 that EC competition law has always fully applied to the banking sector.

64. In almost all jurisdictions Ministries of Finance or Central Banks have the duty to control bank mergers for stability reasons and for ensuring the safety and soundness of the institution and its managerial competency, while competition authorities control them on competition grounds. Only in very few jurisdictions competition and stability concerns are pursued by the same institution:

[34] OECD (1997b), p256.

- In Brasil the Central Bank has full responsibility over bank mergers (both for stability and for competition considerations).
- In South Africa, the Minister of Finance for "public interest" objectives can exclude the competition authorities' jurisdiction over bank mergers.
- In the US, under section 18(c) of the Bank Merger Act of 1966, the Comptroller of the Currency (OCC) for national banks, the FDIC for federally-insured, state-chartered banks that are not members of the Federal Reserve System and the Board of Governors of the Federal Reserve System for state-chartered banks that are system members, must conduct their own competitive analysis of bank mergers. However in most transactions only DOJ and a single bank regulatory agency actually are involved and obtain a competitive factors reports from the Attorney General of the United States before approving a bank merger.
- In Italy the antitrust law provisions apply to banks but they are enforced by the Central Bank (only in so far as the conduct or the merger produces effect on credit-making and deposit-taking markets). In such cases the antitrust authority is obliged to provide an advice. In all other circumstances the antitrust authority is fully responsible.
- In Korea, the Financial Supervisory Commission, when considering an approval of a merger or an acquisition, has to have prior consultation with the Korea Fair Trade Commission on the effect of the operation on competition.

VIII. THE APPLICATION OF COMPETITION LAW IN THE BANKING SECTOR WITH A PARTICULAR EMPHASIS ON MERGERS

65. We turn now to the issues that arise in applying competition law in the banking sector. In particular we will address some of the problems arising in merger control, as an example of how a competition authority applying competition law can bring added value (for example, in the field of market definition, which has been under discussion for quite some time). For reasons of concision, restrictive agreements and abuse of dominance in banking are not analyzed in detail in this report.

66. During the last fifteen years there has been a decline in the number of banks in many OECD countries.[35] Reasons for the consolidation of banking activity include (amongst other factors) the relaxation of restrictions on the geographic area that a bank can serve, and elimination of other structural regulations that may have served to shelter relatively inefficient banks from competition.[36] An additional factor is the adoption of new information processing technologies which has increased the efficient scale of operation in some bank activities.[37]

Framework for analyzing bank mergers[38]

[35] In the U.S., for instance, the number of banks declined monotonically from 14,230 in 1983 to 10,313 in 1994. Over this twelve year period, entry of 2,416 newly chartered banks more than made up for the 1398 banks that failed and exited. The net decline represents a wave of merger activity among banks in the U.S. which has no parallel since the Great Depression. Not only has there been a large number of mergers in the recent past, but a number of individual mergers that have taken place during the 1990s rank among the largest U.S. bank mergers ever, in terms of the real value of the assets involved and also in terms of the share of total U.S. bank assets accounted for by the merging banks. Rhoades (1996a) , Rhoades (1997) ,.

[36] Rhoades (1996b) , Rhoades (1997), Berger, Kashyap, and Scalise (1995)

[37] Description and some discussion of changes in regulations and other forces relevant to the competitive analysis of banking markets in Europe can be found in Gual and Neven (1992) .

[38] This section closely follows Rozanski and Rubinfeld (1997).

67. In assessing the likely effect of a bank merger on competition, in principle one should consider whether the merger could create or facilitate the exercise of market power, where market power is defined as the ability of firms to increase price or reduce quality from pre-merger levels. A merger could have anticompetitive effects by making it profitable for a leading firm to exercise market power unilaterally, or by increasing the likelihood that firms in a market could successfully maintain a collusive outcome.

68. To evaluate the effect of a merger, it is essential to analyze the merger's impact on the range of services provided by banks. Banks sell a wide range of services or products, including deposit, loan, and investment services sold to retail customers; deposit, loan, and various other services sold to businesses, and also correspondent services, which are specialized services supplied by a relatively limited number of banks to other banks, often for resale to the ultimate purchaser. Trade finance, custody, check clearing services, and foreign exchange services are examples of correspondent services. Banks in some countries are restricted in their ability to offer underwriting services, insurance, and some investment products. There are fewer limitations on the ability of banks to offer these products in most other countries.

69. In general, the analysis of the likely effects of a merger on competition must take into account a number of factors. One factor is the possibility that prospective purchasers of a product would choose to substitute to alternative products in response to a small but significant increase in the relative price of the product. If such substitution would not occur in an amount sufficient to make the price increase unprofitable then the product constitutes a relevant product market. A second factor is the possibility that prospective purchasers could turn to alternative sources of supply, including firms that currently produce and sell the product in other geographic areas. If such substitution away from firms located in a given area would not be significant, then the area constitutes the geographic market. The possibility of significant new competition from entry by firms that don't currently produce or sell the product is a third factor[39].

70. The structure of competition in the relevant product and geographic market, including the number and relative competitive effectiveness of current market participants, affects the likelihood that a merger be anticompetitive. Other characteristics of competition in the market also affect the likelihood of anticompetitive effects. For example, if there is significant product differentiation, and if products sold by the merging firms are perceived by purchasers to be relatively good substitutes, than there is a greater possibility of unilateral anticompetitive effects. If firms have good information about the competitive actions of their rivals, and if competitive strategies can be revised quickly, then coordinated anticompetitive effects are more likely. Finally, in some countries competition law allows consideration of a possible efficiency defense - if a proposed merger holds the promise of real efficiencies that could not reasonably be achieved through other means, these efficiencies could serve to lessen concerns about the net effects of the merger on competition.

71. The analytical framework described above will result in different policy recommendations for bank mergers in different countries, because of significant differences in the structure of competition, the preferences of purchasers of bank products (and the set of alternatives they face) and the institutional context. The following paragraphs set out an indicative approach to the analysis of competition in the markets for small business loans and

[39] These are the arguments used by the DOJ/FTC in their merger guidelines in their hypothetical monopolist test for market definition.

consumer bank products, two bank products for which competition concerns tend to be the greatest.

Small Business Loans

72. Small businesses[40] typically have obtained a variety of credit products from banks, including mortgages on commercial property, and loans to purchase or lease vehicles, equipment, and other capital goods. In recent years however non banks have started to enter into this filed offering a number of credit products to small businesses, such as factoring, leasing and mortgages. On the other hand businesses that have a need for a line of credit for startup or working capital are likely to have a limited ability to substitute away from their bank.

73. It is not uncommon for small businesses to rely to a significant extent on personal credit, such as general purpose consumer credit cards or a second mortgage on a personal residence. These alternatives are likely to be viewed as inferior, however, because they are relatively high cost, and they put personal assets at risk. The question for antitrust analysis is whether, as a result of a merger, banks are likely to find it profitable to raise prices with respect to small business loans. The answer to this question depends on the willingness of businesses that would obtain a line of credit from a bank at prevailing prices to substitute to another bank or to alternatives in response to an anticompetitive price increase. The fact that some businesses use these alternatives at prevailing prices demonstrates the feasibility of substitution, but does not establish that such substitution would occur in an amount sufficient to make an anticompetitive price increase unprofitable; the analysis must attempt to quantify the likely magnitude of such substitution.

74. The next step in the analysis of the likely effects of a proposed merger on competition to supply small business lines of credit is the determination of which banks and which bank locations are able to compete effectively to supply the product. In the past there have been strong reasons why small businesses tended to obtain lines of credit and some other key bank products from nearby suppliers. In part, this was due to the information advantages a nearby supplier would have on local enterprises, coupled with a strong preference that some services used on an almost daily basis, such as transaction services (the provision of currency and coin, acquisition of credit card receipts, night deposits, and electronic funds transfers) and demand deposit accounts, be quickly accessible. The internet and internet banking may change all this, considering that credit to small businesses is mainly based on collaterals.

75. To the extent that banks finance investment on the basis of its profit opportunities, than local banks are relatively better placed, considering their superior knowledge of local business conditions which tends to make them better informed about the risks associated with a new business startup, while their proximity to local businesses tends to lower costs of monitoring performance and updating information about credit risk. Local banks are therefore likely to be able to identify small businesses that are better credit risks and compete successfully to win their business by offering relatively favorable terms. It is true that some banks and other providers of credit to small businesses are sometimes located a great distance away.[41] In the case of vehicle or equipment loans that are secured by the capital good being financed, the riskiness of the loan is reduced and the informational advantage of local banks is eroded. In the

[40] "Small" businesses are defined, e.g., by the US DoJ to be those with annual revenues in the range of one to ten million dollars.

[41] Wells Fargo & Co., a California bank, initiated a strategy in 1995 of marketing lines of credit to small businesses nationwide using direct mail. Some other banks have imitated this strategy. Oppenheim (1996) , Oppenheim (1997) More recently, Wells Fargo has solicited applications through its web page.

case of lines of credit, distant suppliers lacking a branch network or significant presence in a local market are likely to regard all but the most well-established small businesses as relatively high risks. Distant suppliers may compete successfully to make loans that the better informed, local lenders also identify as high risk, but they may not be competitive in the case of borrowers that local lenders identify as relatively good risks. It is competition to supply services to these borrowers that is at issue from a merger of local banks.[42]

76. In regard to the analysis of entry conditions, studies of entry in local banking markets show that entry appears to be driven largely by factors such as the growth of economic activity in the area and the current density of banks and branches, rather than by the measured profitability of incumbent banks. It seems unlikely that the entry decision would turn on increased profit opportunities in a relatively small activity such as small business lines of credit. In addition, new entrants may require several years to establish themselves as effective competitors to make small business loans, because of the importance of private information, reputation, and long-standing business relationships in this activity. The possibility of exogenous entry is an important factor to consider, but it may not be possible to count on quick and effective entry to counter the effects of an otherwise anticompetitive merger.

Consumer bank products

77. In the case of some important consumer bank products, such as home mortgages, car loans, and credit card loans and transactions services, distant banks and specialized non-banks are increasingly demonstrating their effectiveness as competitors. The analysis of consumer home mortgages and car loans bears some similarity to asset-backed loans made to businesses: the fact that the collateral is relatively easy to evaluate makes competing in this market easier for non-local suppliers. Credit cards in many countries are often marketed on a national basis by direct mail and telephone. Such credit card issuers rely on credit histories assembled by third-parties (where they exist) and on credit-scoring software that predicts credit risk. Credit-scoring algorithms have so far proven to be more useful in this application than in the case of small business lines of credit.

78. Consumers tend to prefer to obtain checking account services from a conveniently located supplier. Because many consumers who commute a significant distance to work consider a bank location near their workplace to be a good substitute for a bank location near home, the geographic market is relatively large. Also, in some countries (in contrast to the analysis of small business bank products) there are other non-bank depository institutions (such as thrifts or credit unions) which are active suppliers of consumer bank products. The advent and spread of ATMs, electronic funds transfer, and the development of home banking via computer or telephone raise the likelihood that local banks with branch networks lose their competitive

[42] In the case of a market such as that for small business lines of credit in which suppliers are significantly differentiated based on their locations, competitive interactions among firms located along a geographic continuum can be sufficient to conclude that the geographic market is much larger than would be suggested by the strong preferences of customers for local sources of supply. Each firm is constrained only by the few competitors in its immediate neighborhood, but the effects of competition at one end of the spectrum are transmitted from local area to local area and may be felt at a great distance. In theory, however, even if there is no break in the geographic "chain of substitutes," the exercise of market power over a limited portion of the spectrum may be profitable because the profits that can be earned by increasing price to inframarginal customers who lack good alternatives more than makes up for the loss of business at the margin. In the case of bank loans, the possibility of price discrimination simplifies the analysis, and may make it possible to define geographic markets that are quite narrow. Price discrimination in the case of small business loans is likely to be a successful strategy: significant arbitrage among borrowers is implausible, and banks can use information obtained in the loan application process to develop good information about the willingness of customers to substitute toward other suppliers. Banks can meet competition at the margin by lowering prices selectively to some customers.

advantage, and that geographic markets for consumer bank products become much larger. Also internet banking is quickly developing in many countries.

Cluster market approach

79. The methodology described above considers separately the effects of a bank merger on competition to supply each bank product. An alternative approach views the relevant product for analyzing bank mergers as the cluster of products and services that constitutes "commercial banking."[43] This cluster includes consumer loans and consumer banking services as well as business loans and products.[44]

80. Some have argued that the cluster approach is not appropriate because banks are not constrained to raise the prices of all services they offer uniformly. Banks would not be deterred from raising the price of one product, such as a small business line of credit, by the possibility that prospective loan customers would substitute to other products in the cluster, such as a checking account. Nor would an increase in the price of the loan be defeated by competition banks face to supply other products in the cluster.

81. On the other hand, others believe that the cluster market approach gives the right answer, especially if there were strong economies of scope in production, so that all banks supplied all products in the cluster in the same proportion and if there were strong complementarities in demand, so that all consumers consumed all products in the cluster in the same proportion. For example, in analyzing a merger of firms that produce shoes, it probably would not matter much to the conclusion if the analysis was done in terms of right shoes, or left shoes, or pairs of shoes.

82. In the case of the "commercial banking cluster", some firms in fact compete very effectively in supplying some, but not all, products in the cluster. In addition, although consumers and businesses do tend to purchase multiple services from their primary financial institution, they do unbundle purchases today, and would likely unbundle to a greater extent if their current bank increased prices of some products in the cluster. The cluster market approach appears to understate competition in the market by ignoring the role of specialized providers of some services.

83. The cluster market approach may overstate competition in the market by wrongly inferring from the existence of abundant competition to supply one product in the cluster that competition in other product markets is sufficient. For example, suppose that the relevant geographic market was defined by commuting patterns. This is sensible in the case of consumer banking products, for which consumers consider services from banks located near their home or near their work to be good substitutes. But the resulting geographic markets are sometimes far larger than is appropriate to analyze competition for many small business bank products, for which proximity of the bank to the place of business is key. In cases in which the structure of competition is not homogeneous throughout the broad geographic market, the cluster market approach may miss adverse effects of the merger on local competition.[45]

[43] U.S. v. Philadelphia National Bank, 374 U.S. 321 (1963); U.S. v. Phillipsburg National Bank & Trust Co., 399 U.S. 350 (1970)

[44] In the U.S., the cluster market approach guides the decisions of the Federal Reserve Bank.

[45] The Australian Competition and Consumer Commission rejected the cluster market approach when analyzing the 1997 Westpac/Bank of Melbourne merger. The ACCC concluded that the geographic market for home loans was national, but that geographic markets for demand deposits and small business banking products did not extend beyond state boundaries. The existence of national competitors in the home loan market was correctly understood to be irrelevant to the competitive analysis of other product markets. Also the EC Commission does not follow a cluster market approach when defining markets in the competitive analysis of bank mergers.

IX. CONCLUSIONS AND RECOMMENDATIONS

84. This report has sought to review regulations governing banks in the light of established principles for good regulation. It raised the question of what, exactly, is the problem (i.e., the market failure) that (prudential) regulation of banks is designed to address. In particular, while there are some problems that need a regulatory intervention (protection of smallest depositors, proper regulation of banks settlements, mandatory information disclosures, risk adjusted stability concerns), for the rest the sector can be efficiently disciplined by market mechanisms and by antitrust law. The Report addressed then the importance of switching costs for increasing market power of each single bank, identifying regulatory solutions to reduce their importance.

85. In terms of recommendations, jurisdictions should:

- promote an open, competitive, banking environment without unjustified restrictions on entry, ownership or exit, resulting either from the rules to be applied or from enforcement practices;

- ensure that there is a proper separation between the enforcement of prudential regulation and of the general competition rules;

86. In addition agencies should:

- whatever the institutional setting, build good working relationships with the regulatory agencies and coordinate their efforts in reviewing particular matters.

- apply in enforcement the usual tools of antitrust analysis, including market definition, market power/dominance, remedies.

87. Finally, agencies in their competition advocacy functions should consider, as appropriate when competition concerns are raised, to advocate for:

- the elimination of exclusions from competition law for financial institutions;

- an environment where banks are informed in a timely and complete manner on the debt exposure of potential borrowers (in integrated financial markets also on an international basis), making sure to identify ways and precautions such that information sharing does not lead to restrictions of competition;

- a reduction of switching costs by depositors, for example by asking for disclosure rules, for example on the costs associated with the closing of an account or paying off a mortgage;

- in countries with a common currency, a reduction of transaction costs on cross border payments, including the creation of larger than national payment systems, so as to favor the development of larger markets and greater choices for consumers;

- a legal environment where the taking possession of collateral is possible without delay;

- especially in developing countries and consistent with maintaining a competitive market., the creation of a legal environment where financial institutions can reduce their risk by joint liability lending.

References

Andersen, Lykke Eg and Osvaldo Nina, "Micro-credit and Group lending: The collateral effect", Working Paper n.. 1998/18 University of Aarhus, 2000.

Baltensperger, Ernst, "The Economic Theory of Banking Regulation" in Furubotn and Richter, eds, *The Economics and Law of Banking Regulation*, p 1, 1989

Benston, George and George Kaufman, "Is the Banking and Payments System Fragile?", *Journal of Financial Services Research*, vol 4, p 209-240, 1995

Berger, A.N., Kashyap, A.K., and Scalise, J.M., "The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been", *Brookings Papers on Economic Activity* 2:1995, 55-217, 1995

Bryant, J. "A model of Reserves, Bank Runs and Deposit Insurance", *Journal of Banking and Finance*, 43, 749-761, 1980

Bank for International Settlements, *International Convergence of Capital Measurement and Capital Standards: A revised Framework*, A Report of the Basel Committee on Banking Supervision, 2004

Claessens, Stijn and Laeven, Luc, "Financial Dependence, Banking Sector Competition and Economic Growth", World Bank Policy Research Working Paper 3481, January 2005

Crockett, Andrew, Harris, Trevor, Mishkin, Frederic S and Eugene N White, *Conflicts of Interest in the Financial Service Industry: What Should We Do About Them?* Geneva Reports on the World Economy 5, ICMB and CEPR, 2003.

Dewatripont, Mathias and Tirole, Jean, *The Prudential Regulation of Banks*, MIT Press: Cambridge, Mass.

Diamond, D. and Dybvig, P.H., "Bank Runs, Deposit Insurance and Liquidity", *Journal of Political Economy*, 91, 401-419, 1983.

Dymski, Gary, A. , "Banking on Transformation: Financing Development, Overcoming Poverty", presented at Seminario Brazil em Desenvolvimento, Universidade Federale do Rio de Janeiro, September 2003.

Edey, Malcolm and Hviding, Ketil, "An Assessment of Financial Reform in OECD Countries", *OECD Economics Department, Working Papers*, No. 154, 1995

Feldstein, Martin, "The Risk of Economic Crisis: Introduction" in Feldstein, Martin, ed., *The Risk of Economic Crisis*, Chicago, 1991

Financial Times, Wednesday, November 19, 1997

Gual, J., and Neven, Damien, "Deregulation of the European Banking Industry (1980-1991)", Discussion Paper No. 703, Center for Economic Policy Research, August, 1992.

Kaufman, George, "Bank Failures, Systemic Risk and Bank Regulation ", *Cato Journal*, vol 16, no. 1, p 17, 1996

Krugman, Paul, "Balance Sheet, the Transfer Problem and Financial Crisis" http://web.mit.edu/krugman/www/FLOOD.pdf 1999

Mishkin, F., "Asymmetric Information and Financial Crises" in R.G. Hubbard ed., *Financial Markets and Financial Crises*, pp 69-108, 1991

OECD, "Competition, Consumers, and Regulatory Reform", chapter 3 in *The OECD Report On Regulatory Reform: Thematic Studies*, 1997[a]

OECD, "Regulatory Reform In The Financial Services Industry", *The OECD Report on Regulatory Reform: Volume I*, 1997[b]

OECD, "Contribution from Pakistan", *Global Forum on Competition*, Session I, February 2005

Oppenheim, S., "Show Me the Money, Not the Bank, Businesses Say", *Am. Banker* 162, May 19, 1997

Oppenheim, S., "Wells' Small-Business Lending via Mail Pays Off", *Am. Banker* 161, December 23, 1996, 1

Parry, Robert T., "A Central Banker's Perspective on Bank Reform", *Business Economics*, July 1992
Rajan, R.G. and L. Zingales, *Saving Capitalism from the Capitalists* Princeton: Princeton University Press, 2003
Rhoades S.A., "Bank Mergers and Industrywide Structure, 1980 - 94", Staff Studies 169, *Board of Governors of the Federal Reserve System*, January, 1996[a].
Rhoades, S.A., "Competition and Bank Mergers: Directions for Analysis from Available Evidence", *The Antitrust Bulletin*, Summer 1996[b], 339-363.
Rhoades, S.A., "Research on IO Topics in Banking: An Introduction and Overview", *Review of Industrial Organization* 12, 1-8, 1997
Rozanski, George and Dan Rubinfeld, "Mergers and Other Competition Policy Issues in Banking", an Appendix to the United States Submission to the OECD Report on Enhancing the Role of Competition in the Regulation of Banks, 1997.
Santos, Nino, "Financing small, medium and micro enterprises in post conflict situations. Microfinance opportunities in the Democratic Republic of Congo" OECD Development Center working paper, 2003.
Scott, K., "Never Again: The S&L Bailout Bill" in *The Economics And Law of Banking Regulation*, 1989
Seibel, Hans Dieter, "Agricultural Development Banks: Close Them Or Reform Them?", *Finance &* Development, 2000
World Bank, *Finance for Growth, Policy Choices in a Volatile World*, Washington, D.C., 2001
World Bank, *Rural and Financial Services*, Washington, D.C., 2003