RESERVE BANK OF AUSTRALIA

Submission to the Financial System Inquiry



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CONTENTS

Executive S	Summary		(i)
Chapter	1	Background: Financial System Trends	1
	2	Objectives and Types of Financial Regulation	9
	3	Present Regulatory Responsibilities	19
	4	Assessment of Prudential Supervision	29
	5	Organisation of Prudential Supervision	39
	6	Some Other Prudential Supervision Issues	49
	7	Funding Bank Supervision	61
	8	Payments System Issues	65
	9	Competition and Consumer Regulation	73
Appendix	A	Trends in the Australian Financial System	79
	В	Overseas Supervisory Arrangements	111
	C	Should Bank Supervision be carried out by the Central Bank or by a Separate Authority?	119
	D	International Framework of Bank Supervision	137
	E	Oversight of Financial Conglomerates - International Developments	141
	F	References	145
	G	List of Abbreviations	149

EXECUTIVE SUMMARY

- 1. The RBA welcomes the Government's decision to hold a Financial System Inquiry. The financial system and the institutions charged with its supervision have been evolving over recent years in response to the challenges that competition, globalisation and technology have presented. The particular value of the Inquiry is that it permits a stocktaking, whereby the system is seen in its entirety, and where future challenges can be evaluated. It also presents all participants with the opportunity to have their views evaluated in the same arena as their competitors and in the full light of public scrutiny.
- 2. This submission adopts a top-down approach, outlining some general principles which should underlie a sound, competitive and innovative financial system. In keeping with the RBA's responsibilities, it emphasises the need to take into account the long-run stability of the system. That is, regulation should not produce habits of mind in the public or managers of financial institutions that encourage excessive risk taking that could lead to financial crises, but should also not inhibit people from taking calculated and understood risks. The submission recognises that financial crises cannot be ruled out, and therefore the system of regulation should be also one that can minimise contagion within the financial system and the flow-on effects to the rest of the economy.
- 3. It is unlikely that this emphasis will be a feature of most other submissions. They will rightly be mainly concerned with issues of competitive neutrality. Is the burden of regulation too high? Does it bear more heavily on one set of institutions or products than another? Is there duplication? Are newly-evolving institutions escaping the regulatory net? These are all important issues, and there are a number of improvements that will be suggested to the Inquiry by financial institutions, regulators and by the RBA. It is the RBA view, however, that in evaluating these suggestions for change, they should be judged not only by competitive neutrality criteria, but also by the need to promote system stability.
- 4. There is general agreement that there are three main areas of regulation; prudential, consumer protection and competition policy. The body of this submission is directed at the first. On the latter two, the RBA puts forward some observations towards the end of the submission, but the main point is that both consumer protection and competition policy have an existing body of law and, in the main, it is intended to apply to all industries in Australia, not just to the financial sector. Any proposals for change must take that into account. Prudential regulation, on the other hand, is directed solely to financial institutions and concerns problems that are unique to them.

- 5. The first general principle of prudential regulation is that the type of regulation must be based on the risks being incurred. While it is possible to think of a spectrum of risk, it is not a continuous one; there is still an important division into two categories of product which are different in kind.
- In the first category are those products which involve a binding contract on the part of the institution offering the product that it will not fall in value. The main products here are bank deposits and insurance policies. If the institution providing these cannot repay the amount they have specified in advance, they become insolvent. It also happens that some of these institutions are very important for system stability as their failure could become contagious.
- In the second category are the various investment products which involve an undertaking to manage funds on a "best endeavours" basis and whose return is based on the value of the underlying assets. With these products, it is the investor that bears the risk, not the institution. The value of these investments could fall without it implying insolvency for the managing institution.
- 6. It is important to note that this distinction is made in relation to institutions' liabilities, ie the promises they have made to customers from whom they have accepted money. The type of regulations that should be applied needs to be based on the nature of these promises, not, as is sometimes claimed, the type of assets held by the institutions. While there has been increased blurring of assets held by different types of institutions (eg more mortgages held by superannuation funds and life offices than a decade ago), there has been much less blurring on the liabilities side.
- 7. The regulatory framework should recognise the different risks involved in the two types of product, both to the public and to the institutions that provide them. In the first case, it is the institution that has to be regulated with a view to minimising its chance of becoming insolvent. This is prudential supervision per se. The second form of regulation is product based and mainly relies on stringent disclosure rules, including informing the public that the investment may fall in value. It is stretching the definition to call these disclosure rules prudential regulation.
- 8. Because of the different nature of the two types of regulation, the RBA sees no merit in combining them in the one institution, sometimes referred to as a "mega-regulator", or "mega prudential supervisor". Indeed, there is a danger to the long-run stability of the system in so doing because of the "moral hazard" involved. If all financial products were under one government regulator, the public could see them all as being equally safe "the Government stands behind them all". This could have implications for the public purse in the event of a financial disturbance (or even a large fall in asset values). The extra risk from the moral hazard is that institutions would be deterred from competing on safety, and they would be encouraged to take greater risks to maximise returns. (A recent well-publicised case of this concerned the Savings and Loans institutions in the US.)

- 9. While there may be some scope for consolidation of supervisory management, the RBA regards the "mega-regulator" model as fundamentally flawed, and would not favour it even if the RBA became the "mega-regulator". There are few examples of "mega-regulators" around the world if we mean by it a combined supervisor of banks, insurance companies and investment products such as unit trusts and managed funds. There are only four in the OECD area Norway, Sweden, Denmark and Japan (where it is the Ministry of Finance). The financial instability in three of those four countries over the past decade does not suggest that this is a promising model to follow.
- 10. An argument for a "mega-regulator" is that it would help harmonise regulations by allowing inconsistencies to be thrashed out within the one organisation. This could yield some benefit at the margin, but the differences between regulatory regime will remain large. The rules of prudential supervision applied to a bank will still be very different to those applied to an insurance company, and neither will resemble the sort of product disclosure for unit trusts, regardless of whether the supervisors are in the same institution or not. The growth of conglomerates whereby the same corporate entity offers both banking, insurance and investment products provides a challenge to supervisors, although it has been happening here and abroad for more than a decade. Again, a "mega-regulator" is only one of several approaches to this issue. The more common response worldwide is to opt for a lead regulator. That is the approach being undertaken in Australia under the leadership of the Council of Financial Supervisors the co-ordinating body of which the RBA, ISC, ASC and AFIC are members.
- 11. On the issue of who should be the bank supervisor, it will come as no surprise to learn that the RBA believes it should retain that role. A central bank, in addition to its monetary policy responsibility, must always take some responsibility for financial system stability and will be expected to do so by the public. Even those central banks that are given a narrow remit that excludes bank supervision always retain responsibility for the payments system on the grounds that it is vital to the stability of the financial system. The RBA believes that this extends to bank supervision, given banks' importance for stability, their role as lender to small and medium business, their susceptibility to runs, and the fact that these runs can become contagious with drastic consequences for system stability. The central bank is also in the unique position of being a participant in the financial markets on a daily basis, and is the only institution capable of injecting funds at short notice (either to the whole system or on a lender-of-last-resort basis to a particular bank). In addition, familiarity with markets is becoming more important as a potential financial crisis may be initiated in a market rather than by a bank failure (as in October 1987 in the US).
- 12. A number of arguments for and against the central bank being the bank supervisor are evaluated in the body of the submission and in Appendix C. There is no room to rehearse them here, other than to point out that they do not argue the central bank will be a bad supervisor, rather that supervision may interfere with monetary policy. These issues have been debated in a number of countries over recent years with varying results, but the only two instances where responsibility has been shifted

has been in Finland and Hong Kong where it was moved from a formerly independent supervisor to the central bank.

- With bank supervision in the central bank, where does this leave insurance companies given that both are to be prudentially supervised? If the only aim was to minimise the number of supervisors, there might be a case to put them with bank supervision, but other considerations would argue strongly against it. First, there are few, if any, synergies. The structure of the balance sheets of banks and insurance companies are completely different and the skills required to supervise them are also different with actuarial assessment crucial to the latter. Second, insurance supervision is similar in many ways to the supervision required of superannuation. They are both very long run, concerned with retirement income and actuarially based. Even though accumulation-type superannuation funds are, strictly speaking, an investment product, the social cost of inadequate return and community expectation are such that some form of quasi-supervision will be required to make sure that trustees maintain an appropriately diversified portfolio and do not take excessive risks (or become excessively risk averse). With over 120,000 superannuation funds, this is a demanding and labour-intensive task and, in conjunction with insurance supervision, justifies the existence of a specialised supervisor such as the present ISC.
- 14. To date this summary has covered banks, but not mentioned other retail deposit-taking institutions such as building societies and credit unions. These institutions have balance sheets which are similar to banks and are currently supervised by AFIC and the State-based supervisory authorities using rules which are closely based on the ones the RBA uses to supervise banks. Again, if the aim was to minimise the number of supervisors, there is a case to have these institutions supervised by the RBA. On the other hand, there is no case on the grounds of system stability, and being under the wing of the RBA would marginally increase the moral hazard.
- 15. An anomaly in the Australian financial system is that merchant banks, usually owned by foreign banks, are able to undertake wholesale banking business in Australia without a banking authority. This is a hangover from the days when foreign bank entry was not permitted, and these merchant banks provided much-needed competition for domestic banks. Now that foreign bank entry is open, there is a case to expect foreign banks wishing to do banking business to gain authorisation and so face the same supervision regime. It is also becoming increasingly difficult to justify our failure to supervise these unauthorised subsidiaries of foreign banks as expected by the Basle Committee on Banking Supervision.
- 16. Finance companies are a different case. They do not take deposits, but finance themselves through the issue of debentures under the prospectus disclosure provisions of the Corporations Law subject to the ASC. Their liabilities are relatively long term, and they are not subject to runs or contagion. Several have failed over the past two decades without threatening system stability. The RBA sees no case to change their present regulatory regime.

- 17. At present the RBA separately authorises financial institutions (banks and non-banks) that trade in the foreign exchange market. In the case of non-banks, this means supervising part of an institution without first-hand knowledge of the solvency of the whole. Two solutions to this unsatisfactory arrangement are to either confine foreign exchange trading to banks, or to cease separate authorisation of foreign exchange dealers. The RBA favours the second alternative, which will bring the treatment of the foreign exchange market into line with other markets such as the bond market.
- 18. The present authorisation procedures for banks, including the restrictions imposed by the Banks (Shareholdings) Act 1972, have been reviewed in line with recommendation 9.21 of the National Competition Policy Review. In the RBA's view, these restrictions are in the national interest even though they involve a marginal reduction in the degree of competition in banking. The only improvement that warrants consideration is to streamline the process of granting authorisations. This could be achieved by allowing the RBA to grant authorisations, with a right of appeal to the Treasurer.
- 19. The RBA does not see a case for a bank licence fee or for a charge for the cost of supervision. In the latter case, the cost of supervision is well below the implicit tax imposed on banks by the penalty interest rate on Non-Callable Deposits.
- 20. In regard to the payments system, the major issues are risk, entry and challenges from new technology. Settlement risk has been a major concern over recent years, but is in the process of being largely eliminated by the introduction of Real-Time Gross Settlement. The right to entry to the settlement system has also been the subject of controversy but, with building societies and credit unions gaining membership through their special service providers, all significant providers of payments services are now members.
- 21. A recent subject of concern has been the fear that unsupervised competitors might provide an alternative payments system which would bypass the banks. A close examination of the services currently (or prospectively) offered on the Internet suggests that this is unlikely. In order to become a significant provider of payments services, an institution must accept deposits, in which case it will effectively become a bank and be supervised as one.
- 22. On competition policy, the RBA believes that the same broad principles which are used to evaluate mergers in other industries should be used to evaluate mergers in the financial services sector. This would mean taking a fresh look at the "six pillars" policy which prevents mergers between any of the four largest banks and the two largest life offices. The "four plus one" interpretation of the Trade Practices Act, whereby a regional bank presence is required in each State, should also be examined. It would be a much more serious step, however, to re-define competition policy in a way which effectively reduced the number of major banks in Australia to two.

23. On consumer regulation, the RBA believes there is scope for considerable rationalisation. Many financial institutions face rules on consumer protection imposed by State regulations, the ASC, ISC and Industry Codes of Conduct. The RBA plays a minor role in this area through the Australian Payments System Council and some Industry Codes of Conduct. It would be prepared to vacate this area if a more unified system of consumer protection was devised. Something along the lines of the UK Personal Investment Authority seems the most promising avenue.

1. BACKGROUND: FINANCIAL SYSTEM TRENDS

Introduction

- 1. This Chapter highlights the main trends in the Australian financial system which are important in thinking about the scope and structure of financial regulation. It is, of course, somewhat artificial to itemise these factors because they interact with one another. For instance, expansion of the funds management sector, with its appetite for investment assets, has made loan securitisation more viable and opened the way for mortgage originators, using innovative distribution techniques, to compete successfully with the traditional providers of housing finance.
- 2. An understanding of the main trends is obviously relevant to an assessment of the effectiveness of official regulation. Changes in the financial system in the legal structures of financial institutions, the technology they employ and the nature of risks they incur call for a review of regulations to ensure that they remain appropriately targeted and are achieving, as efficiently as possible, the Government's objectives. Meanwhile, regulations are themselves one of the many factors which help to shape the financial system.
- 3. A more detailed account of developments over the past forty years and of the forces which are shaping the future of the financial system is provided in Appendix A. Similar forces are evident in other advanced economies.

Changing market shares

- 4. Measured by assets, the aggregate market share of financial intermediaries institutions which issue mainly deposit-type liabilities and make loans is declining. This share is currently 62 per cent, compared with 74 per cent in 1980. The share of banks within this group has, however, increased since their operations were largely deregulated in the 1980s and entry policy was liberalised. This growth has been largely at the expense of non-bank financial intermediaries building societies, credit unions, finance companies and money market corporations (merchant banks) which had expanded to serve markets denied the banks by regulation. As a result, the banks remain dominant in the financial system with just under half of total assets, excluding their subsidiary operations.
- 5. The funds management and insurance sector has been the fastest growing sector over the past 15 years. It currently accounts for 38 per cent of assets, compared with 26 per cent in 1980. Its expansion has, however, been underpinned more by the reinvestment of earnings than by significant growth in new investments/contributions.

Table 1: Types of Financial Institution

Per cent of financial system assets

	June 1980	March 1996
Banks	41	46
Bank-owned merchant banks and finance companies	7	4
Other non-bank credit institutions	25	12
Banking group funds managers and insurers	4	8
Other funds managers and insurers	23	30

6. Assets are not the only indicator of institutional importance. While intermediaries have lost market share on that measure, they have led the way in the trading of financial instruments, particularly public sector securities, foreign exchange and derivatives. Banks are responsible for almost 90 per cent of foreign exchange dealing and around 80 per cent of over-the-counter (OTC) derivatives.

Product "mobility"

- 7. This refers to the offering by financial firms of products which had previously been associated mainly with other institutional groups. Conventional wisdom is that this phenomenon is increasing rapidly, and examples usually cited include:
- housing loans offered by life insurance companies and mortgage originators;
- liquid investment accounts offered by funds managers (eg cash management trusts) which are functionally similar to bank deposits. Some of these incorporate transaction facilities through links with a parent bank; and
- savings products from life companies which have similarities to term deposits (eg insurance bonds and certain term annuities).
- 8. This sort of overlap is not a new phenomenon. For instance, life offices were much more significant lenders for housing in the 1960s than they are now, and cash management trusts were introduced 15 years ago. It is also easy to overstate the extent and growth of these overlaps. Cash management trusts hold funds equivalent to about 7 per cent of call deposits at banks, a little less than they represented five years ago. Only around 5 per cent of deposit-type investments are held with institutions other than intermediaries such as banks and building societies, a proportion which has held steady over recent years.

Product diversity

- 9. Another dimension of change in financial markets is increasing product diversity. Virtually all financial firms now offer a much wider range of products and services than a decade ago, with multiple options as to rate of return, liquidity, risk characteristics, and so on. These features are combined in different ways and may be linked with other services previously regarded as separate (eg mortgage offset accounts, housing equity loans). At the same time, services previously offered in a package (eg housing loans and savings accounts) are being unbundled. As a result, the consumer of any basic financial service such as a savings account is confronted with a spectrum of choices, with only fine gradations of difference between them. In professional markets there has been a sharp expansion in the use of derivatives products for managing risk; some of these have been used to make retail products such as fixed-rate or "capped-rate" loans more readily available.
- 10. This growing diversity is driven by the relative freedom of financial groups to tailor products to the changing needs of their customers, the application of new technology to product design and delivery and an apparent increase in consumers' willingness to shop around. These and other innovations have been some of the benefits of financial deregulation.

Conglomerates

- 11. Financial conglomerates the linking by ownership of institutions such as banks, insurance companies and unit trusts have become a more important feature of the landscape. Among the causes are:
- aspirations of banks to participate in the more rapidly growing funds management sector, particularly with the prospect of increased compulsory saving in superannuation;
- the ambition of some insurance companies to be able to offer their customers payments and banking services; and
- the desire of insurance companies to make use of the banks' more extensive distribution networks, and the banks' interest in improving the earning capacity of these relatively expensive branches.
- 12. Conglomerates currently account for around 80 per cent of financial system assets, with the 25 largest holding almost 70 per cent of total assets. Conglomerates headed by banks have about 56 per cent of financial system assets while groups headed by insurance companies have a little over 15 per cent. Bank/insurance groups are particularly significant. Currently, seven banks own life insurance companies and one life insurance company owns a bank; collectively, these groups account for more than 38 per cent of financial system assets. The importance of conglomerates, which leads to a wide range of financial products being available in the one place, has no doubt

contributed to perceptions of "blurring" in traditional institutional boundaries and is probably a more significant factor than the phenomenon of product mobility.

Table 2: Conglomerates Per cent of financial system assets				
	1991	1995		
Largest 4 conglomerates	38	36		
Largest 10 conglomerates	56	53		
Largest 25 conglomerates	68	68		

Mergers and acquisitions

13. The high capital costs of competing systems and communications infrastructure have spurred rationalisation of the financial system through mergers and acquisitions, in pursuit of efficiencies and opportunities to streamline branch networks. This has been particularly evident among smaller institutions such as credit unions and building societies. Changes in the population of the different groups of intermediaries are shown in Table 3. Rationalisation has also seen an increase in the number of banks, due mainly to conversions from building society status and the entry of foreign banks, many of which already had a presence in Australia as a money market corporation. While driven by competitive pressures, the trend toward consolidation itself can raise concerns about potential diminution of competition. These are discussed in Chapter 9.

Table 3: Changes in Numbers of Credit Institution Groups 1986 to 1996 Finance Building Credit Banks Merchant societies banks companies unions **Entrants** +19+62+95 +4-170* **Exits** -73 -11 -132-42 78 96 25 Current 52 285 number Estimated net change.

Securitisation

- 14. The growth of securities markets in Australia has been influential in a number of financial innovations (eg cash management trusts in the 1980s). Traditionally, securities markets have consisted mainly of government and semi-government paper, short-term private debt securities and longer-term debt of a small number of top-ranking corporates. The market for long-term private sector debt has been and remains thin, despite recent growth in the securitisation market.
- 15. Increasing demand for asset-backed securities from the growing funds management sector, and the advent of more sophisticated means of tailoring such securities to investor demands, will see securitisation become more widespread in the future. It has been an important feature of US markets for many years. This form of funding has been exploited by the mortgage securitisers in the past year or so, and could be extended soon to credit card and other relatively standardised receivables. Over time, developments in securitisation may see interest extend to the "middle level" corporate market, as is now occurring in the US. The 1995 modification of the RBA's prudential guidelines also made it easier for banks to arrange loan securitisation without compromising capital adequacy.

Challenges to cross-subsidisation

- 16. When the financial system was heavily regulated and new entry relatively difficult, cross-subsidisation in pricing was common. The most prominent example has been the cross-subsidisation by banks of their payments services (cheque-clearing in particular) from the margin between interest received on loans and paid on deposits. This margin also funded the banks' extensive branch networks and large staff numbers.
- 17. More recently, entry into certain markets dominated by banks has become easier because of:
- new delivery methods, which have reduced the strategic importance of full-service branches in establishing contact with customers. Such channels include "virtual bank" kiosks, travelling salesmen (mobile banking), telephone and the Internet;
- other changes, such as the growth in securities markets, which have given new players access to funding without having to raise deposits; and
- a greater willingness of consumers to shop around for the best price and other features.

However, the importance of mortgage securitisation in the US, where nearly two-thirds of mortgage loans are securitised, owes much to "sponsorship" of private securitisation schemes involving access to lines of credit from the US Government. Indeed, only 14 per cent of securitised mortgages go into "private label" schemes. A high proportion of credit card receivables have also been securitised.

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18. Banks and other established institutions (such as building societies and credit unions) would have been vulnerable to new competitors anyway, because of their high cost infrastructures and inability to adapt quickly to more advanced technology, but the cross-subsidies in their price structures have made them more susceptible to "cherry-picking" by entrants in niche markets. Again, mortgage originators are the clearest example.

Technological change

- 19. Technological change, in its various guises, is having such a diverse and widespread impact as to be almost meaningless as a single category for discussion. There are, nevertheless, some useful distinctions. One is the use of *electronic data transmission* in financial services, rather than physical contact and paper flows. The clearest examples are in the payments system where, inter alia, EFTPOS and direct debiting are providing substitutes for cheques and credit cards.
- 20. A second impact is the application of *computing power* and advanced mathematics to the construction and pricing of complex financial products (both wholesale and retail), and to managing market and credit risks in financial firms. Such changes are clearly relevant to prudential supervision, posing questions about the management of market and operational risk. A third broad impact of technological change is *new delivery channels* for financial services. Some of this technology such as the use of telephone for banking transactions is not new. More modern technology includes the use of laptop computers by mobile lenders and of the Internet for inquiries and instructions about bank accounts.

New players

21. New delivery technologies are not only altering the competitive balance among established players, but along with cross-subsidies in existing price structures, are also creating opportunities for new entrants in the financial system. Examples include the mortgage originators (which have effectively linked home buyers with the wholesale capital markets or are acting as agents of traditional lenders), innovators in the field of stored value cards, and the providers of specialised telecommunications and computer equipment which are increasingly providing the linkages between financial firms and their customers. These players are bringing new skills and enhanced competition to Australia's financial system. To date, non-financial firms have not sought to become large-scale suppliers of financial services in their own right in Australia.

Payments system

22. The payments system is undergoing significant change. In very broad terms, this consists primarily of the gradual replacement of paper-based messages (cheques, money orders, etc) with electronic transmission. Stored value cards, using computer chip technology, are another prospective change in retail payments. These developments are making payments cheaper and faster, although initial infrastructure

costs can be very high; they are also creating business opportunities for new specialist entrants, as noted above. A major development in wholesale payments is the move to the settlement of interbank payments on a real-time gross basis, which will cut down interbank settlement risk and substantially reduce one potential source of system instability.

2. OBJECTIVES AND TYPES OF FINANCIAL REGULATION

Introduction

- 23. An efficient financial system will allocate savings to productive users of funds at least cost. It should offer a large range of financial instruments and institutions to assist investors balance risk, liquidity and return. It should also cater to a wide range of borrowers, from the well established to those with high-risk new ventures. The community should be able to trust the integrity and soundness of the system, without believing that everything is guaranteed by the Government. It should allow institutions to innovate employing new technology and offering new products. It should be open to competition.
- 24. Although the features of financial systems vary from country to country, depending on their stage of economic development and the structure and philosophies of government, it is possible to identify three common themes or objectives underlying financial regulation:
- a concern with the stability of the financial system and a desire to prevent financial crises that is, situations where problems in the financial system have the potential to cause a contraction in economic activity through their effects on community wealth, credit flows or confidence in the payments system. This objective is pursued through *prudential supervision* of key institutions, through oversight of arrangements for settling transactions among financial institutions and through "crisis management" when a problem does arise;
- a desire to protect the interests of users of financial services in situations where information about the characteristics of products, or the riskiness of institutions offering them, is hard to assess. This form of regulation *consumer and investor protection* attempts to improve the safety of investors' funds and requires clear disclosure of financial information and appropriate standards of financial advice so that investors and borrowers are better able to make informed decisions; and
- encouragement of appropriate levels of *competition* among those offering financial services, in the interests of efficiency.
- 25. Of these three types of regulation, only the first prudential supervision is unique to the financial sector, for reasons discussed below. Competition policy should involve the application of a common set of principles to all industries in the economy. Similarly, consumer protection rules can apply across a range of products, although there are particular issues involved with financial products; hence a lot of emphasis is given to investor protection. In the discussion below, prudential supervision receives the greatest attention because it is central to the RBA's concerns and expertise.

Prudential supervision

General aspects

- 26. Prudential supervision, in its broadest sense, is about maintaining the longer-run stability of the financial system by avoiding (or at least reducing the chances of) financial crises. History suggests that economy or system-wide financial crises do not occur often, but when they do their consequences are very severe. Most developed economies have only experienced such crises a few times per century. In Australia, such events occurred in the 1890s and the 1930s. Financial disturbances in the late 1980s and early 1990s reminded Australians that this danger was still present. A number of financial institutions incurred significant losses and there were some insolvencies, but the damage was less than in the earlier two episodes.
- 27. Prudential supervision, in its narrower sense, is about encouraging prudent risk management by financial institutions whose failure could precipitate a financial crisis. It works through rules which minimise the chance that supervised institutions will become insolvent and, failing that, by crisis management procedures. As a by-product, it offers the public a relatively safe haven for those savings where security is more important than return.
- 28. Certain sorts of institutions enter into contracts with the public whereby they promise to repay a specified nominal sum of money at some future date. The most common examples are deposits with banks and other retail deposit-taking institutions, where principal and interest must be repaid, or an insurance policy, where the claim must be paid out in full. If these institutions cannot meet their nominal commitments, they become insolvent and fail. Unlike a unit trust or an accumulation superannuation fund, their promised return is legally "locked in"; they cannot justify a lower (or negative) return on the grounds that market conditions proved unfavourable.
- 29. These products involving a fixed nominal contract have evolved over centuries to fulfil a genuine community need. Holders of deposits need to be sure that the expected funds are there when bills have to be paid, and a policyholder could be ruined if the insurance company was only able to pay a proportion of the sum insured. The public expects these institutions to still be around, and able to pay, when the time comes to get their money back.
- 30. For this reason, governments put in place rules designed to minimise the chances that institutions of this type will fail, although failure cannot be ruled out altogether if other unacceptable costs are to be avoided. The cornerstone of these rules is that the institutions have adequate capital to cover the risks they must take. Another characteristic of prudential supervision is that it is necessarily institution-based, because only institutions can become insolvent. Prudential supervision is, therefore, applied to banks, other deposit-taking institutions and insurance companies, but the same principle would apply to defined-benefit superannuation funds.

- Another important argument for supervision is the "moral hazard" argument. 31. Because of the potential suffering involved if one of these institutions was to fail, there is a widespread community belief that the "government would do something about it". In some countries this support is legislated, but even without legislation there is a belief that claims on these institutions are guaranteed. This means that in the event of failure, a government could be forced to make good the public's losses with taxpayers' funds. Also, if all institutions are viewed as being equally safe, there is no incentive for managements to compete on safety. The "moral hazard" is that the incentives tend to make institutions compete on offering the highest return regardless of risk. This will lead to excessive risk taking in the industry, increasing the likelihood of a financial crisis and the need for a government bail-out. The most recent international example of this was the collapse of the Savings and Loan industry in the US. Prudential rules are seen as a necessary restraint on this tendency. Of course, the existence of a supervisory regime might tend to confirm in the public's mind that the institutions are immune from failure; supervision itself provides no such guarantee.
- 32. A theoretical alternative to prudential supervision is "caveat emptor", that is, customers make their own assessments of the soundness of individual banks and insurance companies, without the support of prudential rules. With one or two minor exceptions in earlier periods, this approach has not been followed in any major country. The judgment has been made that the public do not have the required skills or time to do thorough assessments of the health of financial institutions, and the stakes are so high that an error can be ruinous. Even relatively sophisticated financial analysts have made serious misjudgments in their evaluations, so it would be reckless to expect individuals to do better. This does not mean that only governments can be responsible for the prudent behaviour of financial institutions; there is a complementary role for private ratings agencies in combination with a high level of disclosure to assist in this process, but they are not a substitute for prudential supervision.

Prudential supervision of banks

- 33. While both banks and insurance companies share a need for institution-based prudential supervision, banks have some special features which make them crucial for the maintenance of financial system stability.
- 34. First, the structure of their balance sheets makes banks vulnerable to disturbances, even short-lived ones. Most of their liabilities are at call, or very short-term, but their assets are mostly long-term.² It is the nature of banking to take on this maturity mismatch. It is also generic that a large part of bank lending will be to small and medium-sized businesses where information about creditworthiness is

Insurance companies are almost the opposite: their liabilities are not liquid and the majority of their assets are readily marketable (shares, bonds, property). They are thus not as susceptible to runs or contagion as banks and hence not as crucial for the spread of financial crises.

difficult to obtain or standardise, and where loans cannot be securitised and hence made liquid. A bank is thus vulnerable to a run on deposits that it cannot meet. Even if the bank is sound, in that the finally realisable value of its assets is greater than its deposits, the "fire-sale" value of its assets could easily be less than its deposits.

- 35. Second, banks are subject to contagion. A run on one bank, which the public suspects is unsound, can easily lead to runs on other banks which were otherwise prudently managed. However, whether a bank is sound or not, it cannot withstand a determined run, and some lender of last resort is required to restore equilibrium. That lender could be another bank or group of banks, but in practice it is almost bound to be a central bank or a consortium led by a central bank or other bank supervisor.
- 36. Third, banks play a crucial role in the transmission of a financial crisis. Threatened with a run, banks will, not surprisingly, adopt a survival strategy they will be reluctant to make new loans, will call in risky loans and will give preference to holding marketable government securities over non-marketable private sector loans. The provision of credit will tend to dry up, spreading the financial disturbance quickly to the real economy through a contraction in business activity. Modern scholarship on the Great Depression now sees the drying up of credit as a result of bank failures as central to its severity, and more important than the fall in the share market (see Bernanke and James (1990) and Bernanke (1994)).
- 37. In principle, prudential supervision could be conducted by the private sector through, for example, self-regulatory organisations or ratings agencies. However, prudential supervisors tend to be in the public sector either central banks or other statutory bodies. Public sector supervisors can do a number of things more effectively than private bodies, eg:
- Where a bank's prudential standing falls significantly, the supervisor can attempt (usually successfully) to resolve the problem effectively and quietly, thereby avoiding a run by investors. If credit ratings were the prime source of prudential information for the public, a decline in ratings below a certain level could precipitate a run. Similarly, a supervisor might act more quickly to resolve the problem of an institution under threat than can disparate groups of creditors (who might not be able to organise decisive action until too late) or shareholders (who might gamble on a risky project saving the company from insolvency).
- The public sector, through the central bank, can be the ultimate liquidity provider to a bank which is essentially sound but suffering liquidity problems. Banks are generally the providers of liquidity to the economy, but there is always a possibility they might be unwilling to lend to a competitor about whom they lack information that a public sector supervisor has.
- 38. Enhanced disclosure of financial information is viewed by some as a possible alternative to prudential supervision. Improving the transparency and quantity of information contained in financial statements is important and should be encouraged.

Though unlikely to be consulted by most depositors, improved information is useful to the investment community where share analysts and ratings agencies are constantly evaluating banks' performance. Their assessment of, for example, a bank's bad loans can affect its share price and send a useful message to management. As a result of RBA pressure, banks now publish figures on their problem and impaired assets on a standardised basis to assist in market evaluation. While bank supervisors recognise the value of greater disclosure, no-one relies exclusively on this approach; disclosure can be a useful complement in that it increases private sector discipline but it is not a substitute for public sector regulation. Disclosure, no matter how comprehensive, cannot provide a timely picture of a bank's financial performance or risk profile, which can change quickly with the use of derivatives and other complex financial instruments. As the Chairman of the US Federal Reserve Board has noted:

"A generation ago, a month old balance sheet was fairly indicative of the current state of an institution. Today, owing to the proliferation of transactions, a day old balance sheet can be obsolete."

39. The Reserve Bank of New Zealand's (RBNZ) approach is often cited as one which relies exclusively on disclosure, but this is not the case. While the RBNZ does give a lot of emphasis to disclosure, it retains a supervision department which licenses banks, imposes the Basle capital adequacy standards, monitors compliance, holds regular consultations with senior bank management, and has in place crisis management arrangements to cover potential bank failures.

Regulation of investment products

- 40. Investment products offer returns based on the earnings of some specified pool of assets. These include unit trusts and the various products offered by funds managers to the public or to superannuation funds. While the products are clearly defined, the institutions which manage them range from specialised funds managers, insurance companies, bank subsidiaries to friendly societies.
- 41. Investment products do not involve a nominal contract as the assets are managed on a "best endeavours" basis. Provided the manager is honest, the worst that can happen is that the product will yield disappointing returns, possibly involving falls in absolute value. In this event, customers might withdraw funds and move them to other providers. While substantial falls in the market value of investments, if sustained, will reduce wealth and consumption, these effects will generally be less pronounced than those which follow bank failure. Similarly, if the managing institution gets into difficulties, this has few implications for the unit holders; they will still be entitled to the market value of the underlying assets on liquidation or takeover by a new manager. Thus, these products are different in kind as well as degree of risk to deposits or insurance policies. A summary of the differences is given in Table 4.

14.

Table 4: The Two Bas	ic Types of Products
Deposits Insurance policies Annuities	Investment products
Specified nominal amount must be repaid	Investment managed on a "best endeavours" basis. Value of units depends on market performance
Health of institution vital to value of product	Health of managing institution has little or no effect on value of product
Underlying institution can fail, ie cannot meet commitments	Underlying institution can have disappointing performance and a negative return
Institution bears most of the risk	Investor bears most of the risk
Institution must hold substantial capital to meet commitments	Institution holds little or no capital

- 42. As a result of the different risk profile of the two types of products, the required form of supervision is entirely different. For the first group, prudential supervision has to concentrate on the health of the institution and the adequacy of its capital. In the second group, the underlying institution is not at risk to any great extent and the capital needs are minimal. The investor bears the risk, and should be under no illusion that the value of his or her investment is being preserved by the supervisor. People holding investment products do so because they wish to access the high-return/high-risk end of the risk/return frontier. They cannot expect the same degree of protection against the fall in the value of their investment as they would had they held deposits or insurance policies.
- 43. For this reason, the appropriate form of regulation of investment products is one based on disclosure of the characteristics of the product, rather than on the solvency of the institution offering the product. These are entirely separate approaches, and only the latter could be termed prudential supervision. Indeed, it would be very dangerous to the long-term health of the financial system if the public were to perceive that investment products were supervised in a manner similar to that of deposits or insurance policies. This would be an extreme form of moral hazard in that it would blur differences in risk and, at worst, could lead people to think that bank deposits and investment products were equally riskless, ie that the government or one of its instrumentalities stood equally behind them.

- 44. For this, and other reasons, the RBA believes that the centrepiece of financial regulation should be the clear separation of regimes for prudential supervision and product disclosure regulation. The nature of regulation for investment products is set out in the next section.
- 45. Accumulation superannuation funds do not fit neatly into the two-part division outlined above. Although essentially investment products in that their annual return varies with the market and can be negative, they are subject to a form of quasi-prudential supervision. They are required to operate within government rules for fund trustees in respect of their approach to risk, return, diversification and liquidity. This quasi-prudential oversight reflects the compulsory aspect of superannuation, some lack of investor choice, taxation concessions and the long-term nature of investments. These aspects add up to an implicit promise by the funds to pay back contributions plus, in the long term, a positive return not very different from the market average.

Product and advice regulation

- 46. Product disclosure and advice regulation (often called consumer protection) permeates all areas of retail business activity in Australia. It deals with unfair and deceptive practices (eg pyramid selling, misleading conduct), product safety and information, and dispute resolution.
- 47. Other areas of the economy have specific consumer legislation. It can relate to physical safety (eg food, poisons, explosives, motor vehicles and occupational health) or to situations where consumers make decisions that concern large amounts of their money (eg the licensing of builders, rules applying to the borrowing or investing of money). These specialised areas of consumer regulation are often backed up by some form of enforcement to see that retailers are complying with standards (eg health and building inspectors).
- 48. In the financial sector, consumer protection aims to ensure that information disclosed by product producers and sellers is sufficient for investors to make well-based decisions (which may, of course, include a decision to invest in a highly risky venture), with the ultimate objective of promoting efficiency in financial markets. Much of the regulation in relation to investment products and to financial advisers has this goal. Other regulations deal with the competence and integrity of investment trustees and managers; with provision of information to consumers about the on-going conditions of contracts (including charges); with avenues for complaint and redress when disputes arise; and so on. Sometimes information must be provided in a way which facilitates comparison of competing products or services; examples include disclosure standards for life insurance policies, consumer credit laws and the Code of Banking Practice.
- 49. This area of regulation is best achieved by regulating particular products or functions, regardless of institution. Unless financial products are uniquely identified with particular institutional groups, the relevant product regulator will necessarily deal with several groups. For example, the same basic principles can apply to an

independent sole-trader providing financial advice as to the largest financial conglomerate in Australia. Indeed, it can be argued that these principles could be embodied in regulation which relates to all financial instruments and services.

Regulation of financial markets

- 50. Market efficiency is usually concerned with the liquidity, fairness and orderly trading of markets. Participants should be able to buy or sell the products they want, in the volumes they require, and at true market prices. This requires an effective market infrastructure, transparent pricing mechanisms, good settlement and clearing procedures, and freedom from fraud and malpractice. Reliable settlement procedures and arrangements for handling a failure to settle also promote stability.
- 51. To promote market efficiency and stability, governments usually provide a legislative framework and allow the relevant industry or exchanges to establish detailed trading rules and enforcement procedures. The task is, of course, greatly simplified if supervision of the market-makers and the regulation of products and advice are effective.

Regulation to promote competition

52. Most countries have regulatory bodies which aim to prevent anti-competitive practices, including price fixing, monopolies and misleading conduct. They usually have authority to prevent or to challenge mergers or acquisitions which might reduce competition. Their responsibilities normally cover competition in all sectors of the economy since there is no justification to have a different (or very different) competition policy in financial services than elsewhere. Another aspect of competition regulation is the use of litigation, by both the regulator or aggrieved parties, to prosecute breaches of competition laws. Whereas prudential supervisors and regulators of products, advice or markets continuously monitor the financial industry, competition regulators tend to focus more on specific incidents or proposals.

Other regulation

53. Other types of regulation, with objectives other than stability or efficiency, impinge on the financial system. The financial system is a massive database of the economy's financial transactions and wealth. Financial institutions are required to inform the Australian Transactions and Analysis Centre of suspicious or large cash transactions. Lenders and credit assessment agencies are the only private sector bodies specifically subject to the provisions of the Privacy Act. And the Australian Taxation Office requires deposit-takers to deduct tax from the accounts of those who do not provide a Tax File Number. Taxation and social security regulations can also affect the choices people make about which financial product to purchase.

Trade-offs between types of regulation

- 54. While the various types of financial regulation are directed to objectives which the community has endorsed, they are not always consistent with each other. This is inevitable, and no amount of reorganisation of responsibilities can avoid it. An appropriate balancing of objectives is required.
- 55. For example, prudential supervisors usually have authorisation criteria relating to minimum capital and specified ownership structures. This creates a barrier to entry to the particular market which could reduce competition in some circumstances. Similarly, a prudential supervisor will sometimes resolve a potential financial crisis by requiring amalgamation of financial institutions, thereby increasing concentration.
- 56. In addition, there are constraints on the implementation of prudential regulation which are imposed by international competition and international financial regulators. Differences in regulatory regimes can have competitive impacts, including diverting activity to offshore markets (or vice versa). Further, the overseas expansion of Australian financial institutions can be blocked if they are not supervised to internationally-agreed standards. For example, banks operating internationally need to satisfy the capital adequacy guidelines of the Basle Committee on Banking Supervision.

3. PRESENT REGULATORY RESPONSIBILITIES

Introduction

- 57. Reflecting the Constitution, responsibilities for regulating Australia's financial system are divided between the Commonwealth and the States. Commonwealth agencies supervise banks and insurance companies, while the States have responsibilities for building societies, credit unions, friendly societies, trusts and unincorporated enterprises. The Australian Securities Commission (ASC) and the Australian Competition and Consumer Commission (ACCC) operate under State and Commonwealth co-operative schemes. Overlaying the formal regulatory structure is the Council of Financial Supervisors (CFS).
- 58. This Chapter describes how these regulatory arrangements fit together. Its main focus is prudential supervision, but it also looks at regulation to protect consumers of financial instruments and services as well as market regulation. The current regulatory arrangements in Australia are summarised in Table 5.

Prudential supervision of capital-backed institutions

Credit institutions

- 59. Credit institutions in Australia fall into two main categories: supervised deposit-taking institutions (banks, building societies and credit unions) and unsupervised issuers of debt securities (eg finance companies, merchant banks).
- 60. Banks are supervised by the RBA. Building societies and credit unions are supervised by State Supervisory Authorities under the Financial Institutions Code, which is administered by the Australian Financial Institutions Commission (AFIC). Supervisory policies for these institutions are similar in that they rely heavily on capital adequacy standards applied to the banking system by the RBA. However, differences in the main activities of the institutions and in their relative size and sophistication have led to some differences in approach. RBA supervision tends to be less intrusive and prescriptive than that conducted under the AFIC framework. In on-site work, the RBA has specialised teams which assess credit risk and market risk management by banks; SSAs conduct more detailed and frequent inspections.

	Other self regulation		Banking, building society and credit union: disclosure and EFT conduct At least 6 industry-based complaints bodies (eg Bank Ombudsman)
Table 5: The Current Regulatory Structure	Other State bodies/legislation (for some States & institutions these could be SSAs)		Friendly societies Trustee companies/ public trustees Miscellaneous State- based institutions Consumer Credit Acts
	Other Commonwealth bodies		Private Health Insurance Administrative Council: health insurers • competition • general trade practice issues • pricing
	Australian Securities Commission (& self-regulatory bodies under Corporations Law)	22	ASX: stock brokers SFE: futures brokers Collective investments Securities and futures dealers/advisers Corporations: incorporation aspects Securities and futures: disclosure and market conduct
	Australian Financial Institutions Commission (& State Supervisory Authorities)	or i manciai supervise	SSAs: building societies, credit unions AFIC: special service providers
	Insurance and Superannuation Commission (and associated bodies)	Members of Council of Financial Supervisors	Life insurance companies General insurance companies Superannuation funds Insurance agents and brokers Life and general insurance: disclosure Superannuation: disclosure Insurance agents and brokers: conduct Superannuation Complaints Tribunal
	Reserve Bank of Australia		Banks Foreign exchange dealers
	Type of regulation		Supervision/ oversight Consumer protection and selected other regulation

- 61. Under the Reserve Bank Act, the RBA must exercise its banking policies to contribute best to "the economic welfare and prosperity of the people of Australia". The Banking Act specifies two broad objectives for bank supervision. The first is to protect the depositors of banks³. The second addresses the potential for problems in the banking system to create broader damage to the financial system. The RBA is charged with encouraging a bank:
- to keep itself in a sound financial position;
- not to cause or promote instability in the Australian financial system; and
- to demonstrate integrity, prudence and professional skill.

The Act gives the RBA powers to monitor and evaluate how effectively banks meet these objectives.

- 62. AFIC's statutory aims are to protect depositors and to promote the financial integrity and efficiency of the institutions supervised under the Financial Institutions Scheme.
- 63. Unsupervised credit institutions may issue securities and be regulated by the ASC under the Securities Chapter of the Corporations Law. This requires issuers of debt securities to be licensed as securities dealers and to meet ASC tests for financial soundness, competence and integrity. If securities are issued to retail investors, a prospectus and trust deed are required. The trustee will usually have powers to obtain financial statements from the company and, if trust deed provisions are breached, to act on behalf of debenture holders. Credit institutions, such as finance companies, can issue securities to wholesale markets but usually need a rating to do so. Certain standards specified by ratings agencies must be met to achieve a high credit rating.
- 64. Special purpose vehicles for securitisation schemes also issue securities. They are subject to the Corporations Law in the same manner as other issuers. However, they do not exist as companies *per se* but provide the vehicle by which the operations and some risks are undertaken by the arranger of the scheme or are outsourced to third

The Banking Act does not define a "deposit". Nevertheless, for the purposes of the Act, deposits can reasonably be confined to debts entered into by a bank which give rise to a banker/customer relationship - that is, cheque or term deposit accounts, rather than funds borrowed by a bank from wholesale markets. Banks' other liabilities fall outside this definition, although a broader definition may encompass some marketable instruments which are accepted in financial markets as deposits, such as certificates of deposit.

Australian law is clear about what is not to be described as a deposit: where a public borrowing by a corporation is classed as a security under the Corporations Law it has to be described as a debenture, unsecured note or similar terms. This allows borrowings of most supervised institutions (eg banks, buildings societies, credit unions, life insurance companies) or by prescribed interests or pastoral finance companies to be described as a deposits. The Corporations Law exempts banks' debts which arise in the ordinary course of banking business from the debenture provisions of the Law.

22.

parties (eg mortgage originators, mortgage insurers). Again, they need to meet ratings agency requirements to borrow on wholesale markets.

Institutions offering insurance and superannuation products

- 65. These institutions comprise insurance companies, friendly societies and defined benefit superannuation funds. Life and general insurance companies and superannuation funds are supervised by the ISC⁴. Its aim is to promote public confidence and help avert instability in the insurance and superannuation sector, as well as provide a safe haven for (retail) savings. To this end, it requires such institutions to maintain adequate risk management policies and internal controls.
- 66. At a very general level, insurance companies are supervised like deposit-taking institutions, with an emphasis on capital/solvency requirements. However, capital requirements for life insurance companies which hold mainly marketable assets focus more on market risk than credit risk. There are some additional requirements for insurers: eg scrutiny of actuarial assumptions underlying the valuation of liabilities and of risk-shedding arrangements with reinsurers. Life insurance companies split their business into statutory funds. Each statutory fund can cover a wide variety of insurance policies, but capital-backed and investment-linked businesses are kept separate. Each statutory fund is required to have sufficient reserves to be able to service the business of that fund. Unlike banks, insurers are not subject to an internationally agreed supervisory framework.
- 67. Friendly societies are currently supervised by State bodies but are due to come under AFIC in early 1997. They operate in a similar manner to life companies and, within the AFIC regime, will have broadly similar capital and other prudential requirements.
- 68. The very large number of superannuation funds (around 120,000) restricts the ISC's ability to maintain close and frequent contact with each fund. The supervisory regime for superannuation funds reflects this. Trustees of company and industry superannuation funds are required to have equal numbers of company and employee representatives. Trustees are also required to determine the investment strategy of superannuation funds namely to have regard to risk, return, the benefits of diversification and liquidity needs. The ISC's approach to supervision is similar to, but more intensive than, the ASC's regulation of unit trusts and other fund raisers. It has more of an audit-type role, concentrating on larger funds and those which appear to be in difficulty.

Health insurers are supervised by the Private Health Insurance Administrative Council; friendly societies and some State government-owned institutions are supervised by State government bodies.

Oversight of funds managers

- 69. There are six types of funds managers, or institutions offering investment-linked products: unit trusts, investment companies, common funds, accumulation superannuation funds, some life insurance statutory funds and some friendly society benefit funds.
- 70. Institutions offering these products make promises about the categories of assets on which their returns will be based and about redemption arrangements. Most importantly, however, they do not promise to pay a particular, or even a positive, return on the investment. Regulation by the ASC and ISC, therefore, concentrates on whether managers are efficient, honest and fair, and have adequate resources, systems and procedures to manage the funds.

Prudential supervision of financial conglomerates

- 71. Because of the different risks that credit, insurance and funds management institutions face, governments, owners and markets insist that they be in separate corporate entities. For example, a funds manager could not merely pool assets and allow the returns to flow through to the investor if there were capital-backed products on the same balance sheet.
- 72. Financial conglomerates are groupings of these different types of institution under common ownership. Supervisors of the members of financial conglomerates face important issues including contagion risk, the transparency of legal and management structures, large and intra-group exposures and the measurement of capital adequacy (particularly to avoid double-gearing).
- 73. Most countries supervise financial conglomerates on a "solo-plus" basis. That is, supervision of individual entities is on a stand-alone basis but is supplemented by a general assessment of the group as a whole. In Australia, members of the CFS have agreed on principles for the oversight of conglomerates. They have, in particular, agreed to share information and to liaise with each other when a problem affecting any entity is judged to have the potential to impact on other members of the group. Progress in implementing this framework has been slowed by the need for legislative changes before some agencies (including the RBA) may share information and to protect information received. A Bill to facilitate information-sharing is expected to be introduced in Parliament later this year. Internationally, standards for supervising conglomerates are being addressed by the Joint Forum on Financial Conglomerates (see Appendix E).
- 74. CFS members have recommended that financial conglomerates in which a non-operating holding company owns both a bank and an insurance company be permitted, subject to appropriate regulation of the holding company. The Treasurer has announced that legislation to give effect to this proposal will not be introduced until consideration has been given to the findings of the Inquiry. In the meantime, the Colonial Mutual Group's proposal to establish a holding company structure will be

facilitated under existing banking and other legislation and will be subject to undertakings which allow for the effective oversight of the holding company by the RBA.

Product and advice regulation

- 75. As shown in Table 5, product and advice regulation (consumer protection) is the responsibility of a number of Commonwealth and State agencies and industry bodies. Much of the regulation has developed in the last few years, as a result of the proliferation of financial products and because of the magnitude of decisions many Australians face in providing for their retirement income. Some specific failures to provide information and advice that meets investors needs have also been a spur.
- 76. The RBA plays a small and indirect role in product and advice regulation. It chairs and provides the Secretariat for the Australian Payments System Council, which comprises representatives of financial institutions, others involved in the provision of payments services, consumers and other public bodies. The Council has been monitoring compliance with the Electronic Funds Transfer (EFT) Code of Conduct (since 1989), and implementation of the Code of Banking Practice (since 1993) and the similar codes developed for building societies and credit unions (since 1994). The RBA is also represented on the Board of the Australian Banking Industry Ombudsman Scheme. This method of combining industry, consumers and Government officials has worked well in improving standards of banking industry disclosure and complaints resolution. It is an approach used in many parts of the financial sector.
- 77. The ASC and ISC play similar roles for the securities, futures and insurance industries. Both use industry bodies in a self-regulatory role: eg the Australian Stock Exchange and the Sydney Futures Market have formal roles under the Corporations Law; the Life Insurance Complaints Service plays a similar role to the Banking Ombudsman. The ASC and ISC also have a role in product disclosure. The ASC has broad rules for disclosure in prospectuses enshrined in the Corporations Law (prospectuses should contain all the information necessary to enable an investor or professional adviser to make an informed assessment of the securities offered). It vets prospectuses issued. The ISC has issued a Circular on life insurance product disclosure and also vets customer information brochures issued by life offices.
- 78. The ASC administers the application of the Corporations Law to firms that provide advice regarding securities, while the ISC has requirements applying to individual life insurance agents and brokers. Advisers can give advice on functionally similar life insurance investment products and securities, but be required to follow different advice rules. There are no specific requirements applying to financial advice about bank deposits.
- 79. The ACCC has the responsibility of enforcing the consumer protection provisions of the Trade Practices Act; this is conducted on a case-by-case basis rather than as a continuous monitoring process. The Trade Practices Act has also been used by private parties in civil prosecutions regarding disclosure in prospectuses. The

- ACCC also has a role in developing consumer regulatory policies, including pricing. Its predecessors were involved in the formulation of both the banking and life insurance codes of practice, a review of the EFT Code of Conduct, an inquiry into retail transaction deposit account pricing and the monitoring of credit card pricing.
- 80. The Federal Bureau of Consumer Affairs, part of the Commonwealth Department of Industry, Science and Tourism, advises the Minister for Small Business and Consumer Affairs on, among other things, consumer protection, safety and information standards. Its involvement in the financial system is relatively limited, although it has commented publicly on electronic banking issues.
- 81. The States also have a role in consumer financial matters. All States have consumer affairs agencies to administer their own consumer protection legislation, which includes consumer credit. Existing credit legislation differs in a number of important ways across States and does not, in general, cover housing loans. Efforts to harmonise credit legislation across Australia and broaden its coverage have recently resulted in uniform Consumer Credit Legislation which is expected to come into force in most States later this year. The States have Tribunals which can hear consumer disputes and have, in the past, awarded hefty penalties against non-complying credit providers.

Regulation of financial markets

- 82. Regulation of financial markets in Australia is mostly undertaken under the aegis of the Corporations Law by the ASC and authorised exchanges the Australian Stock Exchange (ASX) and the Sydney Futures Exchange (SFE). The ASC, SFE and ASX are together responsible for regulation of *exchange-traded markets*. The Corporations Law envisages that much of the day-to-day regulation will be carried out by the exchanges. Exchanges are approved by the Treasurer and must have appropriate business and listing rules, and fidelity fund arrangements for the protection of users. They must also provide information to the ASC, which has some powers of market intervention. The Corporations Law also requires dealers to be licensed, sets out disclosure requirements to ensure that "investors" can make informed decisions, and prohibits certain forms of abusive behaviour (such as insider trading, market manipulation, and making false or misleading statements).
- 83. All foreign exchange trading and most bond trading is conducted by market-makers directly with the public and each other; these markets are known as *over-the-counter* markets. The foreign exchange market is administered by the RBA under the Banking (Foreign Exchange) Regulations. All foreign exchange transactions in Australia must be conducted with authorised foreign exchange dealers (banks and merchant banks); the RBA requires dealers to meet supervisory requirements relevant to the conduct of foreign exchange business. *Over-the-counter securities markets* are regulated by the Corporations Law, which requires a prospectus for the issue and sale of most securities and the licensing of most over-the-counter dealers. Exemptions from prospectus requirements are given for transactions in wholesale markets (eg if

individual parcels of securities for sale exceed \$500,000, or if offers are made to specified classes of sophisticated investors, eg securities dealers, life insurance companies).

- 84. The regulatory structure for *over-the-counter derivatives markets* is more complicated and is under review by the Companies and Securities Advisory Committee. Derivatives transactions can be regulated under the futures or securities Chapters of the Corporations Law or under the Banking (Foreign Exchange) Regulations. Some contracts (eg over-the-counter commodity options) are unregulated.
- 85. Because banks are at the centre of derivatives and securities markets in Australia, the RBA has been working to ensure banks' systems for managing market risks are adequate. It is also working with accounting bodies to improve public disclosure of traders' derivatives activities/exposures and is implementing the Basle Committee's capital guidelines on market risk.
- 86. The exchanges have detailed rules for the conduct of derivatives and securities trading. These aid in enhancing fairness, transparency and financial integrity. They can assist in detecting the build-up of exposures and in discovering price manipulation. In the over-the-counter markets, industry bodies, principally the Australian Financial Markets Association, provide further guidelines for industry conduct. Nearly all securities and derivatives markets in Australia are computer-based and face substantial potential competition from equivalent markets overseas. Financial market regulators in Australia are aware that over-regulation of these markets is likely to lead to atrophy, just as they are aware that a reputation for well-regulated and efficient markets is likely to attract overseas business.

Regulation to promote competition

- 87. The ACCC has the primary role in regulation to promote competition. This includes prohibiting mergers and acquisitions that are judged to "substantially lessen competition". The factors on which the ACCC can make its judgments are outlined in Section 50 of the Trade Practices Act. They include the level of concentration in the market, the height of barriers to entry, the extent to which substitute goods or services are available and the extent of vertical integration in the industry.
- 88. The ACCC also vets some agreements among financial institutions and can authorise anti-competitive practices if they have offsetting public interest benefits. Examples include the rules of the Australian Payments Clearing Association which govern access to and procedures for the various clearing streams of payments between banks and other members of APCA and ASX membership rules.

Council of Financial Supervisors

89. The Council of Financial Supervisors, formed in 1992, is a co-ordinating body which brings together the heads of Australia's main financial supervisory agencies. The

Council aims to enhance the quality of financial supervision and regulation in Australia by:

- facilitating exchanges of information bearing on the efficiency and health of the financial system;
- assisting each supervisory agency to be aware of, and to understand, developments in parts of the financial system outside its particular area of responsibility;
- identifying important issues and trends in the development of the financial system as a whole; and
- avoiding unintended gaps, duplication or inconsistencies in regulation.
- 90. The Council encourages the harmonisation of regulatory requirements where the interests of agencies overlap. It does not, however, promote the application of identical standards to all financial institutions or products. Approaches to the protection of depositors and investors vary from one part of the financial system to another depending on a range of factors, including the nature of the products in question and the degree of risk attaching to them; the numbers and characteristics of the institutions and investors involved; and the statutory responsibilities and community expectations of supervisors.
- 91. The Council is not itself a statutory body, nor is it a prudential supervisor or regulator in its own right. Its creation has not altered the statutory responsibilities and powers of its members, or replaced other channels of communication between them. The Council's work has concentrated on the supervision of financial conglomerates. In addition, Council members have been establishing bilateral arrangements for information exchange and the supervision of particular institutions or groups. The Council is also overseeing a review of unintended overlaps and inconsistencies in the regimes regulating sales and advice practices for similar retail products offered by different kinds of institutions.

4. ASSESSMENT OF PRUDENTIAL SUPERVISION ARRANGEMENTS

Introduction

- 92. Since deregulation, the Australian financial system has been marked by expansion and innovation. It is much more sophisticated and open than systems in many larger countries. Take-up of new technology in payments and other areas has been rapid. Competition has been very strong in wholesale financial markets, and has been intensifying at the retail end more recently. At the same time, the financial system is sound and has a high level of community confidence. It suffered some instability early in the 1990s, but less than was experienced in many other countries at the same time. The recovery from that period of weakness has been quite rapid.
- 93. Against that background, several criticisms have been made of prudential supervision in recent times. These seem to be not so much about the quality of supervision as about whether it is organised efficiently or whether it is distorting competition. This Chapter examines some of those criticisms.

"The supervisory system is out-of-date"

- 94. It is sometimes asserted that prudential supervision arrangements have fallen behind developments in the market. To some extent at least that will always be the case, and is no more than an indicator of the pace of financial innovation. It is, in fact, no bad thing that supervisory arrangements should be one (small) step behind the market, not so much in terms of understanding developments but in reacting to them. In the absence of perfect foresight, any attempt by supervisors to be pre-emptive risks inhibiting innovation and efficiency.
- 95. The RBA would reject any suggestion, however, that prudential arrangements have not evolved with the rapid change in Australia's financial system. Although the present regulatory structure is relatively young, there has already been considerable rationalisation and updating in the past decade. The RBA's Bank Supervision Department was established in 1984. The ISC was created from four separate regulators in 1987. The ASC took over from the previous Federal and State regulators in 1991, and AFIC was established to administer the Financial Institutions Scheme in 1992. Concurrently, the supervision of the major financial sectors has been enhanced. Meanwhile, reviews of the regulation of collective investments, friendly societies, trustee companies and derivatives markets are in train.
- 96. The most significant recent step has been the creation of the Council of Financial Supervisors in 1992 to formalise high-level liaison and co-ordination among the main agencies. This will be an increasingly important player, both for harmonising supervisory requirements and in the oversight of financial conglomerates. Building on a policy framework recently devised by the CFS for holding company structures, more formal lead regulator arrangements will be developed for all conglomerates.

- 97. In the RBA's area, there has been major evolution over recent years in the methods used in bank supervision, in response both to the increasing complexity in banking and lessons learnt from problems in the late 1980s. Capital adequacy standards covering banks' credit risks on and off balance sheet were introduced internationally in 1988. By the end of 1997 these standards will have been extended to cover market risks. The new standards have been developed with extensive industry consultation, internationally and domestically, to ensure that they are both relevant to banks' own risk management and consistent with the objective of minimising regulatory burdens. A key aspect is the "internal model option" which allows banks to use their risk management systems for generating a regulatory capital charge (subject to their satisfying a number of qualitative and quantitative requirements). The RBA expects that, in future, other supervisory requirements will be based more on banks' internal systems, and will focus more on economic concepts of risk and capital.
- 98. This theme of evolution is also illustrated in the development of the RBA's credit and market risk visits, which commenced in 1992 and 1994, respectively. While other overseas supervisors had engaged in detailed examinations of banks' operations, the RBA was one of the first to recognise the value of targeted, high level visits to assess (and develop benchmarks for) risk management systems and methodologies. These are likely to be both more effective and less intrusive than prescriptive, rule-based supervisory methods. A number of overseas supervisory agencies, including the Bank of England and the US Federal Reserve, are now emphasising programs similar to those conducted by the RBA in their on-site work. These and prudential standards - such recent as on securitisation and funds management - reflect the RBA's aim of finding an appropriate balance between supervisory vigilance and minimum interference with the freedom of banks to be innovative and efficient.

"Everything is Blurring"

- 99. It has been asserted that a blurring of distinctions between financial institutions and products effectively undermines the current institutional focus of prudential supervision. Some of these issues were addressed in Chapter 2. In the RBA's view:
- a valid distinction can be drawn between two broad categories of financial product those which are "deposit like" and those where the return is linked to the performance of a specified pool of assets. It is this basic distinction which establishes the need for different supervisory approaches to be applied to the different institutions offering these products; and
- there has been some crossing over of products between the different types of institutions and some new finance providers have challenged traditional market boundaries. But that process is far from complete. Such innovations, nonetheless, can have implications for product regulation. The community presumably wishes to have the same information provided by all suppliers of products which are close

substitutes - to assist with choice - and to have similar avenues of redress for complaints about poor service regardless of source. But these innovations do not have any automatic consequences for prudential supervision, which is concerned with institutional viability and financial system stability.

- 100. Under what circumstances might blurring in the latter, more narrow, sense have consequences for prudential supervision? First, the advent of new competitors in similar products could prompt a re-evaluation of the supervision requirements for established firms. It may be that there is a case to reassess the balance which has been struck between the costs (including effects on competitiveness) and the benefits of that supervision. This balance must periodically be reviewed by relevant supervisors, with any competitive impacts being one factor taken into account. Second, where the general activities of new providers raise the same concerns for either the protection of investors' funds or for financial system stability which motivate supervision of established firms, they should come under broadly equivalent prudential standards.
- 101. Are prudential supervision arrangements in Australia applied unevenly to similar activities which pose similar risks?

Credit institutions

- 102. The main deposit-takers are banks, building societies and credit unions. The RBA's prudential supervision of banks is very similar to AFIC's for the latter two groups, both being built substantially on the capital standards developed by the Basle Committee on Banking Supervision, with only minor variations in asset risk-weights. The main differences in supervision relate to ownership rules, prime purpose requirements and supervisory style which largely reflect the community-based origins, narrower scope and smaller size of the AFIC institutions. Some studies have also highlighted the additional costs involved in supervising building societies and credit unions because of its State-based structure, which involves some duplication of resources.
- 103. Merchant banks borrow in wholesale markets and are not subject to prudential supervision in their own right. Most are subsidiaries of foreign banks and are supervised indirectly on a global consolidated basis by their "home" bank supervisor. They do not therefore have to observe local capital requirements, large exposure limits and PAR or lodge non-callable deposits with the RBA. On the other hand, they do not enjoy some of the advantages of branch status or direct access to the payments system. The fact that some such institutions have chosen to apply for a banking authority, while others who would qualify have chosen not to, suggests that the competitive advantages in the two categories are finely balanced and the net outcome depends a good deal on individual circumstances. (These institutions are discussed further in Chapter 5.)

Deposit-takers and life insurance companies

104. Banks (and other deposit-takers) and life insurance companies are both subject to capital adequacy rules, but these are constructed quite differently. In large part, however, this reflects the differing natures of the institutions - the risks they carry on and off their balance sheets and the contracts which they strike with investors or savers. One consequence of these differences is that insurers pose less risk to financial system instability than banks do, and it would not be inappropriate for them to be supervised to a different standard. Even so, it is not apparent that varying supervisory requirements do create competitive advantage in relation to the small set of savings products which are similar between banks and insurance companies. The Council of Financial Supervisors has commenced an assessment of the scope to align capital standards more closely, but this seems likely to be limited.

Funds managers and the others

- 105. All funds managers (other than the special case of superannuation funds) operate in a common framework of product regulation under the ASC. Where a funds management operation has a bank parent, the RBA has certain requirements to emphasise to investors the separateness of the two, but these place no particular constraint on the funds management activity itself. As described in Chapter 3, funds managers are not prudentially supervised in the way capital-backed institutions are. Nor should they be attempts to do so would constrict the spectrum of risk for investors and alter the funds management role fundamentally.
- 106. The RBA's view is that there are no major instances of supervisory requirements contributing to an "unlevel" playing field, without a justification in the different nature of the institutions involved.

"Supervision should be based on functions, rather than institutions"

- 107. Again, it is not always clear what is meant by this view. If functional supervision means simply that all deposit-takers should be supervised alike, all insurers should be supervised alike, and so on, there is nothing exceptional in that. As noted above, Australia is very close to having such a system.
- 108. In other cases, functional supervision seems to mean that each type of financial asset a government security or a housing loan, for instance should be assigned a capital charge which would, in turn, be invoked whenever and wherever that asset occurred in the financial system. That this makes no sense is obvious if one contemplates the manager of a unit trust with a portfolio of government securities having somehow to hold capital equivalent to that required of a bank with securities on its balance sheet. As outlined in Chapter 2, the concept of a capital charge only has meaning when applied to an institution with a standard balance sheet or which incurs exposures in its own name. Even among deposit-takers it might, in principle, be quite appropriate for different capital charges to apply to similar assets. The community

may want its investments with one group to be very secure while, with another, it is prepared to accept more risk in return for higher earnings.

109. Implicit in the argument for "functional" supervision is the view that any capital charges should be calculated as the sum of all the individual components of risk. But prudential supervision has to assess the risk in an institution as a whole, taking into account possible geographic or industrial concentrations of exposure and, possibly, correlations (positive or negative) between different risks within the portfolio. Modern supervisory practice is moving increasingly in that direction. In this sense, the notion of supervising functions or products could be viewed as a rather outmoded approach to what is a complex and rapidly-evolving supervisory process.

"Supervision is too costly"

- 110. While it would be surprising if supervision did not entail costs for supervised institutions, the relevant questions are about the *net* costs for individual institutions taking into account the lower funding costs and other advantages which come with greater public confidence *and* for the financial system in the broad. The gross costs for the latter include restraints on innovation and efficiency; these need to be set against the benefits of a more stable and reliable financial system. Even at the institutional level it is difficult to measure objectively the net benefits or costs. It is virtually impossible to do so in the broader sense.
- One approach which can be indicative is to look at outcomes. Focussing on the banking system, with which the RBA is most familiar, it would be hard to sustain an argument that prudential supervision is unduly onerous. It certainly does not appear to have hindered expansion and change there. In contrast with some other countries, Australian banking groups have considerable choice in business activities - from "traditional" banking to derivatives trading, and on to insurance, funds management and superannuation. The banking sector currently has its highest share of financial system assets since the mid 1970s, as well as accounting for the vast bulk of transactions in the securities, foreign exchange and derivatives markets. management subsidiaries of banks have increased their market share in recent years, now having around one-quarter of the total compared with a fifth in 1990. The only significant regulatory requirement bearing on banks' funds management and insurance activities is that they are conducted in separate legal entities. This ensures, as far as is possible, that the deposit business of the bank and the capital supporting it are insulated from those other activities. However, this "separation" of activities imposed by supervisory requirements is probably no greater than would have arisen naturally within a banking group given the different legal, financial and risk characteristics of these businesses and the different skills required to manage them.
- 112. The RBA's main balance sheet requirements leaving aside the NCD impost which has no prudential supervision purposes relate to capital and holdings of prime assets (PAR). Neither appears to entail significant costs for banks because, on average, they hold more capital and more prime assets than the RBA requires.

Currently, the capital ratio of the banking system is 11.6 per cent. Based on the standard minimum of 8 per cent, this translates to "excess" capital of about \$15 billion. This is not, of course, to say that the requirements will not bite from time to time. If they did not, they would be serving no purpose in curbing risky behaviour.

- 113. Bank profitability has also remained high, on average, which is at odds with prudential constraints bearing heavily on operations. While recent high levels of profitability are now being challenged, this is more the effect of new competitors with lower operating costs than the banks have. The ability of mortgage securitisers to gain a significant slice of the housing finance market, at the expense of the banks, is perhaps the best recent example of that process. Although banks have a funding advantage over the mortgage securitisers their lending rate is higher. Even assuming (unrealistically) that banks would hold no capital and no prime assets in the absence of supervision, supervision costs for housing lending account for only 60 basis points of the bank margin.
- 114. There has been strong response to the further opening of foreign bank entry arrangements since 1992. Together with the conversion of building societies to banks, the number of banks has increased substantially from 28 in 1980 to the present total of 52, and there is a handful of applications in the pipeline. (Only one foreign bank has left the Australian banking scene in that time.) This increase is not consistent with supervision being onerous or discouraging.
- 115. The RBA's overall assessment is that the supervisory burden on Australian banks is not excessive and probably much less than in countries such as the US, Japan and Singapore. Even so, the RBA is conscious of the costs which undoubtedly come with supervision and aims to minimise these, consistent with its statutory obligations. Its on-site visit program, for example, is helping it to assess the relevance of data collections and to consider moving to new information which would be more useful and less costly to collect. In some instances, banks themselves have encouraged the RBA to collect and publish more aggregate data on their activities and risk exposures. With prudential requirements based more on banks' internal management systems and, where possible, harnessing the disciplinary forces of the market through encouraging better financial disclosure by banks, supervision should become more effective while also involving lower compliance costs.

"Regulations overlap and conflict"

- 116. Complaints are commonly made about overlaps or lack of co-ordination in supervisory requirements. As with "blurring", however, the substance in these complaints can be hard to pin down.
- 117. Overlaps involving prudential supervision could arise in two or three ways. The first is where an institution is subject to both prudential supervision and product regulation which will have it answerable to two agencies. This may be an irritant, but it is unavoidable just as it is unavoidable that financial institutions will be subject to the Corporations Law, to taxation law, privacy standards, anti-discrimination law, and

- so on. Because the agencies' objectives are different, their requirements should not be duplicated to any great extent or be inconsistent.
- 118. Another area of overlaps arises with conglomerates, where the individual entities within the group have different supervisors. Again, it is inevitable that when a conglomerate is composed of different types of institutions deposit-takers, insurance, funds management different standards and reporting requirements will fall on those specialised entities. Generally these requirements will not overlap but in some cases they will for instance, with intra-group exposures. It is an ongoing objective of the Council of Financial Supervisors to see that the responsible supervisors two, in most cases, with Australian conglomerates do not get in each other's way, requesting the same information from different parts of the group or imposing requirements in relation to group behaviour which are inconsistent. The proposed adoption of more formal lead regulator arrangements will help here, as the lead regulator could assume responsibility for group-wide data.
- 119. It has been suggested that the creation of a single prudential regulator may go some way to remedying problems of this type. A more extreme variant of this argument is that all regulatory agencies (prudential and otherwise) could be merged in order to improve co-ordination of financial regulation and supervision. There is, in fact, little evidence to support the contention that combining supervisory or regulatory agencies leads to any rationalisation of supervisory requirements or that co-ordination would be made easier by reorganisation of agencies. This is explored in more detail in Chapter 5.

"Capital requirements for banks are arbitrary"

- 120. Banks have argued from time to time that regulatory capital charges applied to individual or groups of exposures are not well aligned to actual (economic) levels of risk. The most commonly cited example is the 4 per cent capital charge applied to the bulk of banks' residential mortgage holdings, when there is strong evidence that the true risk in such assets is much less. More generally, it can be been claimed that the application of a standard 8 per cent capital charge on all corporate and related exposures takes no account of the wide spectrum of credit risk within the corporate sector. There are other examples.
- 121. One implication of the use of rule-of-thumb regulatory capital charges is that it may disadvantage banks with relatively low-risk corporate loan portfolios but work to the advantage of banks with higher-risk portfolios (since, other things being equal, both institutions face the same capital charge). The argument is that regulatory arrangements should not bias asset portfolio choices of institutions, as this leads to regulatory-induced competitive advantages and disadvantages which work against efficient resource allocation both at the macro and micro level.
- 122. The challenge of ensuring that supervisory capital charges are well aligned with actual risk is a difficult one, involving choices between accuracy and simplicity. Supervisory capital structures work best when they are relatively simple the ready

acceptance of the international Capital Accord in 1988 owed much to its simplicity. Such simplicity does not aspire to measure risk accurately on an exposure-by-exposure basis. Only a dedicated methodology based on concepts of economic capital can fulfil that requirement. Banks have only recently begun to turn their attention to the measurement of their capital needs on this basis.

123. The new market risk guidelines referred to above take a step in this direction by recognising banks' own risk management models as the basis for a capital charge. The RBA is looking (over the longer term) at ways of incorporating more accurate risk measurement systems into other capital requirements. Major changes here will depend in part on developments internationally and the result would tend to be a much more complex system than the present one. Meanwhile, the broad approach to risk measurement does not preclude reassessments of particular risk weightings if it were clear that these had clearly become inappropriate from a prudential perspective. (Risk weights on housing-related exposures is one possible example, as is the recognition within the risk weight structure of insurance.) Such issues are discussed regularly with banks.

"Supervision is not ready for the future"

- 124. It has been argued by some that developments in communications and technology may render the present financial and prudential structure irrelevant. Implicit in this is the view that supervisors have not recognised the potential for change. In part, the argument is an elaboration on the blurring thesis discussed above. In part, it also reflects a concern about how existing financial institutions and their supervisors will cope with uncertain financial developments ahead.
- 125. In considering such concerns, it should be recognised that the Australian banking sector has not only retained market share but increased it significantly over the past decade. Banks have also been among the most active in utilising new technologies to transform the nature of their businesses and move into those newly expanding fields of electronic, branchless, computerised and telephone banking. The Australian community has become a relatively intensive user of such sophisticated technology. Prudential supervision has not constrained the capacity of banks to respond to, and harness, these innovations (most of which offer novel methods of service delivery for existing products, rather than new products). The challenge for banks will be to forge effective alliances with specialist technology suppliers. Ultimately these are commercial and competitive, rather than prudential, issues.
- 126. Non-finance firms have not intruded significantly into traditional banking areas. While some large overseas corporations have developed extensive card networks abroad, they have not impinged upon the intermediation or market-related activities of banks. Very importantly, they do not constitute part of the payments clearing and settlement system. Currently, all activities of such institutions require the presence of a bank to carry out any necessary clearing and settlement functions. It is impossible to come to definitive conclusions on where this broad issue of potential

involvement of non-finance entities in the financial system may be heading. It is conceivable that, in time, technological developments could see "banking" activities conducted over international computer networks, bypassing traditional credit institutions and conceivably becoming part of the payments network. This possibility is discussed in Chapter 8.

127. The main point to make is that to the extent that any new players succeed in building a financial business which poses similar risk to savers and to the financial system as do banks, they would have to be supervised in the same way. These are issues for consideration by supervisors globally; they are not unique to Australia.

5. ORGANISATION OF PRUDENTIAL SUPERVISION

Introduction

128. Calls have been made for a re-arrangement of supervisory responsibilities as a response to the perceived deficiencies of present arrangements. These deficiencies were assessed in the previous Chapter. International experience does not provide a conclusive guide to the "right" way of organising prudential supervision. A variety of models exist, operating in the context of different countries' historical, political and cultural circumstances. This Chapter looks at some options for changes in Australia's arrangements and concludes that, in the RBA's view, there is no case for radical overhaul of the present system. Overseas arrangements are summarised in Appendix B.

A "Mega-regulator"?

- 129. Some commentators have suggested that all supervision be assigned to a single agency or "mega-regulator". The justification usually appeals to the phenomena of blurring and inconsistencies in regulation, which were discussed in the previous Chapter. The RBA believes the supposed advantages of a "mega-regulator" are illusory and that the approach poses significant dangers to the long-run stability of the system. The RBA would hold to this view, even if the proposal were to locate the "mega-regulator" in the central bank.⁵
- 130. The "mega-regulator" is a difficult concept to pin down. Presumably, it would not be responsible for competition policy or consumer protection, but would be responsible for prudential supervision somehow defined. This model would still leave financial institutions answering to at least three regulatory bodies, and so would not achieve the simplicity inherent in the title "mega-regulator". But this is not the main shortcoming of the proposal.
- 131. The main shortcoming is the belief that prudential supervision should be applied to such different activities as banking and insurance on the one hand, and funds management on the other. The analysis in Chapter 2 makes it clear that prudential supervision is an activity to be undertaken on an institutional basis, where the solvency of the institution is, at least potentially, at risk, ie where it will fail if it cannot meet its pre-determined commitments. It therefore makes sense to apply prudential supervision to banks and life offices. The type of regulation appropriate to funds managers and mutual funds is not prudential supervision because the solvency of the institution is not at risk it is product disclosure and advice regulation. The two types of regulation are very different and the RBA does not believe there are any

In fact, the moral hazard problem could become more severe if the "mega-regulator" was in the central bank.

synergies between them. This is one reason why, in most countries, they are carried out in different agencies.

- 132. There are, in fact, strong reasons why they should not be carried out by the one agency. Prudential supervision necessarily carries with it some official "comfort" for savers about the solvency of individual institutions and the maintenance of contractual claims. In Australia, the degree of comfort falls short of a guarantee. Support for an ailing institution may involve the use of public funds, but can also be achieved through the organisation of a takeover by a stronger institution or an officially-managed workout. There should be no expectation of such support in the case of managed funds. Yet investors might assume that some obligation for adequate investment performance is implicit if the same agency has responsibility for both types of institution, the more so when a capital-backed institution has an ownership linkage with the funds manager. Any arrangements which encourage the perception that managed funds are no more risky than deposits would distort the risk spectrum, increase moral hazard and the implicit "safety net", and reduce the efficiency of the mechanism by which savings are allocated to investments of varying characteristics, including risk.
- 133. Proponents of a "mega-regulator" argue that regulatory conflicts or overlaps would be eliminated, or at least significantly reduced, if individual regulators were absorbed within the one organisation and reported to the one chief executive. There may be some merit in this argument, but it is essentially one of managerial efficiency, rather than one based on economic principles. Large public sector organisations can suffer diseconomies of scale, and some disputes are better sorted out in public discourse between regulators than in private negotiation between departments of the same agency. In addition, the degree of overlap in the current prudential structure tends to be exaggerated. Even under the present arrangements, the statutory responsibilities of the existing prudential supervisors are clearly defined, and no single institution (as opposed to conglomerates) is subject to prudential supervision by more than one of them.
- 134. Another claim is that a single supervisor would mean more efficient supervision of financial conglomerates. The RBA accepts that conglomerates will generally be answerable to more than one agency because of the different jurisdictions to which constituent companies belong. However, any administrative economies from a single overseer will be limited as long as different supervisory standards apply to different parts of the group. The businesses of member companies and the types of risks involved remain sufficiently distinguishable to require different supervisory techniques and skills. For example, the capital adequacy rules applying to a bank will always be different to those applying to an insurance company and neither will bear any resemblance to the product disclosure rules for a funds manager.
- 135. It has also been suggested that a single supervisor would be better able to handle the related tasks of limiting the risk of contagion from one entity in a conglomerate to another, and of appraising the overall health of such a group. Again,

as long as different prudential standards apply across the group, this claim is questionable, particularly if communication and co-ordination among the relevant agencies is effective.

- 136. An international consensus is emerging that, for most financial conglomerates, a lead regulator should be nominated to organise group-wide financial assessments, to exercise authority over special-purpose holding companies and to co-ordinate remedial action in a crisis. As noted in Chapter 3, this approach has been proposed by the CFS for conglomerates headed by special-purpose holding companies and is likely to be extended to others. The need for formal lead regulator arrangements in Australia has been lessened by the fact that in most cases hitherto one (supervised) institution has dominated each conglomerate.
- 137. Among OECD countries, only Sweden, Denmark and Norway have a stand-alone "mega-regulator" which supervises banks, insurance companies and investment products. Japan is close to this model in that it has a "mega-regulator" with these responsibilities, but it is part of the Ministry of Finance.
- 138. The BIS Annual Report of 1993 contained a survey of financial distress among its member countries over the previous decade (see also Llewellyn (1992)). The countries singled out for poor performance in terms of financial instability and large losses of taxpayers' funds in bank rescues were Sweden, Norway, Finland, Japan and the US. Three of the countries that employ the "mega-regulator" model are included in this small group. While it is difficult to spell out the precise chain of causation, this correlation should not be ignored. Proponents of the "mega-regulator" model need to explain why they are recommending an approach which has such a poor track record.

Which institution should supervise banks?

139. The RBA believes that central banks are best placed to oversee the stability of the financial system. They are participants in that system - conducting a wide range of financial transactions in money, bond and foreign exchange markets, as well as often acting as banker to governments. And, they are the ultimate source of liquidity to the financial system. They may supply liquidity to the system generally (as in 1987 following the stock market crash), or they may be the "lender of last resort" to individual financial institutions which are in difficulty. Last resort lending refers to a direct loan usually from a central bank to a commercial bank unable to raise liquidity from other, more usual, sources; this would typically be because the bank was experiencing a run on deposits due to a loss of confidence. Last resort lending would

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In the other two, Finland and the US, the banking system (or the part that incurred the losses - in the US case, the savings and loans institutions) was not supervised by the central bank.

The bail-out of the banking systems in the Nordic countries was extremely expensive for taxpayers. In Norway and Sweden the cost was equivalent to nearly 5 per cent of GDP; in Finland it was 8 per cent of GDP.

usually involve loans to a bank which was still solvent. It should be distinguished from financial support for an insolvent institution which, if it were provided, would usually involve the Government. Last resort lending has long been seen as a function of central banks. Indeed, the origin of many central banks was as ultimate backstop to the financial system, with the name "reserve bank" indicating a role as custodian of the reserves of the commercial banking system.

- 140. While the RBA finds the case to remain the bank supervisor a convincing one, it is true that practice varies around the world. In some countries the central bank is the sole bank supervisor, in some countries it shares responsibility with another body and in some it has no supervisory responsibilities. In recent years, a number of countries have revisited the issue of who should supervise banks. In Norway, a parliamentary working party recommended that the bank supervisory authority be incorporated into the central bank, but was overruled by the full parliament who opted for the status quo. In South Africa, the Jacobs Commission made the opposite recommendation namely, to take bank supervision away from the central bank but again was overruled and no change has occurred. In the two cases where the recommendations were carried out Finland and Hong Kong the result was to move a formerly independent bank supervisor into the central bank (see Appendix B).
- 141. A number of arguments have been advanced against the central bank being the bank supervisor. The RBA remains unconvinced by these arguments and feels that, on balance, the arguments for having a dual role are much stronger. A summary of the relevant arguments is given below; a more detailed account is contained in Appendix C.
- 142. The most common argument for separation is that there is a conflict between responsibilities for bank supervision and monetary policy. That is, a central bank that is also the bank supervisor will place too much emphasis on financial stability, rather than concentrating single-mindedly on anti-inflationary monetary policy. This argument does not say that the combined institution will be a poor bank supervisor it says that it is monetary policy that will suffer. But the argument is a curious one in another way, in that it implies that ignorance of the health of the banking sector is an advantage in conducting monetary policy. The RBA believes the opposite to be the case. A first-hand knowledge of whether the banking sector is robust or fragile is essential in order to understand whether a change in monetary policy will have a large or small effect on the economy. In essence, there are synergies between the two responsibilities, rather than conflicts.
- 143. A second argument for separation is that in the event of a "bail out" of the banking sector, the cost will be borne by the taxpayer and so the decision should be made by the government (or a body reporting directly to it). This is a rather academic argument in the Australian context as neither the RBA nor the Federal Government has

lost taxpayers' money through a bank rescue. Nevertheless, it is a possibility. However, if the argument is to have validity it would have to be established that the central bank was likely to extend lender-of-last-resort credit unwisely when a stand-alone supervisor would decide against exposing the taxpayers to loss.

144. The question of which body - the central bank or the separate institution would make the more prudent decision cannot be answered with any confidence. On the other hand, the question of which body could take the most timely action in the event of a crisis would have to be answered in favour of the central bank. It is transacting in the money, bond and foreign exchange markets virtually every day, and sits astride all the flows in the payments system. Whether it is the bank supervisor or not, it would have to be involved in any action designed to alleviate a financial disturbance or a crisis. It could do this either by adding liquidity to the market as a whole, in the course of its open market operations, or by extending lender-of-lastresort loans to a particular bank (or banks). If it felt that the problem in question was not a matter of liquidity but of solvency, it could arrange a merger or orderly closure. In principle, of course, it could do these things on the advice of an independent supervisor, but in practice this would be a clumsier arrangement. Time is of the essence in a crisis, and getting agreement between different institutions is often difficult in such circumstances. While it is usual to think of a bank failure as the event which precipitates a potential crisis, it is equally likely that the initiating event could be a disturbance in financial markets such as happened in the Penn Central case or following the share market crash of 1987 (see Appendix C). Thus, the skills required for crisis management may not only be those of the bank supervisor, but could also involve those of the financial market specialist within the central bank.

145. A third argument for separation is that a central bank could suffer reputational damage as a result of its bank supervision activities, which would reduce its credibility in conducting monetary policy. What gives this some force is that, even in an optimal system of bank supervision, an individual bank can (and must be allowed to) fail, but the public, the press and politicians invariably see this as evidence of incompetence on the part of the supervisor. This argument is widely used in the UK, where the reputation of the Bank of England has suffered as a result of the failure of Johnson Matthey Bankers, BCCI and, recently, Barings. Some commentators see this as

The RBA has never had the need to lend to a bank in liquidity difficulties, and therefore has never lost money through a last resort loan. In the early 1990s a number of banks in Australia made losses, but they were recapitalised by their owners. In most cases the owners were foreign banks, but in two cases the owners were State Governments which had guaranteed the liabilities of the banks they owned. The Commonwealth Government provided compensation to the Victorian and Tasmanian Governments for the tax equivalent revenue foregone following the sale to private banks of State-owned banks. This reflected government policy to encourage privatisation. The South Australian Government was also provided with assistance to help it reduce the debt burden associated with supporting the State Bank of South Australia (SBSA). This assistance was entirely discretionary and conditional on privatisation of SBSA; it occurred some two years after problems at SBSA were first revealed.

affecting its ability to conduct monetary policy, but it has been hampered on this score at least as much by an Act which gives it virtually no independence.

146. This argument, like the first, does not imply that the central bank will be a poor bank supervisor - it says that it will be monetary policy that suffers. In the RBA's view, any merit in this argument is outweighed by other factors which point to advantages from combining bank supervision and monetary policy. For a start, there is always a risk that a stand-alone bank supervisor would see its role rather narrowly. This is because it would be penalised severely in the case of a bank failure, but receive little or no reward for other desirable outcomes such as the efficiency, innovative capacity and growth of the banking sector. A central bank, by necessity, has a wider set of objectives and responsibilities and is less likely to narrow its focus in this way. In similar fashion, a stand-alone supervisor is more likely to develop a rules-based culture, with lawyers and accountants predominant. In a central bank, the bank supervisors have to argue their case with colleagues who are predominantly economists and financial market specialists. This has the effect of softening the dependence on rules and introduces a higher degree of "market friendliness".

Which institution should supervise insurance companies?

- 147. The insurance industry provides a number of products such as life insurance, annuities and defined-benefit superannuation which involve binding nominal contracts. Failure to meet these contracts would cause the failure of the institution. They therefore fall clearly into the category that should be prudentially supervised. In which case, they are much closer to banks than to the managers of investment products (although they are also in this business). Is there a case for combining their supervisor with the bank supervisor?
- In the RBA's view, there is no good reason to do so. It would not raise moral 148. hazard issues but there is no positive case either. Synergies are hard to find because it would not be appropriate to apply common supervisory rules and techniques to those entities, notwithstanding the fact that they are all capital-backed. Particular expertise is required for the different types of financial business that they undertake. As noted in Chapter 2, the risks in the insurance and superannuation businesses require a different type of analysis than those in a deposit-taking operation. The application of actuarial techniques to the liabilities side of the balance sheet is the central element in the prudential supervision of a life office, while assessing the adequacy of a bank's capital, on the other hand, is a very different matter. Overseas experience is that where the supervision of such fundamentally different financial activities is the responsibility of a single agency, the work generally tends to be allocated to separate departments or divisions and different capital adequacy rules are applied. The major examples are the Scandinavian countries, where a single supervisor covers the banking, insurance and securities industries, and Canada, where banking and insurance fall under the one agency.

149. Another argument for combining insurance and banking supervision is that it would, in fact, help to produce a consistent set of capital requirements. The capital requirements on banks and life offices are indeed different but so is the nature of the risks they face. No-one has yet established that the requirements on one set of institutions are more onerous than the other, given these different risks. If it were so, more consistent capital requirements could be applied, but that could be achieved just as easily by discussions between separate regulators as between departments within one regulator. Banks and insurance companies wishing to operate in more than one country would, of course, also be constrained by international rules.

Other deposit-taking institutions

- 150. At present, *building societies* and *credit unions* are supervised by State agencies under the umbrella of AFIC, in arrangements which involve some duplication of resources and inflexibility. While those institutions are subject to contagion risk, their small size makes it doubtful that even a widespread run on them would have systemic consequences.
- 151. Nonetheless, there may be a case for the RBA to take on their supervision on efficiency grounds. The community sees building societies and credit unions as safe havens for a significant part of their savings, in much the same way as they do banks. Further, their business is functionally similar to that of banks, with relatively liquid liabilities and a significant part of their assets comprising long-term, non-marketable loans. Consequently, the supervisory arrangements for building societies and credit unions are based closely on the RBA's supervisory regime for banks. There is some potential for greater efficiency and cost savings if these bank-like entities were also supervised by the RBA. However, it would not be practical to attempt to force building societies and credit unions into a bank "mould" as far as ownership rules, etc, are concerned.
- 152. If the RBA were to assume supervisory responsibility for both these groups, there would inevitably be some compression of the spectrum of perceived risk among financial intermediaries but, as noted, that would not be out of line with the community's assessment of these intermediaries. There could also be an extension of moral hazard risk. To mitigate this, it would need to be made clear that RBA supervision should not be regarded as a guarantee against institutional failure, even for a bank.
- 153. There is an anomaly in the present system in the treatment of *merchant banks*, which is a hangover from the days when banks were heavily regulated and foreign bank ownership was not permitted. Most of the firms in this sector are subsidiaries of foreign banks and their activities are difficult to distinguish from the wholesale banking activities of authorised banks. Indeed, many of the foreign-owned institutions which are now authorised banks converted from merchant bank status with little change to their operations.

- 154. The anomaly in these arrangements is that, although merchant banks are doing the same business as authorised banks, they are not supervised in the same way and are not subject to the NCD requirement. In other countries, it is normal for foreign banks to have to take out a banking licence if they wish to do banking business in another country's market. There is a case for imposing that requirement in Australia as well.
- 155. The continued existence of a significant merchant bank sector, with substantial foreign bank ownership, does not sit comfortably with international efforts to improve the supervision of the cross-border operations of international banks. In terms of the standards developed by the Basle Committee on Banking Supervision, there is an obligation on host authorities to exercise effective supervision of foreign banks operating in their territories. Host authorities are expected to be in a position to inform the home supervisor (who is charged with responsibility for exercising effective consolidated supervision of its banks) of any perceived shortcomings in the local activities of those banks. The RBA is not in this position with regard to merchant banks owned by foreign banks. It therefore favours a change in policy which would require such banks to become authorised under the Banking Act.
- 156. It is much less clear that *finance companies* should also be made subject to RBA supervision. This sector comprises about 100 entities with total assets of around \$46 billion. Some two-thirds of their borrowings are from the wholesale markets. Some 20 finance companies borrow in the retail market, through the issue of debentures under the prospectus disclosure provisions of the Corporations Law and subject to the surveillance of the ASC. Many finance companies are equipment finance specialists, including some which support the sales activities of associated industrial concerns. Finance companies do not engage in maturity transformation to any significant degree as the bulk of their fund raising is in the form of term borrowings. Only about 5 per cent of their liabilities are at call, so the threat of a "run" is not an issue. Nor is contagion a concern and finance companies would not seem to be a threat to financial system stability. Several have failed in the past 20 years without causing wider problems and the community accepts that they are further out on the risk/return frontier than banks.

Regulation of investment products

- 157. Managed investments, whether sold directly to the public or to trustees of superannuation funds, should be subject to product regulation with the emphasis on disclosure requirements. There is no case to apply prudential supervision to institutions which manage investment products.
- 158. The authority responsible for the regulation of investment products should, of course, be separate from the authority responsible for prudential supervision of banks. Beyond that, the RBA has no strong views on institutional arrangements. At present, the ISC and the ASC regulate the products of the funds management industry, the superannuation industry as well as investment advisers. There have been reports that some firms have been able to shift products between the two regulatory jurisdictions in

order to gain more favourable treatment. This is not necessarily a deficiency of the system; it only becomes so if it can be established that similar risks are receiving different regulatory requirements.

159. For the special reasons outlined in Chapter 3, a form of prudential supervision is exercised by the ISC over accumulation superannuation funds. This puts such funds at a different point on the risk spectrum compared with the generality of investment funds. Because of the importance of preserving a risk spectrum for investors, the RBA would be concerned at any prospect of superannuation-type oversight being extended across the whole managed funds industry. At the same time, it could be socially undesirable to lessen the present oversight of superannuation. It might, therefore, be appropriate to have superannuation funds overseen separately by the ISC, an arrangement which entails certain synergies with the supervision of the life insurance industry.

Summary

- 160. The RBA does not see a strong case for radical overhaul of present responsibilities for prudential supervision. In the interests of efficiency, responsibility for building societies and credit unions could be transferred to the RBA, although there are no pressing reasons in terms of financial stability for doing so. There is a stronger stability argument that the anomalous situation of international banks operating here as non-banks should be resolved by requiring them to become authorised banks.
- 161. The RBA supports the continuation of a specialist insurance supervisor and a separate product disclosure regulator of the managed funds industry. Oversight of superannuation could be located in either of these agencies, but there seems to be no strong case to relocate it from the ISC where there are some synergies with supervision of insurance companies.

6. SOME OTHER PRUDENTIAL SUPERVISION ISSUES

Introduction

162. This Chapter discusses authorisation criteria for banks, arrangements for dealing with a bank "exit", the supervision of intermediation subsidiaries of banks and the licensing of foreign exchange dealers.

Authorisation criteria for banks

Ownership and control of banks

163. The *Banks (Shareholdings) Act 1972* seeks to promote a wide dispersion in bank ownership. To this end, it prohibits any one shareholder, or group of related shareholders, from acquiring in excess of 10 per cent of the voting shares of a bank. Exemptions can be granted by the Treasurer for shareholdings up to 15 per cent and by the Governor-General for shareholdings beyond 15 per cent. The Act requires that the Treasurer shall not refuse applications for exemptions for shareholdings up to 15 per cent unless he/she can demonstrate that this would be contrary to the national interest. For proposed shareholdings in excess of 15 per cent, the onus is on applicants to demonstrate that the exemption sought would be in the national interest.

164. The Act's objectives are to:

- protect depositors against the risk that a bank's resources could be used to serve the particular interests of a few dominant shareholders;
- ensure that a bank's viability is independent of the viability of a major shareholder;
- ensure reasonable independence and continuity of management; and
- facilitate the raising of additional capital when necessary.
- 165. It can be argued that, in promoting a wide dispersion of ownership, the Act also serves to protect existing management, restrict opportunities for takeover and impede market entry, which may, in turn, inhibit moves to promote competitive efficiency. In practice, the Act's restrictions have not proved to be a significant impediment to increased competition and reorganisation within the financial sector. This is due principally to the powers of exemption available under the Act and the discretionary manner with which these have been applied. For example, exemptions have been granted to foreign banks to enable them to establish/acquire local subsidiaries; for domestic banks to acquire other domestic banks; and for an insurance company to purchase a bank. As noted elsewhere, the number of authorised banks has almost doubled since the early 1980s.
- 166. For the reasons stated above, however, it has been Government and RBA policy not to support exemptions for corporations engaged in businesses outside the

financial sector. Nevertheless, it has been possible for these corporations to participate in the financial system in other forms such as finance companies or merchant banks.

- 167. Most developed countries impose ownership restrictions on banks, with thresholds for regulatory intervention generally ranging between 5 and 10 per cent.
- 168. The RBA believes strongly that the policy presumption in favour of a dispersion of shareholdings in banks, as embodied in the present Act, should be retained. The Act could, however, be amended to improve the efficiency of its operation by:
- adopting a single exemption procedure for shareholdings above a minimum, which could be set at 10 or 15 per cent. The two tiers of exemption have not proved to be useful, especially given the presumption in the Act in favour of granting exemptions to shareholders wishing to acquire interests up to 15 per cent; and
- allowing exemptions under the Act to be granted by the Treasurer alone, without Vice-Regal involvement.

It should also be made possible to attach conditions to exemptions under the Act, possibly facilitating a more liberal approach to some applications.

Minimum capital

- 169. Since 1992, the minimum level of Tier 1 capital required of a locally incorporated bank has been \$50 million. This is broadly consistent with total balance sheet assets of around \$1 billion. A relatively high level of minimum Tier 1 capital is one of the simplest and most effective means of discouraging unsuitable shareholders from attempting to gain a banking authority. On the other hand, it might be argued that a high minimum capital requirement unduly restricts competition.
- 170. In Australia, there are many avenues for those with access to only small amounts of capital to participate in the financial sector for example, mortgage managers, small-scale finance companies, financial advisers and funds managers. To provide the relatively broad range of services expected of banks requires sufficient capital to acquire the necessary expertise and technology, and to generate the required degree of confidence. It is of considerable importance that confidence in the banking system as a whole is not undermined by the failure of small players lacking sufficient resources.
- 171. The RBA does not believe that the minimum capital requirement has ruled out prospective applicants who could have made a contribution to the Australian financial system. In a world where financial institutions of doubtful pedigree are always scouting for opportunities, the minimum capital requirement for a bank is an excellent screening device.

Foreign banks

- 172. Since 1992, foreign banks have been able to apply for banking status in Australia either as subsidiaries or as branches. When entry was first opened up in 1984, after a long prohibition, foreign-owned banks had to operate as subsidiaries, reflecting in part the objective of competitive neutrality with domestic banks. More fundamentally, there was a concern that with branches the RBA would not be able to carry out effectively its ultimate "depositor protection" responsibilities which depend on its taking control of, and managing, a bank in difficulties.
- 173. As the new foreign bank subsidiaries gained experience in Australia, they increasingly specialised in wholesale markets. In this business, they felt constrained by prudential requirements; they argued that they could be more effective competitors if they could operate as branches and take positions which were related to the global strength of their parent, rather than the size of their capital in Australia.
- 174. Nevertheless, the fact remained that the Australian authorities could not accept responsibility for the solvency of a foreign bank which operated in Australia through a branch. Accordingly, when branches were allowed, they were excluded from the depositor protection provisions of the *Banking Act*. It was thought appropriate, however, to preserve that protection for all household depositors and foreign bank branches were consequently precluded from gathering retail deposits specifically, initial deposits under \$250,000 from persons and unincorporated entities.
- 175. Foreign bank applicants must establish that they are subject to *adequate* standards of supervision in their home country. The approach followed in Australia is consistent with the internationally agreed Minimum Standards for the supervision of international banks described in Appendix D. Banks from countries where supervision is inadequate should not be permitted to operate in Australia.
- 176. A key issue in branch applications has been the requirement that banks wishing to branch into Australia be able to make a convincing case that they will be able to make a worthwhile contribution and "not just add to the number of banks". Generally, banks which are willing to commit resources to obtaining a banking authority believe they will able to deliver their range of services more effectively as a bank and thus have been able to argue that they will be more competitive (although there have been a couple of cases where the scale of the proposed branch operation in Australia has been too small for the RBA to believe the applicant should be encouraged). If foreign banks were to be compelled to have banking authorities to operate here as discussed in Chapter 5 that is, if the "merchant bank" option were retracted the RBA may need to be more tolerant of those foreign banks which wanted to operate in Australia on a small scale.
- 177. Foreign banks are also required to have *an ownership structure* which is generally consistent with the objectives of the *Banks (Shareholdings) Act*. This requirement is necessary for competitive equity with Australian-owned banks, and because the underlying principle is sound for both local and overseas entities.

Nevertheless, some flexibility is required in administering this requirement to reflect differences in practices and supervision overseas. For example, in many Asian countries, large individual or family shareholdings in a bank are quite common. The RBA has also been prepared to accept banks owned ultimately by foreign holding companies where the holding company itself has a dispersed spread of shareholders, and there is provision in the home country for the supervisory oversight of the holding company. In such cases, however, the RBA prefers that a bank in Australia be owned directly by an authorised foreign bank, rather than directly by the ultimate holding company. This ensures that the Australian bank has the backing of a shareholder with the full resources of an authorised bank.

- 178. One of the lessons from the BCCI case was that unnecessarily complex ownership structures should be a warning sign that it will be difficult for the supervisor to monitor activities of the group. The RBA recommends retention of requirements on prospective foreign bank applicants which are broadly consistent with Australia's models for domestic banks.
- 179. The 1992 policy on foreign banks has permitted a steady flow of new entrants. Discussions with foreign banks operating non-bank subsidiaries in Australia indicate that most have not been discouraged from conversion to bank status by the prudential standards, but by the costs of interest withholding tax on a branch's borrowing from its parent (which a subsidiary can escape with properly structured borrowing in its own right) and the below-market interest rate on NCDs.

The process of authorisation

- 180. Under the *Banking Act*, applications for authority to carry on banking business are made to the Treasurer and authorities are granted by the Governor-General. In practice, prospective applicants are encouraged to first discuss their proposals with the RBA so it can identify aspects which might not be consistent with policy. If a proposal is able to be developed to the point where it meets all entry criteria, a formal application is forwarded to the Treasurer with the RBA's recommendation that an authority be granted. Treasury will have been kept informed of the RBA's discussions with potential applicants and given the opportunity to offer any views. On no occasion has Treasury not supported the RBA's view.
- 181. The concept of authorising banks to conduct banking business in Australia was first proposed by the 1937 Royal Commission into the Monetary and Banking Systems. The Royal Commission recommended that the Treasurer should grant such authorities. The *Banking Act 1945* introduced the Governor-General into the process and subsequent *Banking Acts* retained this arrangement. It is not evident that the involvement of the Governor-General is warranted and this requirement makes the process more cumbersome.
- 182. One option would be for the RBA to be assigned responsibility for granting banking authorities, with unsuccessful applicants having a right of appeal to the Treasurer. As the RBA sets the entry criteria for banks, and is responsible for their

ongoing supervision, it would seem appropriate for the RBA also to be responsible for their authorisation. It is common practice overseas for supervisory authorities also to issue licences. The RBA would support such an arrangement which would be more in line with comparable provisions in the insurance industry. Under the *Life Insurance Act 1995* the power to register life offices is given to the Insurance and Superannuation Commissioner, but the Treasurer is required to endorse any decision by the Commissioner to refuse an application. A similar arrangement applies under the *Insurance Act 1973* for general insurance companies. Alternatively, the power to authorise could lie with the Treasurer.

Outward authorisation

183. As noted in Appendix D, the second of the internationally accepted Minimum Standards for the supervision of international banks provides that "the creation of a cross border banking establishment should receive the prior consent of both the host country and the home country authority". Australian banks are advised to consult the RBA prior to overseas acquisitions, because it is clear that such acquisitions can have a significant impact on the soundness of the local operation. This consultation presently occurs on a voluntary basis. It is usual practice for the host country authorities to ask to see evidence of home country approval for new cross-border banking operations, and this of course encourages Australian banks to consult the RBA prior to proceeding with new acquisitions or operations overseas. Nevertheless, there would be merit in including a requirement for RBA approval of such initiatives in the *Banking Act*. This would demonstrate that the Australian prudential regime meets international best practice in this area.

Crisis management

- 184. Prudential supervision aims to reduce the probability that a bank will fail. It will never be possible (or even desirable), however, to reduce this probability to zero. As the failure of a bank would have major consequences for financial system stability, supervisors inevitably become involved in managing failure situations. The *Banking Act* clearly contemplates the possibility of bank failure and makes provisions for this eventuality. If a bank is unable to meet its obligations the RBA has power to assume control of its business.
- 185. These provisions reflect the recommendations of the 1937 Royal Commission, which envisaged that the RBA could appoint a receiver for the depositors if it assumed control of an unsound bank. For example, the Commission recommended that one of the first acts of the central bank, after it assumed control of a bank, should be to estimate and announce the amounts likely to be available for distribution to depositors. The implication was that depositors might not, in these unlikely circumstances, recover the full value of their money.
- 186. Consistent with this, the RBA has always maintained that the "depositor protection" provisions of the *Banking Act* do not amount to a guarantee. Unfortunately, the reflection of the Royal Commission's recommendations in the

current wording of the *Banking Act* gives rise to some ambiguity. The Act says (Section 14(5)) that where the RBA has assumed control of a bank, it shall remain in control of, and continue to carry on the business of the bank, until the deposits with the bank have been repaid (or provision is made for their repayment, or the RBA believes it is no longer necessary for it to remain in control). The wording used does not appear to allow the RBA to act as, or appoint, a liquidator to wind up the bank. As well, the reference to deposits being repaid might be taken by some to imply that they would be repaid in full.

- 187. In practice, the RBA would attempt to deal with a troubled bank by arranging for its recapitalisation by shareholders or its merger with a stronger bank. The possibility that the RBA might exercise its powers to assume control of a bank could persuade management of the distressed bank to co-operate in seeking merger partners. However, its hand would be further strengthened if the legislation made it clear that, once it had assumed control of a bank, the RBA might sell the bank to other parties. This would give strong incentives for a bank's board to arrange a sale so that it could achieve the most favourable possible terms. Of course, any actions by the RBA to sell or wind up a bank, should be subject to appeal to the courts.
- 188. The RBA favours amendments to the *Banking Act* to clarify the powers of the RBA should it assume control of a bank. The Act might also be amended to make clear that "depositor protection" does not imply an official guarantee.

Supervision of non-bank subsidiaries of banks

- 189. Among advanced economies, Australia appears to be unique in allowing banks to conduct financial intermediation in subsidiaries which are not authorised as banks and which operate outside the ambit of supervised financial institutions. The reasons for this are historical. Prior to Australia's decision to deregulate financial markets in the 1980s, non-bank financial intermediaries (principally building societies, finance companies and merchant banks) experienced rapid growth in market share. This was to the detriment of authorised banks, whose capacity to compete was hindered by controls and regulations.
- 190. Since deregulation, the share of the finance company and merchant bank industry assets controlled by banks has been in decline. This has been due to a number of factors, including:
- many non-bank subsidiaries had been formed to enable banking groups to circumvent direct controls, such as interest rate ceilings and limits on lending, which did not apply to non-banks. With deregulation, much of the rationale for such subsidiaries has been removed;
- spectacular losses suffered by banks' non-bank subsidiaries earlier this decade, which in turn rebounded significantly on the performance of their parents. These included losses of \$2.7 billion by the State Bank of Victoria's subsidiary Tricontinental Corporation, around \$1 billion by State Bank of South Australia's

Beneficial Finance Corporation, and a \$726 million loss by Westpac's AGC. The losses experienced by Tricontinental and Beneficial did major damage to the viability of SBV and SBSA, and caused heavy losses for their State government owners. Another dramatic addition to this list in 1994 was the collapse of the UK's Barings Bank due to the activities of its non-bank subsidiary in Singapore.

Many of the operations of banks' non-bank subsidiaries have been wound back into the parent banks, while others have brought their subsidiaries' operations under closer control.

- 191. Eleven Australian banks own finance companies and 25 own merchant banks. These finance companies currently have assets of around \$23 billion (representing 50 per cent of the finance company industry) while the merchant banks have assets of around \$13 billion (representing 22 per cent of the merchant bank industry). Of the 25 merchant banks, 6 are special purpose vehicles established solely to enable foreign bank branches to raise tax-effective funds under Section 128F of the *Income Tax Assessment Act*.
- 192. The following table indicates that much of the business now conducted in banks' non-bank intermediaries could be done within the authorised bank. Bank-owned finance companies have moved away from their consumer finance origins: their balance sheets are now dominated by business loans and commercial leasing. The balance sheets of bank-owned merchant banks also consist largely of business loans; they are also active in traded instruments and corporate advisory work.

Table 6: Assets of Bank Subsidiaries Per cent of total - June 1996			
Finance Companies		Merchant Banks	
Business lending	46	Business lending	36
Consumer finance	23	Liquid assets	33
Commercial leasing	25	Loans to related companies	21

- 193. Despite these trends, some banks retain finance company/merchant bank subsidiaries because:
- they perceive marketing advantages in subsidiaries which have developed valuable goodwill and customer recognition in specific market niches;

- the subsidiaries can access longer-term retail funds through debenture issues;
- they can access tax-effective offshore funding, as noted above;
- more suitable depreciation arrangements are available for taxation of leasing; and
- some regulatory requirements, such as the Prime Asset Requirement and NCDs, can be avoided.

194. The RBA has no direct legislative responsibility for, or powers to supervise, non-bank financial institutions, whether or not they are subsidiaries of banks. Nor does it believe that subsidiaries such as finance companies need to be supervised in their own right for financial system stability purposes. Nevertheless, it has been long recognised that the difficulties of a subsidiary can pose a threat to a supervised parent. Consequently - and despite the legal limitations - the RBA has sought to conduct its supervision of banks in such a way as both to take account of and contain risks which may emerge in such subsidiaries. This is achieved primarily by adopting a consolidated approach to the prudential supervision of banks: while the RBA does not have legal power to obtain separate information on each subsidiary, it applies key prudential requirements, including capital adequacy and monitoring large exposures, on a consolidated group basis.

195. At the same time, the RBA seeks to contain the extent to which a bank can be exposed to risks undertaken by an associate by ensuring that the subsidiary's business is kept distinct from that of the bank. Among other things, this limits exposures from parent to subsidiary and requires that, in so far as a bank feels implicit responsibility for a subsidiary, it should exercise that responsibility by ensuring that its associate has sound and prudent management which is aimed at achieving undoubted viability within the capital resources of the associate itself.

196. Experience has, however, demonstrated how difficult it is for banks to insulate themselves fully from troubles arising in a subsidiary. They inevitably face some pressure - either moral or commercial - to prop up ailing businesses with which they are associated, thereby weakening their own capital positions. There is no doubt that the task of supervising banks would be easier if they had no unsupervised subsidiaries. Nevertheless, while banks see a commercial rationale for these subsidiaries, the RBA is not inclined to pursue their prohibition. Rather it will continue to encourage banks to carry out all intermediation business within the bank. For those subsidiaries which remain, the RBA would prefer to have more formal powers to require their sound and prudent management, and to prevent a bank's support of a subsidiary where that could weaken the bank.

The Banking Act does not prevent debenture issues by banks but it requires that, in the event of the liquidation of a bank, depositors would have priority over secured creditors.

Authorisation of foreign exchange dealers

Current framework

- 197. Arrangements in the Australian foreign exchange market are administered under the *Banking (Foreign Exchange) Regulations*. Financial institutions wishing to be dealers in foreign exchange must seek authorisation by the RBA and must adhere to certain guidelines. The establishment of authorised dealers is intended both to promote the liquidity and depth of the market by having a core group of institutions which stand ready to quote prices to customers, and to provide a means of ensuring the integrity of the market through the authorisation process.
- 198. When the exchange rate was floated in December 1983, only the existing 14 trading banks were authorised. In April 1984, non-bank financial institutions which met certain criteria were also invited to apply for authorisation. The main criteria that dealers be incorporated locally, and have at least \$A10 million in capital, adequate systems and experienced dealing staff were designed to ensure that dealers were of some standing and expertise. The RBA also sets net overnight position limits on their foreign exchange exposures and contingent loss limits on their options business.
- 199. The extension of authorisation to non-banks greatly assisted the growth of the market through the second half of the 1980s. In recent years, however, many of the major non-bank dealers have converted to bank status. The 41 banks now authorised to deal in foreign exchange account for almost 90 per cent of total market turnover, so the liquidity added by the 33 non-bank dealers is fairly limited. Furthermore, the top ten of these account for most of the remaining turnover; the smallest 23 non-bank dealers account for less than 1 per cent of turnover. The case for having non-bank authorities is therefore no longer as strong as it was in the 1980s.
- 200. The authorisation of non-bank financial institutions meant that the RBA's supervisory net widened slightly in that it began to oversee the foreign exchange activities of these organisations. Although this has never carried any assurances about the financial soundness of the institutions involved, it has put RBA in the potentially awkward situation of supervising one aspect of the operations of institutions not otherwise covered by Australian supervision.
- 201. The authorisation process has some useful by-products. It gives the RBA a direct say in the foreign exchange operations of dealers, which on occasion has been helpful in developing the Australian market. The requirement that all foreign exchange transactions should be channelled through authorised dealers also makes implementation of United Nations sanctions and the tracking of money laundering easier; and it allows the RBA to collect comprehensive statistics on the Australian market. The importance of this has, however, diminished now that regular BIS surveys of foreign exchange markets are in place and, overall, these benefits are of second order importance.

International practice

202. Australia's arrangements are somewhat unusual by world standards. Most countries follow one of two models. One is to have no specific restrictions on foreign exchange dealing, with foreign exchange treated as just another financial product. This approach is followed by the US, UK and Canada. The second model is to restrict foreign exchange dealings to banks. This is common in Europe, and no doubt reflects these countries' history of universal banking. Italy comes closest to the Australian model, having a two-tiered authorisation process - one for banks and one for other credit institutions. Japan, which used to restrict foreign exchange dealing to banks, has recently announced an extension to some other institutions as a result of pressure to deregulate its market.

Options for change

203. Given the changing roles of banks and non-banks in the market, there is a case to review current authorisation arrangements. Two options may be considered:

(i) restrict foreign exchange licences to banks

One option is that only banks be authorised to deal in foreign exchange. Under this approach, responsibility for supervision of their foreign exchange activities would become a part of the RBA's overall supervision of banks. The arrangement would result in a lifting of supervisory standards in the foreign exchange market. It would also lessen any perception that may exist at present that the RBA supervises non-banks. On the other hand, it could be interpreted overseas as a move to restrict participation in Australian markets. As noted, Japan, which used to follow such a policy, has recently widened authorisation to non-banks as a step towards market liberalisation.

(ii) deregulation of foreign exchange market

The other option is to remove the need for authorisation altogether, allowing any entity to buy or sell foreign exchange without limitation. This would also resolve the present awkwardness of having the RBA prudentially supervise one component of a non-bank dealer's operation, as well as being consistent with the RBA's approach to other markets (eg for bond dealers). It might also increase competition and efficiency by allowing others to participate but such effects are unlikely to be large when there are already many dealers in the market, who compete not only with each other but also with dealers in other foreign exchange centres.

204. An important consideration is whether there would be a significant loss of integrity in the foreign exchange market if the authorisation process were abolished. Under current arrangements, there have not been problems in the wholesale side of the market, which may be because the authorisation process acts to ensure that participants are of high integrity. But, neither have there been problems in the bond market where no such authorisation process exists. If the second option were accepted, it would be

necessary to remove the current exemption in the Corporations Law for foreign exchange dealing, so that non-bank dealers in foreign exchange would require a securities dealers licence and would be subject to the investor protection aspects of the law. This would be important in order to safeguard the integrity of the retail side of the market.

205. The RBA's view is that there is a strong case for the second option - that is, for terminating the current separate licensing regime for foreign exchange dealers. If merchant banks owned by foreign banks are required to become authorised banks in Australia, as discussed in Chapter 5, most foreign exchange dealing would continue to be supervised.

7. FUNDING BANK SUPERVISION

Introduction

206. Banks in Australia do not pay a licence fee for authorisation or a levy for the cost of RBA supervision. Supervision costs form part of the general expenditure of the RBA. Banks are, however, required to lodge with the RBA Non-Callable Deposits (NCDs) equivalent to 1 per cent of their liabilities (excluding capital) in Australia. They attract an interest rate set 5 percentage points below the average yield at tender in the previous month on 13-week Treasury Notes. By this route, banks contributed some \$185 million in 1995/96 to RBA profits and thereby to Commonwealth budget revenue.

207. NCDs do not serve any monetary policy or prudential purpose. Although the revenue derived has been described as a kind of payment for the "benefits" which come with bank authorisation and supervision, the re-introduction of a discounted interest rate in mid 1995 was essentially a revenue-raising measure.

Is there a case for a bank licence fee?

- 208. The case for a licence fee depends on there being identifiable net commercial benefits from banking status. If such benefits exist, the "user pays" principle suggests those institutions enjoying them should make a payment in return, otherwise they enjoy a public subsidy.
- 209. Market perceptions of the safety and soundness of authorised banks are undoubtedly enhanced as a result of official screening, ongoing prudential supervision and access to any lender of last resort facilities that may be extended to them. Banks are also permitted to accept deposits without the need to issue prospectuses. While the depositor protection provision in the *Banking Act* does not provide a guarantee of bank deposits, bank depositors have historically enjoyed a high level of security. As a result, banks may be able to fund themselves at a lower cost, or to attract business which would not otherwise be available.
- 210. The commercial (as opposed to community) benefits flowing from supervision can, however, be overstated. Banks do not always enjoy cheaper funding than non-banks, especially in wholesale markets where local banks face significant competition from foreign banks operating as (unsupervised) merchant banks in Australia, or from offshore funding. More generally, an increasing range of financial institutions can provide particular banking-type services without being authorised as banks, lessening the economic value of a banking authority vis-a-vis other forms of operation. Any benefits to banks associated with direct access to the payments system has also been reduced as the system has been opened (indirectly) to building societies and credit unions in recent years. Furthermore, banks do not have a right of access to RBA emergency support facilities during times of liquidity crises. Liquidity support is purely at the discretion of the RBA and will not be provided to ensure the continued operation of an insolvent institution.

- 211. Bank authorisation also entails costs to banks. They are required to meet ongoing supervisory requirements; provide data and other information; and pay for external auditor reporting to the RBA. The RBA does not consider these costs to be unduly burdensome. However, insofar as they exceed the standards which would otherwise be imposed by financial markets, banks will be competitively disadvantaged at the margin vis-a-vis unsupervised institutions.
- 212. Many non-bank institutions in Australia (such as life offices, building societies and credit unions) are also subject to official screening on entry, and are either directly or indirectly supervised and regulated. These entities enjoy some enhanced status as a result, and none is subject to a licence fee.
- 213. There would be various disadvantages in imposing a licence fee. It could compromise the pursuit of systemic stability by discouraging large non-bank financial institutions, such as foreign bank-owned merchant banks, from converting to authorised bank status. It could discourage other applications for banking authorities (and possibly cause some authorised institutions to contemplate surrender of their authorities). At the margin, a fee could also act as a barrier to entry into the banking sector, which would be at odds with the thrust of policy to reduce entry barriers and encourage greater competition in Australia.
- 214. A licence fee would also risk producing distortions within the financial system of the type seen under old Statutory Reserve Deposit arrangements. The extent to which this occurred would depend, of course, on how the fee was structured. More importantly, however, application of a licensing fee based on the notion of access to favoured treatment may reinforce expectations of official support for a bank encountering difficulties, so heightening the problems of "moral hazard" associated with authorising and supervising banks.
- 215. In summary, while the benefits and costs of banking status are not readily quantifiable, it is not at all clear that there are substantial net commercial benefits. There would be considerable difficulty in putting a value on a banking authority and setting any licence fee would be arbitrary and subject to much debate. A fee which exceeded any net benefits gained by banks would have an adverse impact on the banking industry. There would appear to be no major gains to be made from imposing a general licence fee on banks.

A charge for the costs of supervision?

216. Arguments for and against levying a charge on banks to meet the specific costs of RBA supervision are similar to those outlined in the previous section. The main argument in favour is competitive neutrality, since most other financial institutions pay the costs of their supervision. It can also be argued that supervisors provide a service for depositors, notably small depositors, in monitoring the condition of banks on their behalf. A payment for this service could be made by these beneficiaries, through their banks.

- 217. Against this is the argument that the RBA supervises the banking system primarily for the general benefit of the community. Banks stand at the core of the Australian financial system they continue to be the main depositories of community savings and play a central role in the operation of the payments system. Supervision of banks provides benefits which spread across the whole economy, and do not accrue just to banks (and their depositors and shareholders). On this view, bank supervision is a "public good", contributing importantly to maintaining financial system and economic stability, as well as to protecting individual depositors. The annual costs of RBA supervision, which are in the order of \$10 million, are low overall, particularly so when compared to the implicit tax imposed by NCDs.
- 218. There are some other reasons not to pursue a levy:
- as argued above, payment by banks for their supervision may be perceived by the community as a *de facto* payment for "guaranteed" RBA support, either to individual banks or to their depositors. Any encouragement of the perception that banks are guaranteed by the RBA would be highly undesirable; and
- if required to pay for their supervision, banks may seek to place pressure on the RBA and Government to reduce the costs by curtailing supervision. This could tend to impair the independence, and compromise the integrity, of supervisors. Other countries have experienced such pressures (eg the supervision of savings and loan associations in the US during the 1980s). While such pressures can be resisted, considerable time and effort might be diverted to debating supervision charges, rather than to supervision itself.

Overseas practice

- 219. Practice in overseas countries in levying fees and charging for supervision is mixed. Most countries do not levy licence fees. Where they do, the amounts are relatively small and do not appear to attempt to recoup any net advantages accruing from the authorisation of banks. Licence fees, more often than not, are viewed predominantly as fees for supervision.
- 220. As a general rule, central banks do not charge for supervising banks. They regard supervision of banks as a public good which forms part of their general operations and the costs as part of their overall operating expenses. Where specialist supervisors are responsible for supervising banks, they generally do charge for supervision. This is largely out of necessity given the absence of alternative funding sources available to them. The charge for supervision ranges from partial to full cost recovery. Supervisors who undertake extensive examinations of banks (and other institutions) often charge to help cover the substantial costs of this process. The structure of supervisory charges levied on banks can, in some instances, be complex and unwieldy from an administrative viewpoint.

8. PAYMENTS SYSTEM ISSUES

Introduction

- 221. This Chapter describes some important innovations in the payments system and the policy issues they raise. Australia's payments system is a critical part of the economic infrastructure. It is the "hidden plumbing" through which financial values flow around the economy. An efficient and reliable payments system can make an important contribution to economic growth and to Australia's international competitiveness. The payments system is also the mechanism through which financial shocks can be transmitted more widely through the financial system and into the broader economy. International payment system linkages can carry shocks quickly across borders.
- 222. Flowing from its concern for financial system stability, the RBA's main interests in the payments system relate to its soundness and reliability ensuring that risks are well identified and controlled and that, if a problem arises, its spread is limited. It is now working with the industry on a system which will significantly reduce interbank settlement risk. The RBA is also keen to promote efficiency, competition and fairness in the payments system and has pursued these objectives in various ways, including through the Australian Payments System Council¹⁰ and the Australian Payments Clearing Association¹¹.

Wholesale payments

Main developments and prospects

223. The potential for financial system instability in the payments system lies primarily with wholesale payments, including high-value payments between financial institutions, net settlements from retail clearing streams and settlements from securities trading systems. The potential arises because of the large amounts involved, and because under current arrangements there can be up to a 24-hour delay between the incurring of interbank liabilities and their extinguishment (settlement) across Exchange Settlement Accounts (ESAs) at the RBA. Failure to make a settlement payment will create a major disruption because the bank due to receive funds will have entered into various other transactions on the expectation that funds will arrive. If this expectation is disappointed, the subsequent transactions would be virtually impossible to unwind.

¹¹ The Australian Payments Clearing Association (APCA) is the industry body with responsibility for managing payments clearing arrangements between members. The RBA currently provides the Chairman and a voting Board member to APCA.

The RBA chairs and provides the secretariat for the Australian Payments System Council (APSC) which was formed in 1984 by the Federal Treasurer to encourage efficiency and stability in the Australian payment system and advise the Treasurer on relevant matters. It has no operational role in the payments system.

66.

Real-time gross settlement (RTGS)

- 224. In mid 1995, following consultation with the banking industry, the RBA announced plans to introduce a RTGS system for high-value payments by the end of 1997. Under RTGS, high-value interbank payments will be settled across ESAs as they are exchanged between banks during the course of the day. This will replace the existing practice of clearing high-value payments and netting interbank obligations, under which final settlement does not take place until the morning of the following business day. The RTGS system will be built on the RITS¹² securities transfer and settlement platform operated by the RBA. Payments will also feed into this from the settlement system operated by Austraclear, and from a delivery system whose operations will be co-ordinated by APCA.
- 225. The introduction of RTGS will substantially lessen risk in the domestic payments system because over two-thirds of the total value of daily payments activity will be settled during the course of the day, sharply reducing overnight credit exposures between banks. By requiring each high-value payment to be pre-funded, RTGS will eliminate the potential for one bank to cause liquidity (or solvency) problems for other banks by failing to settle for its high-value payments.
- 226. Not all interbank settlement risk will be eliminated by RTGS because retail payment systems will continue to settle on a deferred net basis. However, the amounts at stake are relatively small and much of this risk is covered by loss-sharing agreements among the main participants in those systems.
- 227. Further, the RTGS system will not remove normal credit risks between banks and their customers. But it will focus attention more sharply on those credit exposures, many of which are not clearly identified under current arrangements. The immediacy of an RTGS payments environment will heighten the need for customer credit exposures to be well understood and controlled; a bank making a payment on behalf of a customer will know that its instruction to the central bank will be acted on as soon as it has funds in its ESA available and will be irrevocable. Thus it must take an explicit credit decision about its own customer before issuing the instruction will it provide credit, if so how much and on what terms, or must the customer have cleared funds before the bank will initiate the transaction on its behalf? Banks are responding to the need to more tightly control their credit exposures in an RTGS environment. Many have substantial back-office development projects underway.

Securities settlements

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228. RTGS will allow all securities settlements in Australia to be made on a full delivery-versus-payment basis. This ensures that final transfers of securities will occur

RITS is an electronic registry, transfer and settlement system for Commonwealth Government securities. A similar facility, FINTRACS, is operated by Austraclear Ltd for semi-government and private sector debt securities.

if, and only if, the payment side of the transaction is performed simultaneously. This applies to all Commonwealth Government securities settled using RITS, as well as to all other debt instruments settled through Austraclear. Settlements made through the ASX's equities clearing system will also settle on this basis, but as an entire batch of transactions once a day, not as individual items as they occur.

Foreign exchange settlement risk

229. The international banking industry is now examining how to apply similar principles to reduce the risks associated with settlement of foreign exchange transactions, where the commodity being delivered is not a security but an amount of foreign currency. As payments are made in two different countries, with different participants and often during different business hours, achieving payment-versus-payment by synchronising the two settlement legs becomes much more difficult. With the encouragement of central banks, a number of large international banks are seeking to establish systems to link the payment in one currency to the receipt in another, thus reducing the risk that one party to a transaction will pay out but not be paid by its counterparty. Establishing either direct or indirect linkages between national RTGS systems will be critical to the success of such endeavours.

Policy issues: access to the wholesale payments system

- 230. Until 1994, the RBA granted ESAs only to institutions which it supervised and which were considered unlikely to expose other institutions (including the RBA) to credit risk through failure to settle. Since then, in addition to the banks, two Special Service Providers (SSPs), one representing permanent building societies and one representing credit unions, have been given settlement facilities after the RBA was satisfied with the quality of their supervision by AFIC. They are permitted to settle only a limited range of low-risk transactions.
- 231. Policy on access to ESAs reflects their central role in the payments clearing and settlement system. Historically, settlement accounts were established as a convenient way for providers of payment services to discharge their liabilities to each other. Entries to accounts at a trusted third party were cheaper and more convenient than exchanging gold or banknotes. The main role of ESAs continues to be the extinguishing of obligations which banks incur to each other through their specialised role as providers of payment services. Payment providers transfer customers' balances held on their balance sheets to customers of other institutions. In the process, they incur liabilities one to the other. By settling these clearing system obligations using settlement accounts with the central bank, creditor banks exchange claims on other commercial banks for a risk-free claim on the central bank. RTGS will prevent the build-up of settlement exposures by settling each high-value payment at the central bank continuously throughout the day.
- 232. Banks are the main providers of payment services in Australia, in part because they hold the bulk of customers' deposit accounts from which payments are made. In recent years building societies and credit unions have successfully competed for a

share of retail payments. These are the only types of institutions which currently have ESAs - either directly as do banks or indirectly in the case of building societies and credit unions.

- 233. The prospective introduction of RTGS has led some to question whether access to ESAs could be broadened beyond banks and SSPs because, with the removal of settlement risk between ESA institutions at least for high-value payments new players would not expose existing participants to losses. It is true that unsettled payment system exposures will be less of a problem with RTGS. However, the RBA does not accept that the introduction of RTGS would justify giving ESAs to commercial organisations which might make large numbers of payments on their own account, but which are not providers of payment services generally to others. To do so would change the essential nature of one of the RBA's core central bank functions as supplier of settlement services to commercial payments providers. It would also mean that the RBA was providing a banking service to private sector users of the payments system in competition with the commercial banks.
- 234. In principle, institutions other than the existing members of the payments system could become large-scale providers of payment services to customers holding transaction balances with them and thereby generate settlement exposures to other payment providers. If this happened, it could be appropriate for the RBA to help extinguish these risks and prevent them creating exposures for other participants by giving the new providers access to ESAs. Each case would need to be considered on its merits, in light of the business being transacted and the potential exposures being generated. Of course, such institutions would need to have customers prepared to hold significant transaction balances with them; if they were to develop this business to any significant size they would almost certainly have to become a bank or other supervised deposit-taker.

Retail payments

Main developments and prospects

235. The vast bulk of retail payments pass through well-established retail payment systems - cash, cheques, direct entry, credit cards, debit cards and EFTPOS. These systems have evolved over many years. While each has features that need improving - such as cheque clearance times - all are well accepted by the public and do not raise new prudential or system stability issues.

Emerging systems

236. A number of technological innovations have attracted considerable attention, including payments over the Internet and stored-value cards (SVCs). These create opportunities for firms supplying communications and computer software services to play a role in payments.

237. This has excited assertions that the payments system as we know it is under challenge and that banks will become irrelevant. These claims are not at all well-founded. Many confuse the fundamental nature of payments - a transfer of value from payer to payee - with the operations of the payments process. Some of the common claims are discussed in the following paragraphs.

Unsupervised non-banks are competing unfairly with banks

- 238. One common complaint is that non-bank companies, not subject to banking regulation, are unfairly eroding banks' credit card business. The case of GE Capital, an internationally operating finance company, is often cited. GE Capital has purchased the inhouse credit account business of the Coles Myer Group to give it a card base of around 2 million in Australia. Many department stores have provided similar store card services for many years, funding themselves on the wholesale market and advancing credit to their customers. GE Capital operates many similar specialist businesses which it has purchased from department store chains around the world. It appears to be successful mainly because it is very efficient. It is difficult to see that it has a regulatory advantage the company has a capital ratio of 15 per cent, well in excess of most banks, and it is not a significant retail deposit-taking institution.
- 239. GE Capital's card competes directly with those offered by banks every time a customer makes a choice about which card to use in a Coles Myer store. There is no evidence that it has either a new or privileged position in that competitive environment. The structure of the business is similar in many respects to that of the long-established charge card companies, American Express and Diners Club, which offer their cardholders a means of payment at participating merchants, and credit until the monthly account falls due. At this stage, the merchants covered by GE Capital's Australian operations are all stores in the Coles Myer Group. Ultimate settlement of obligations incurred on these cards takes place through the banking system.

The Internet is making banks irrelevant

240. Another claim is that by breaking geographic boundaries, the Internet is making conventional banking and payments irrelevant. An example quoted is someone with Internet access logging on to a Web site for a bookshop in the US, selecting a book and paying for it using his/her credit card without leaving home. But banks are involved in this transaction. The Internet is being used principally as an efficient "search engine". Ordering and paying for goods remotely has been possible for many years, using mail order catalogues, fax machines and the telephone. Credit card payment is convenient because the customer simply cites his credit card number to make the payment (the merchant and his banker have arrangements covering losses due to fraud). Most Internet payment works in the same way - it is simply another way of authorising a conventional credit card payment. The payment is processed through the credit card clearing and settlement system as are cards authorised by signature in a shop. The same will apply to debit card transactions when Internet security is satisfactory.

- 241. Many other Internet-based banking products are also merely a more efficient means of access. A "home page" with details of a bank's products is an electronic brochure. One Australian bank already allows customers to move funds between their accounts by issuing instructions over the Internet, rather than over the counter. Security considerations have so far prevented banks from accepting instructions over the Internet to debit a client's account and make payment to another party. When security problems are overcome, the debit will be a conventional banking operation and the covering credit will be processed through a conventional payments system, such as the direct entry system used to make salary payments. In all these transactions, banks or other financial institutions or credit or charge companies, carrying out conventional payments business, are directly involved. The only new element is the means of issuing instructions to them, which will probably be cheaper for banks and more convenient for customers.
- 242. There is, however, an emerging class of Internet facilities which could reduce the role of banks. Some companies (such as Digicash) are promoting the use of Internet "tokens". Tokens are purchased from the issuing company using conventional payment means a debit to a bank account or credit card account and then used to make payments to third parties. Under some scheme designs the tokens have to be returned directly to the bank or the issuer to be redeemed, while in others they could be passed from one holder to another over the Internet, just as currency notes are passed from hand to hand. It remains to be seen whether consumers will be prepared to hold significant balances in this form. It is more likely that only supervised financial institutions with a track record in payments (such as banks) will have the standing and credibility to become large players.

The telecoms, network and software suppliers are taking over

- 243. There is a concern that the companies providing telecommunication, network and software facilities to banks and their customers such as AT&T, Telstra and Microsoft will somehow take over banks' payment business. Banks clearly depend on outside suppliers for a range of services they need to conduct their payments activities. When the technology was simple, specialised and relatively inexpensive it was controlled by individual banks, but this is no longer possible. Competition among banks might force them to outsource processing and communications to the specialised service providers. But this does not mean outsourcing the basic financial services of holding balances and arranging for their transfer on request.
- 244. Banks fear that they will lose their direct relationship with their customers. As an example, as home banking becomes more popular, customers may choose banks that can be accessed using the software with which they are familiar (such as that provided by Microsoft) rather than first choosing their bank. With the next generation of bank customers more familiar with keyboards and the Internet than bank services and prudential standings, banks might well find they need to approach their customers through third parties. Software and network suppliers might become the gateways to banks as the doors of a bank branch used to be. These are indeed difficult issues for

banks to grapple with. But they are commercial issues, not issues of public policy as those fearful of change often claim.

Policy issues

- 245. The emergence of new payment instruments, such as Internet services and SVCs, do raise various new issues for public policy. Most of these are about consumer protection, prevention of money laundering, potential erosion of tax bases and privacy protection and so fall outside the RBA's main area of responsibility. Even the potential loss of seigniorage from SVCs is ultimately more a matter for the Government than for the RBA.
- 246. Systems involving the issue of electronic tokens will allow payments to take place on the Internet. Consumer regulators may wish to establish standards for security and for disclosure, the latter so that consumers know with whom they are dealing. Should the use of such tokens become widespread there may be a need to increase public protection, in part by establishing sound and reliable clearing and settlement arrangements. To date, with only a few exemptions, banks remain the source of the value being transferred and the point of redemption. This position may be challenged in the future, but issuers who cannot guarantee integrity of the source of funds are unlikely to find widespread public acceptance, especially for high-value payments.
- 247. While the Australian authorities can apply standards to issuing institutions based in Australia, a major attraction of the Internet is the access it gives to organisations based abroad. Australian agencies cannot control who issues tokens or establishes systems abroad, nor could they realistically prevent residents from opening accounts abroad and accessing them via the Internet. These issues will be faced by all countries. The RBA is liaising on these issues with other central banks, particularly through the Bank for International Settlements.
- 248. SVCs aim to replace currency for consumer payments, both domestically and in foreign currencies for travellers. Achievement of this aim would pose concerns for central banks and other agencies, because any loss of confidence in the soundness and security of this new payments instrument would be very disruptive to business activity. The regulatory environment to be applied to SVC products internationally is still to be decided. The US Federal Reserve has taken the view that it does not want to impede development by premature regulation. It has identified the matters which potential issuers need to address, and stressed their obligations to disclose fully to potential cardholders the risks they bear. In contrast, the European Monetary Institute has recommended that only authorised "credit institutions" (banks, building societies and credit unions in Australian terminology) should be able to issue SVCs in European Union member states.
- 249. The RBA has drawn a distinction between development projects and full-scale introduction of SVC products. Its approach has been to monitor closely international developments and the domestic trials of SVC products. Two have involved banks

directly and two have been operated by non-financial companies. All have involved only a small number of cardholders and merchants and relatively small exposures for cardholders.

- 250. Arrangements might be made for unsupervised institutions issuing SVCs to provide a degree of assurance that card holders could redeem value in cards. However, failure of a major broadly-based scheme could have damaging effects on consumers and merchants and on general confidence in other similar products. Given this risk, the RBA is inclined to the view that SVCs which are likely to be widely issued and accepted, and whose use generates significant liabilities which must be cleared and settled, should be issued only by supervised financial institutions.
- 251. In discussions with banks about SVCs, the RBA has sought not to stifle innovation, but has identified issues which scheme designers need to address, and invited them to demonstrate how they would do so. For instance, institutions issuing SVCs need to demonstrate that they have the financial resources to match the risks and claims that could arise if the card security is compromised. This could include adverse affects on the bank's reputation in other markets, raising the possibility of flow-on effects. The schemes will also need to address adequately the concerns of the law enforcement agencies and consumer interests.

9. COMPETITION AND CONSUMER REGULATION

Introduction

252. This Chapter comments on some areas of policy which are not "core" issues for the RBA, but in which it takes an interest both because of their intrinsic importance and because they can overlap with its responsibilities for prudential supervision. The Chapter also discusses briefly the RBA's own customer services.

Competition policy

- 253. In the RBA's view, a coherent set of competition policy principles should apply to all industries, and be administered by the ACCC with economy-wide responsibilities. The same broad principles which are used to evaluate mergers in other industries should be applied to the financial sector. They should focus on three issues:
- Would the merger lessen competition?
- Would the merger change the cost structure of the industry concerned?
- Does the merger have public policy implications beyond those that relate to competition and costs?
- 254. The Trade Practices Act prohibits mergers that are likely to significantly lessen competition in a "substantial market" in Australia unless the ACCC judges the merger as providing net public benefits. The Act has sufficient scope for these principles to be addressed. In its judgements, the ACCC needs to recognise that competition policies cannot be implemented in a vacuum and that other considerations, such as financial stability, are also important. It will need to consult widely with relevant parties.
- 255. Notwithstanding the liberalisation of entry into banking, two separate policies have principally determined the core structure of the financial sector over the past five years. These have been the "six pillars" policy, which has prevented mergers between the four largest banks and large life offices, and the "four plus one" interpretation of the provisions of the Trade Practices Act by the ACCC in its consideration of bank mergers.
- 256. The "six pillars" policy has its origins in the decision of the previous government, in May 1990, to block a proposed merger between the ANZ Bank and National Mutual, the second largest life insurer in Australia. The merger would not have breached any legislative or prudential guidelines and was not seen as a threat to stability of the financial system. Rather, the government took the view that the merger would have reduced the "diversity of institutions and effective competition in banking, in life insurance, and more generally the provision of financial services". Its judgement was that such a merger would reduce competition more than was in the national interest. In reaching this view, the government made it clear that it would not

entertain proposals for mergers between any of the four largest banks or the two largest life insurers. It argued that large financial institutions should develop their own business or make smaller acquisitions.

- 257. The policy has never had a legislative basis and it is timely that it is being reviewed. The RBA believes that the ACCC should evaluate the competitive impacts of proposals for mergers and acquisitions in the finance sector on the same basis as proposals in any other sector. In doing so, the ACCC will have to grapple with difficult issues of market definitions and the extent to which other institutions are potentially effective competitors.
- 258. These issues were also raised by the "four plus one" interpretation the ACCC placed on Section 50 of the Trade Practices Act when evaluating the proposal by Westpac to acquire Challenge Bank in September 1995. In allowing the acquisition to go ahead, the ACCC focussed on the market for banking services in Western Australia, rejecting arguments that the relevant market was national. The ACCC argued that regional banks were an important source of competition to the majors in most states, and allowed the acquisition to proceed only because BankWest would remain independent, as the "plus one" providing effective competition to the majors. The ACCC extrapolated this analysis to possible future proposals, arguing that any purchase by a major bank of the last remaining regional bank in any state would be likely to substantially lessen competition and that the ACCC would "need highly persuasive evidence to be convinced otherwise". Under this policy, acquisition of a number of regional banks by a major bank is effectively ruled out.
- 259. The RBA believes that the focus on a state market may be overly restrictive. In its view, competition in the market for banking and other financial services should be analysed at the national level. While institutions with a regional focus may be important in some markets, particularly for some retail services and lending to small businesses, where local knowledge is useful, these factors are becoming less relevant. Delivery systems such as ATM and EFTPOS networks are making regional markets more readily contestable by institutions without a strong physical presence in those areas. Electronic banking enables customers to access a number of banks through post-office tellers. Telephone banking and, increasingly, the Internet, allow bank customers to conduct many transactions such as paying bills and moving funds between accounts, balance inquiries and obtaining product information without visiting a branch
- 260. The forces operating on the financial services sector are mostly national in scope. Despite inter-state differences in industry structure, there is little difference in the interest rates charged and paid by the same financial intermediary in the different states. As in the global market, ongoing changes in information technology and in delivery systems are lessening the importance of geography in defining markets for financial services in Australia.

- 261. The benefits to customers and shareholders of any merger between a major bank and a regional bank will obviously need to be assessed on a case-by-case basis. The RBA believes that outright prohibition would be too strict an interpretation. That said, the RBA is not advocating a spate of bank mergers. There is no compelling evidence that economies of scale exist in banking either in Australia or abroad. Large banks do not typically have lower average costs than smaller banks, and both specialised and multi-product banks appear to be commercially viable.
- 262. A frequent argument is that bank mergers would reduce costs by facilitating a rationalisation of banks' extensive branch networks. This argument has some merit, although rationalisation is already under way and will continue whether or not mergers take place. Mergers of banks operating in the same geographic areas are likely to promise the greatest savings through branch rationalisation.
- 263. Another argument is that even the largest Australian banks are too small to offer a full range of international services to all their customers, putting them at a competitive disadvantage. However, large corporate customers generally maintain relationships with a number of banking entities, reflecting the fact that different banks have expertise in different areas. No bank can be the most efficient in all activities. Australian financial institutions need to decide whether international expansion requires sheer size, or expertise in specialist areas which offer strong potential for growth.
- 264. Finally, improvements in information technology are increasing the scope for cost savings through the centralisation of information processing and payments. Economies of scale clearly exist in such activities. The issue is how best to realise them. One option is the merger of institutions. Another is for the development of organisational structures (alliances, outsourcing etc.) which allow institutions to take advantage of the potential savings without merging.

Industry structure and prudential issues

- 265. As well as being subject to the Trade Practices Act, mergers among banks and substantial acquisitions by banks of other financial institutions require RBA approval, because of their possible consequences for the prudential soundness of the banks involved. In the normal course, the RBA would not seek to interfere with the judgment of banks' senior management and board about the commercial viability of an acquisition proposal. If, over time, the financial system were to become much more concentrated, or if there were proposals which would themselves produce a substantial increase in concentration, the RBA might need to take into account such questions as:
- Would a heavily concentrated banking system be more or less vulnerable to financial shocks?
- Would the RBA's options for managing serious weakness in one large bank be significantly reduced if there were only one or two others?

266. Australia's banking system, in which four major banks account for around three quarters of most banking business, is not excessively concentrated by international standards. A reduction from four large banks to three would not greatly increase concentration nor would it necessarily reduce competition significantly. The Netherlands, for example, has had three dominant banks competing vigorously since 1990. However, commentators suggest that the market dynamics in Australia are such that there would quickly be pressures to move from three to two. If this were to occur, it would give Australia the most concentrated banking industry in the industrialised world, and would take us into unchartered prudential waters. (How could a merger be arranged if one of the two banks got into difficulty?) This is a very big step to take and would require community support, but it should not be ruled out of order altogether.

Consumer protection regulation

- 267. All companies must conform to a range of consumer protection regulations under the Corporations Law and the Trade Practices Act. Financial institutions are subject to a wide range of additional consumer protection requirements. Many of these are set out in Chapter 3. These requirements are due, in part, to the increasing complexity of many financial products and services and to the sometimes ad hoc regulatory responses to them. The Consumer Credit Code, due to commence on 1 November 1996, is intended to replace inconsistent State Credit Acts which applied different standards to products and institutions from state to state. However, even after decades of work there are still doubts about the consistency of implementation.
- 268. In addition, codes of practice for banks, building societies and credit unions, expected to be adopted at the time of the commencement of the Credit Code, require that institutions fully disclose fees and charges and establish internal and external dispute handling processes. Similarly, life offices and general insurance companies have codes of practice that emphasise disclosure.
- 269. Table 7 highlights the consumer protection requirements and the range of "regulations" with which financial institutions must comply, over and above the usual requirements of the Corporations Law and Trade Practices Act. The current extent and variety of consumer regulation in the financial sector and the lack of consistency in application is excessively costly. There is considerable scope for rationalisation which could improve the position of consumers and reduce compliance burdens on institutions.

	Table 7: Consumer Protection Measures						
Requirements	Banks, Building Societies and Credit Unions	General Insurance	Life Insurance	Superannuation	Unit Trusts		
Legislation	Credit Code	Insurance Contracts Act	Life Insurance Legislation	Superannuation Industry (Supervision) (SIS) Legislation	Sections of Corporations Law		
Codes & Disclosure	Codes of Practice (voluntary, but contractually enforceable)	Code of Practice (voluntary) and by Circular	Code of Practice (compulsory), ISC Disclosure Circulars that provide for a Key Features Statement	SIS legislation, Key Features Statement for retail products	Sections of Corporation Law		
Regulator	State Consumer Affairs, APSC (monitors codes of practice)	ISC	ISC	ISC	ASC		
Complaints Body	ABIO, separate schemes for building societies and credit unions	Enquiries and Complaints Scheme and Insurance Brokers Dispute Facility	Life Insurance Complaints Services	Superannuation Complaints Tribunal	Financial Planning Association Complaints Resolution Scheme		

- 270. Centralising and harmonising consumer protection regulation on a product basis would go a long way towards overcoming the distorting effects of inconsistently applied regulations. As discussed earlier in this Submission, it need not conflict with prudential supervision on an institutional basis. The responsibility should be vested in a single national authority perhaps along the lines of the Personal Investment Authority in the UK. Such an authority would take over the various finance sector consumer-related activities of the states, the ASC and the ISC. It should also become responsible for the work undertaken by the RBA, through the Australian Payments System Council, on the Electronic Funds Transfer Code of Conduct and the codes of practice for banks, building societies and credit unions.
- 271. If a national consumer authority were to be established, the RBA believes it should adopt a flexible, non-statutory approach, with close working links with service providers and consumers, and rely where possible on self-regulation supported by a high degree of transparency. This would minimise the impact of regulation on costs and innovation and encourage industry to lift service standards beyond minimum requirements. The APSC and the Banking Industry Ombudsman Scheme have found

this approach particularly valuable in carrying out their work. A new consumer authority should also establish a mechanism for close communication and consultation with the prudential supervisors of the institutions it deals with, to reduce the likelihood that consumer-related requirements will constrain institutions in a way that might damage their financial soundness. This could be achieved through regular consultation with the Council of Financial Supervisors.

The RBA's "commercial" activities

- 272. In addition to its responsibilities for monetary policy and prudential supervision and its role as banker to the commercial banks, the RBA participates in the financial system as a provider of services. Under its legislative charter, *insofar as the Commonwealth requires it to*, the RBA acts as banker and financial agent of the Commonwealth. It does not have this business, or any other business, as of right it must provide quality services at competitive prices.
- 273. The RBA provides specialised banking, cash and registry and settlement services to the Commonwealth and a limited range of other clients. It recognises that these services compete with private sector providers. In line with the principles of competitive neutrality endorsed by the Council of Australian Governments for such competition (the "Hilmer principles"), the RBA aims to recover fully the cost of these services largely through fees and charges. Within the RBA's structure, banking, registry and settlement and cash services are organised and managed separately; accounting systems are structured so as to facilitate separate reporting of the full costs and revenues of the various commercial activities.
- 274. Although denied the opportunity to cross-subsidise from other income sources, the RBA is able to be a competitive supplier of transactional banking services by concentrating on systems dedicated to government needs. The RBA works actively with its government customers to improve cash management practices, especially through the joint development of electronic services designed to improve the efficiency of payments and collection systems.

APPENDIX A: TRENDS IN THE AUSTRALIAN FINANCIAL SYSTEM

Introduction

- 1. Like other industrial countries, Australia has experienced major changes to its financial system in recent decades. The net effect has been a transformation in the system from a relatively closed, oligopolistic structure in the 1950s and 1960s, based predominantly on traditional bank intermediation, to a more open and competitive system offering a much wider variety of services from an array of different providers. This process of financial system evolution, while driven largely by market forces, has been assisted by prevailing regulatory and supervisory arrangements.
- 2. Among the range of influences on financial-sector development, three main forces can be highlighted. The first has been the role of financial regulatory policy which, to an important degree, shaped the broad trends in banks' market shares in recent decades the extended period of decline up until the early 1980s and subsequent recovery in the post-deregulation period. Secondly, technological developments have been important in reducing the cost of many information-intensive financial activities and in making available a wide range of new products and delivery systems. A third influence arises from the interaction of these first two factors with the historical cost and pricing structure of traditional intermediation, and in particular with the traditional cross-subsidisation of payments services by banks. The persistence of elements of this pricing structure has created opportunities for growth of specialist low-cost financial-service providers which have become an increasingly important source of competitive pressure on banks.
- 3. The section that follows has a general overview of the main trends in the financial sector and relates those trends to the changing demands of the users of financial services: the government, household and business sectors. The remaining sections deal in more detail with banks and other credit institutions, the life insurance and superannuation sector, and the growth of financial conglomerates.

Overview of main trends

The financial system in the 1950s and 1960s

4. While the 1950s might seem a remote starting point for analysis, the period provides a good stylised model of what might be called the "traditional" financial system, and many of the important trends to be analysed can be traced back to that time. The discussion that follows makes use of a basic distinction between the *credit institutions* (or *financial intermediaries*) sector, comprising those institutions whose core functions involve borrowing and lending, ¹ and the *managed funds* sector,

The main groups are banks, merchant banks, finance companies, building societies, credit unions and pastoral financiers.

comprising mainly life insurance and superannuation funds along with other investment vehicles like unit trusts. Emerging areas of competition and "functional overlap" between the two areas are discussed further below.

5. Table A1 illustrates long-run trends in the structure of the credit institutions It can be seen that, until the 1950s, financial intermediation was largely synonymous with banking. In 1953, banks accounted for 88 per cent of the total assets of this sector while the next largest group, pastoral financiers, had only 4 per cent. A summary balance sheet for banks at around the same period (Table A2) shows the main elements of what might be regarded as the traditional bank product mix. Deposits were raised mainly from low-cost sources, with non-interest-bearing cheque accounts and low-interest savings bank deposits together funding almost 90 per cent of the balance sheet. Fixed deposits represented most of the remainder. On the asset side, almost half the balance sheet was invested in government securities or held in Statutory Reserve Deposits (SRDs) with the RBA, and around 40 per cent accounted for by loans. With interest rate controls in place, bank loans were rationed and available only to the most creditworthy of borrowers. Banks faced little competitive pressure from other institutions, which had not yet begun their rapid development, and the system was not open to foreign bank entry or to offshore transactions. Banking business was essentially a low-risk proposition conducted at regulated prices.

		Pe	r cent of	ftotal				
	1929	1936	1953	1970	1980	1985	1990	1995
Banks	94	95	88	70	58	59	69	77
Building societies	2	2	3	5	12	10	5	2
Credit unions	_	_	_	1	1	2	2	2
Money market corporations	_	_	_	3	6	11	11	9
Pastoral financiers	4	3	4	3	1	2	0	0
Finance companies	_	1	3	15	18	13	9	6
Other	_	_	1	3	4	3	4	3

Table A2: Balance Sheet of the Banking Sector \$ million. June 1956

	Trading banks	Savings banks	Total	% of total assets
Liabilities				
Non-interest bearing deposits	2336		2336	43.0
Savings bank deposits	_	2289	2289	42.1
Fixed deposits	514		514	9.5
Other (excludes capital)	142		142	2.6
Assets				
SRDs	521	na	521	9.6
Government securities	415	1704	2119	39.0
Loans	1945	364	2309	42.5
Other	366	119	485	8.9
Source: Reserve Bank of Australia, Oc	ecasional Paper 8.			

- 6. The other main part of the system was the managed funds sector, which in terms of assets was around one-third the size of the banks. This comprised principally life offices and superannuation funds, which offered very different services from banks in the form of long-term, highly tax-favoured saving plans. There was some overlap with banking functions in the provision of mortgage lending by life offices, which helped to satisfy the demand for mortgages unmet by banks. This area of lending activity was quite substantial in the 1950s and 1960s but subsequently declined, for reasons discussed in a later section.²
- 7. From this sketch can be identified the three elements of what might be called the traditional bank business mix; namely, lending, deposit-taking and the provision of transactions services. An important issue is the extent to which these three services need to be provided in a single institution. In this respect a central part of the developing story concerns the emergence of new financial products and new institutions that can compete separately for profitable lines of business, without taking on the whole of the banking product mix. This sort of competition was not possible in the 1950s and 1960s when securities markets were undeveloped and separation of deposit and lending functions, as is now exemplified by cash management trusts and mortgage securitisers, was not possible.

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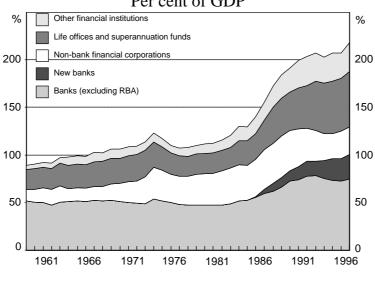
More recently, life offices have again become active in the mortgage market.

A fourth element, the passive holding of government securities, is best thought of as something separate and only incidentally important in the early postwar period, rather than being part of the core business of banking; it was a product of regulation and of the high levels of government debt incurred during the war.

Development of financial institutions

8. Overall growth of the financial system and its institutional subsectors is illustrated in Figure A1. System assets more than doubled as a ratio to GDP between the 1960s and 1990s, with most of that growth occurring in the immediate post-deregulation period in the second half of the 1980s. This has been followed by a period of slower growth but the long-term trend still appears to be upward, consistent with patterns in other countries and with theoretical notions of "financial deepening" as an economy grows. That is, the demand for financial services, broadly defined, tends to increase faster than the increase in income.

Figure A1
Total Assets of Financial Institutions
Per cent of GDP



Source: Reserve Bank of Australia Bulletin.

9. Banks went through an extended period of declining market share during the 1960s and 1970s, when corresponding gains were made by non-bank financial intermediaries, particularly building societies, finance companies, merchant banks and, This trend reflected the competitive disadvantage that financial later, unit trusts. regulations placed on banks. In particular, interest rate controls tended to keep the entire structure of bank rates below market-clearing levels, with a consequent rationing of bank funds and the emergence of a ready market for funding at higher rates. To some extent, the banks responded by creating non-bank subsidiaries to conduct this business "outside" the bank itself and, therefore, outside regulatory constraints. But there was also a substantial growth of non-bank financial intermediaries (NBFIs) not affiliated with the domestic banking sector. In a number of cases, these institutions were owned by foreign banks that sought a financial presence in Australia but were precluded from establishing a formal banking operation by the effective moratorium on new foreign banking authorities before 1985. In other cases, non-bank institutions were joint ventures between domestic and foreign banks.

- 10. A strong reverse trend in these market shares has been observed in the post-deregulation period as the banks' ability to compete with NBFIs improved. In addition, banks reabsorbed non-bank affiliates onto their balance sheets and there were a number of prominent non-bank institutions, particularly building societies, which found it advantageous to convert to banks in the late 1980s and early 1990s. A one-off easing of restrictions on foreign bank entry in the mid 1980s, and the more open entry policy adopted since 1992, saw the foreign bank presence increase, in part at the expense of the merchant bank sector.
- 11. A critical factor shaping the recent history of the financial system was the credit boom which followed financial deregulation. This phenomenon, and its interaction with macroeconomic developments in the 1980s, contributed to growth of the financial sector in a number of ways. Most importantly, it gave the system the capacity to satisfy long-standing, repressed demands for finance. This had the predictable effect (in a qualitative sense) of allowing a one-off expansion of the financial sector relative to its historical trend. Related to this, the expansion in the availability of finance contributed to an asset price boom which further fed back into credit growth. Rising asset prices and expectations of continued asset price inflation fed the demand for credit and also provided increased collateral to support debtfinanced asset acquisition. Finally, rising real asset prices and the high real interest rates that followed deregulation meant that the managed funds sector generated exceptionally high rates of return in the 1980s. Since these funds tended to be locked in (particularly in superannuation funds) and automatically reinvested, the high rates of return contributed substantially to growth in these institutions' assets. The net result was a near doubling of the size of the financial sector relative to GDP in little more than a decade.
- 12. The shifting market share of banks *vis-a-vis* other credit institutions is illustrated more starkly in Figure A2, which shows banks' assets as a share of the total credit institutions sector. This declined steeply to a low point of 57 per cent in 1981 before recovering equally dramatically to almost 80 per cent by 1993, its highest share for thirty years.
- 13. The pattern of decline and recovery is exaggerated somewhat by the growth and subsequent reabsorption of non-bank subsidiaries by banks, but the qualitative picture remains valid; on a consolidated basis, banks asset share fell to a trough of 61 per cent in 1981, still a substantial reduction in the market share of consolidated banking groups from the levels of the 1960s and 1970s. On the other hand, the recovery in banks' aggregate market share during the subsequent period was substantially boosted by the entry of new banks, particularly through the conversion of existing non-bank intermediaries. When new and pre-existing banks are shown separately, it is apparent that banks already existing in the mid 1980s largely did not recover the market share lost in earlier decades. This may be one indicator of the increasingly competitive environment faced by banks, a theme discussed in greater detail below.

Figure A2 Banks' Share of Credit Institutions' Assets % 80 80 All banks 70 70 60 60 Excluding new banks 53/54 59/60 77/78 83/84 89/90 65/66 71/72

Source: Occasional Paper No. 8 and Reserve Bank of Australia Bulletin.

The non-financial sectors

14. Before turning to a more detailed analysis of competitive forces within the intermediation sector it will be useful to look at trends in the financial demands of the other parts of the economy which are the financial sector's clients.

Government

15. Developments in government finance have exerted a powerful influence on the financial sector throughout the post-war period. The federal government entered the post-war period with a substantial volume of debt, amounting in 1950 to more than 100 per cent of GDP. This ratio was steadily reduced until the late 1970s and underwent a further major reduction in the second half of the 1980s, reaching a trough of 15 per cent of GDP in 1990/91. This trend has meant that holdings of government debt have necessarily represented a diminishing proportion of the balance sheets of financial institutions, and particularly of banks, which had held a large part of the outstanding supply in the 1950s. The reduction in government security holdings in turn allowed banks to expand their lending to the household and corporate sectors, thereby gradually changing the structure of banks' balance sheets. Between the early 1950s and the early 1990s, public sector securities and SRDs fell from over 50 per cent to under 10 per cent of banks' total assets.

Corporate sector

16. By international standards, leverage within the Australian corporate sector has traditionally been relatively low, and this remains the case despite a substantial increase in corporate borrowing in the late 1980s. Average debt-equity ratios of Australian companies are slightly lower than in the US, Canada and the UK, and significantly below those in European countries and Japan which have very different banking systems and methods of corporate governance (Table A3).⁴

Table A3: Debt-Equity Ratios of Non-Financial Enterprises

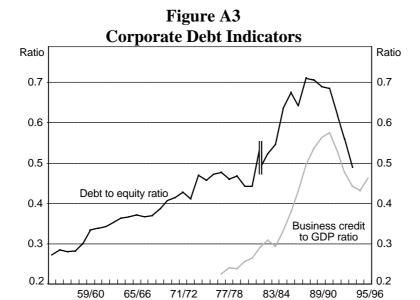
	1981-1985	1986-1990	1991-1993
US	0.5	0.8	1.0
Japan	4.8	4.2	4.0
Germany	3.6	2.7	2.8
France	2.7	2.2	1.4
Italy	3.6	3.0	3.1
UK	1.1	1.1	_
Canada	0.9	0.9	1.0
Australia	0.5	0.6	0.6

Sources: OECD Non-financial Enterprises Financial Statements (for all countries except Germany and Australia); OECD Financial Statistics (for Germany); and Reserve Bank of Australia.

17. The Australian historical experience seems broadly consistent with the pattern of increasing corporate debt observed in other low-leverage systems, particularly in the US and Canada. Starting from a low base in the 1950s and 1960s, the average debt-equity ratio in Australia has been on a sustained upward trend, accelerating sharply in the second half of the 1980s before the subsequent period of debt reduction observed more recently (Figure A3). The spike in leverage in the late 1980s is in fact understated by the data in Figure A3 based on a continuous sample of companies, since many of the companies whose leverage increased most dramatically at that time did not survive the period and are therefore excluded from the continuous sample. Notwithstanding the substantial debt reductions that took place in the early 1990s, the volume of corporate debt outstanding remains considerably higher relative to GDP than was the case in the early 1980s, and the most recent data suggest that corporate borrowing has again begun to increase.

Some caution is needed in comparing balance sheet ratios across countries because of differences in accounting practices.

⁵ See Mills, Morling and Tease (1993).



Source:

Reserve Bank of Australia Bulletin, Reserve Bank of Australia Company Supplement and Australian Stock Exchange Financial and Profitability Study (1995).

18. An unusual characteristic of the debt component of Australian corporate financing is the limited use made of direct borrowing through the issue of corporate securities. Corporate borrowing demands in Australia have traditionally been met mainly by credit institutions - that is, by banks, merchant banks and finance companies, with the largest part of the market being accounted for by banks. Currently only around 10 per cent of the aggregate corporate balance sheet is financed by debt securities. In this respect the pattern of corporate financing in Australia differs from those in the larger English-speaking countries, particularly the US and the UK, where debt security issuance has historically represented a sizeable proportion of overall corporate sector funding. A possible explanation is the smaller size of the Australian economy and the relatively small number of Australian companies that would be considered large on an international scale.

19. The fact that direct forms of financing have not been more important to date, however, provides little guide to the future and conditions seem likely to favour an expansion in the corporate debt market. One factor is the increased sophistication of institutional investors and increased demand from that source for good quality debt. In Australia, the expected expansion in the funds management and superannuation sector could be an important catalyst in this regard. The potential for growth could be further enhanced if attempts to rein in the growth of government debt are successful in the years ahead, as there could then be an increase in demand for alternative securities.

⁶ This figure excludes bank bill finance.

Data presented by Tease and Wilkinson (1993) suggest that, in flow terms, security issuance provided funding of comparable magnitude to bank loans for the corporate sectors of both countries in the 1980s.

20. Trends here will have an important bearing on the long-term role of banks. One view⁸ is that technological improvement is continually reducing the information costs associated with direct financing even for relatively small companies. alternative view⁹ is that banks (or credit institutions more broadly defined) seem likely to retain at least that part of lending linked to the small-to-medium business sector where the practical difficulties of assessing creditworthiness are much greater, technological improvements notwithstanding, than for larger companies. It could, of course, be argued that the issue is more involved than suggested by either of these views. Corporate demands for finance tend to be diverse, with required borrowings linked variously to long-term capital investments at one extreme or to the need for shorter-term standby and liquidity facilities on a day-to-day basis. While direct forms of financing could be an efficient means of obtaining longer-term funds, a major role would still exist for intermediated forms of financing in satisfying shorter-term requirements, even where the largest borrowers are concerned. It could also be argued that, even if there is a significant shift towards direct forms of financing, banks would be well placed to provide the associated services of origination, underwriting and distribution.

Households

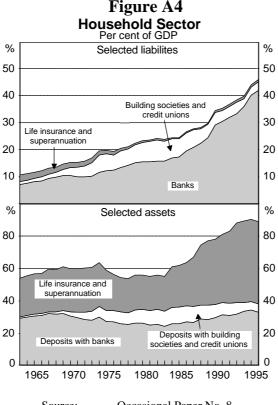
21. The data in Figure A4 illustrate the household sector's position as a net holder of financial assets and show that both sides of the aggregate household balance sheet have undergone a trend expansion over several decades. Notwithstanding this trend, and the fluctuations in some of the balance sheet components, an immediately striking feature of the asset side of the balance sheet is the relative stability of household deposit holdings. These currently stand at just under 40 per cent of GDP and have shown only minor fluctuations around a very gradually rising trend since the early There seems to be reasonably close substitutability among deposits of 1960s. competing intermediaries, suggested by the fact that the trend in total deposits is much more stable than either the bank or non-bank components of that aggregate. This could be argued to be consistent with a fairly stable level of desired deposit holdings relative to income, driven essentially by transaction and short-term saving requirements, with the institutional split between banks and non-banks being influenced by the relative attractiveness of their interest rates. 10 This behaviour can be contrasted with the much greater variation in household assets held with life insurance and superannuation

⁸ Bisignano (1991).

⁹ Goodhart (1988).

¹⁰ This view is consistent with more detailed evidence presented by Dilnot (1990).

funds, which did not appear to give rise to any offsetting fluctuations in deposit In other words, household behaviour seems to make a clear distinction between deposits with intermediaries and balances with funds managers. 11



Source: Occasional Paper No. 8.

22. On the other side of the balance sheet the most important item is lending for housing, which accounts for around three-quarters of personal sector borrowing. Growth in overall borrowing by the household sector shows no sign of abating and, as in other areas of financial intermediation, banks have gained a strong recovery in market share since the mid 1980s, although very recent developments are putting that share under pressure.

Financial intermediation and securities markets

23. Within the credit institutions (intermediaries) sector, two main trends have been important in shaping the competitive environment. The first, already outlined in the preceding section, was the development of financial regulatory policy and its interaction with performance of the different groups of intermediaries. In broad outline, banks lost market share up to the mid 1980s but regained it rapidly once deregulation allowed them to compete for business on more equal terms. As is evident

A separate question concerns the substitutability between superannuation and other non-deposit stores of household saving, which is not addressed here. See Morling and Subbaraman (1995).

referring back to Table A1, banks now dominate the intermediation sector to an extent not seen since the 1950s and 1960s, accounting for almost 80 per cent of the total assets of this group of institutions.

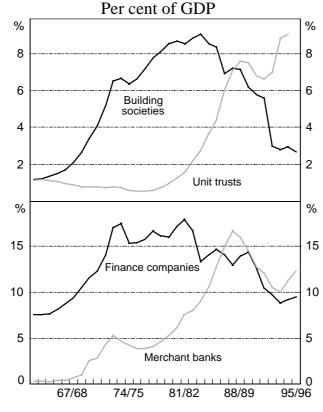
24. The second trend, elaborated below, has been the unbundling of the banks' traditional product mix. This refers to the increasing capacity for new entrants to bid separately for components of banks' traditional business without offering a comprehensive range of banking services. This trend suggests that, even in an environment where banks are not hampered by regulatory constraints, there may be increasing competitive pressure on the most profitable parts of their traditional business base.

The bank product mix

- 25. As argued earlier, the traditional mix of products provided by banks can be viewed in broad terms as comprising three elements deposit-taking, lending and providing transactions services. This, of course, has never been the complete picture and in recent years bank activities have expanded well beyond the traditional product range, as evidenced by the growing proportion of banks' income accounted for by fees as opposed to net interest earnings. Nonetheless, net interest income continues to provide the bulk of the aggregate profits of Australian banks.¹²
- An important issue in relation to the basic economics of the banks' product mix concerns the extent to which the joint products within the mix are separable. In other words, to what extent can the markets for these services be competed for separately rather than delivered jointly by full-service institutions? Historically, there has always been some scope for specialist institutions to compete with banks on a partial range of services. Important examples in the 1960s and 1970s were the building societies and finance companies, which could be thought of as offering limited ranges of deposit and lending services independent from the more comprehensive services, including transaction facilities, available from banks. These institutions grew rapidly in those decades (Figure A5), although the growth was much more a result of their ability to operate outside of key regulatory controls than to the specialist characteristics of their product lines.

Currently around 60 per cent of banks' income is accounted for by net interest. This figure understates the importance of intermediation business since it excludes bill acceptance fees, which are really a form of intermediation income.

Figure A5 Non-Bank Financial Intermediaries Assets



Source: Reserve Bank of Australia Bulletin.

- 27. A much more important spur to competition for specialist lines of business came with the growth in size and liquidity of securities markets in the late 1970s and early 1980s. This allowed specialist institutions either to finance their lending activities by raising funds in liquid securities markets, or to operate effectively as retail deposit-takers while investing their funds in securities rather than loans. In other words, the development of securities markets helped to make possible the provision of "deposit-like" and lending services by separate institutions. Three examples illustrate the process.
- 28. First, on the deposit side, was the growth of cash management trusts, the first of which was established in 1981. Although these are, strictly speaking, funds management rather than deposit-taking institutions, they offer a service that from the point of view of the customer is akin to a short-term retail deposit offering close to wholesale rates of interest. Cash management trusts remain relatively small in aggregate (currently with around \$7 billion in total assets, or around 3 per cent of aggregate household deposits) but have had an important impact on competition for the marginal depositor, and hence on the pricing of banks' own deposit services. In this way they have contributed to the competitive pressures that have seen a steady erosion of banks' low-cost deposit base.
- 29. A second example, on the lending side, was the growth of merchant banking. This occurred in two distinct phases one in the late 1960s and early 1970s, and the

other in the 1980s (see Figure A5). Asset price inflation and an expanding demand for credit played a role in both episodes, with these institutions being active lenders at the more speculative end of the risk spectrum. Regulatory constraints on banks also clearly played a big role in the earlier episode but it is significant that merchant banking activity continued to expand rapidly in the mid 1980s after those constraints on banks were removed. Merchant banks engage in a wide range of financial activities but an essential characteristic of much of their activity is to provide loans to businesses, funded by borrowing in domestic financial markets or from non-residents. In this way, they perform the lending and credit assessment functions associated with traditional banking without taking deposits from households. Merchant bank assets expanded to a peak of around 13 per cent of the financial intermediaries sector in 1988 but then contracted sharply for several years. Nonetheless, they remain a significant presence as the largest of the non-bank intermediary categories, currently accounting for just under 10 per cent of total intermediaries' assets.

30. The third and most recent example of specialist competition is the growth of mortgage managers. These have been in existence since at least the 1970s but it is only in the past few years that they have grown dramatically and emerged as a significant, though still small, competitor to banks in the housing loan market. They currently account for about 8 per cent of new housing loans, compared with a market share of less than one per cent only a few years ago (Figure A6). Mortgage managers arrange housing loans funded ultimately by the issue of mortgage-backed securities that are, in turn, mainly held by institutional investors. The growth of this market provides a good illustration of the potential for separation of certain forms of lending from deposit-taking functions in the financial intermediation sector, and also illustrates the role that funds managers can play as providers of funds to specialist institutions.

Mortgage Managers' Housing Lending Per cent of total approvals % 8 8 6 4 4 2 2 0 0 95/96 87/88 89/90 91/92 93/94

Figure A6

Source:

Australian Bureau of Statistics Cat. Nos. 5609.0 and 5643.0 and Department of Industry, Science and Tourism.

31. It should be noted that the process of disentangling traditional banking products by specialist institutions or entities is still in its infancy in Australia. In the US, where disintermediation has been a feature of the financial system for a decade or more, almost two-thirds of residential mortgages and half of the outstanding credit-card receivables are now funded through the wholesale markets via securitisation programs. Other entities, such as state and local authorities, are increasingly looking beyond the banking system to fund their activities via the issue of securities backed by their receivables (water, electricity, gas etc). These practices have the potential to erode further the traditional market for bank funding in the US and there is no reason to believe that the process will not go further in Australia.

Competition and margins

- An important influence on these competitive developments has been the traditional pricing structure of the banks' joint product mix. This has typically involved very low fees for transactions services, with bank revenue essentially coming from the net interest margin, a system often described as one involving "implicit" interest payments to deposit holders in the form of free or low-cost transactions services. This pricing structure was sustainable as long as there were reasonably strong natural barriers to the separate production of banks' core services, which was essentially the case up to the 1970s. As noted above, the absence of well-developed securities markets meant that lending and deposit services could not be separately provided, and there was little scope to provide transactions services independently of deposit taking facilities. The key subsequent development is that, to an increasing degree, separate production of these services is now possible and the new "production technology" for basic deposit and lending services is increasingly one which does not require extensive branch networks. To the extent that this is the case (and the trend is still at an early stage) it means that the economic function of branch infrastructure should be viewed as being related primarily to transactions rather than intermediation services. This in turn suggests that, under the prevailing price structure, the provision of transactions services by banks is essentially loss-making and has to be cross-subsidised from net interest earnings.
- 33. The pricing structure described above is clearly not one the banks would ideally want. There is a strong economic logic to pricing transaction services more in line with costs, and indeed a wide range of transactions fees have been introduced by banks in recent years. These appear, however, to remain well short of full cost recovery.¹³ The low-price regime on transactions services is essentially inherited from history and banks have faced strong public resistance to changing it. Nonetheless, the situation seems unlikely to be sustainable indefinitely, and changes are occurring.

The Prices Surveillance Authority report (1995) concludes that bank transaction services are priced significantly below cost on the basis of allocations of infrastructure costs in line with standard accounting principles. See also Burrows and Davis (1995) for a discussion of the economics of cost allocation for joint products.

Banks will be unable to compete with specialist institutions while they are required to cross-subsidise payments services which their competitors do not offer.

- 34. The need to cross-subsidise transactions services and maintain an expensive infrastructure network have important implications for banks' competitive position, particularly when viewed in conjunction with another development, the decline in banks' low-cost deposit base (Figure A7). Low-cost deposits defined here as non-interest-bearing accounts, statement savings accounts and passbook accounts currently represent about 12 per cent of the major banks' total deposit base. This is down from over 50 per cent in 1980 and from even higher levels in the 1960s and 1970s. The trend can be attributed to a number of longer-term factors including the effect of periods of high inflation in sensitising depositors to differences in rates of return, as well as competition from non-bank competitors, particularly cash management trusts. This shift in the composition of deposits has been an important source of upward pressure on banks' average cost of funds relative to money-market interest rates.
- 35. Another factor influencing this relative cost of funds in the past few years has been the decline in inflation and the consequent fall in average nominal interest rates. Since the "low" interest rates referred to above had little or no scope to fall further, the general fall in market interest rates has necessarily compressed the margin between low-cost and market rates. In other words, the cost advantage derived from a given volume of low-cost deposits has declined at the same time as their share of total deposits has fallen. In a low-inflation environment, there is no reason to expect a significant reversal of this trend.

Figure A7 **Low Cost Deposits of Banks** Proportion of total liabilities % % transaction accounts 50 50 Passbook accounts Current deposits not bearing interest 40 40 30 30 20 20 10 10 1982 1984 1986 1988 1990 1992 1994 1996 Reserve Bank of Australia Bulletin. Source:

- 36. Against this background it is useful to look at what has happened to margins between deposit and lending rates. The Campbell Committee expected that deregulation would lead to reduced margins by increasing overall competition and removing constraints that had channelled competition into non-price areas such as the extension of branch networks (see Valentine (1991)). There has been considerable debate as to whether these and other expected benefits of financial deregulation have been realised, and some borrower groups such as small businesses have expressed concerns recently about high margins. These concerns partly reflected the fact that key lending rates fell less than one-for-one with cash rates during the extended period of cash-rate reductions in the early 1990s, which was in turn related to banks' tendency to smooth their main lending rates over the course of a cycle. There was also concern that heavy loan losses incurred by banks made them reluctant to cut gross margins.
- 37. The data in Figure A8 suggest that average margins have been fairly stable although showing some tendency to fall since the early 1980s. Two features of the data seem particularly striking. The first is the way that average deposit rates and average lending rates have moved together over the course of a number of interest rate cycles. These averages seem much more closely related to each other than to developments in general securities-market interest rates such as the 90-day bill rate. Secondly, abstracting from cyclical movements, both deposit and lending rates have moved upward relative to the bill rate over a period of time. This is true both for the averages depicted in the upper panel of Figure A8 and for the main indicator lending rates. Similar behaviour has been observed in a number of other OECD countries that deregulated their financial systems. ¹⁵

For a discussion of these issues in an Australian context, see Fraser (1994) and the papers in Macfarlane (ed) (1991). See also Edey and Hviding (1995) for a discussion of other OECD countries' experiences.

¹⁵ See Edey and Hviding (1995).

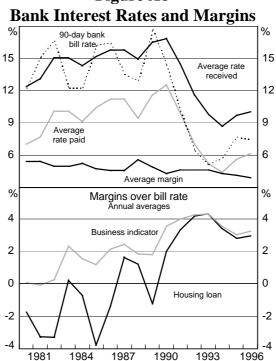


Figure A8

38. In the light of the preceding discussion this behaviour can be interpreted as consistent with a form of joint-product pricing that aims to preserve average margins. With competition having been stronger on the deposit than on the lending side, average deposit costs have moved upward, and the cost of cross-subsidising transactions services has effectively been shifted from depositors to borrowers. It is this pricing structure that is now under pressure from specialist lenders.

Reserve Bank of Australia

Source:

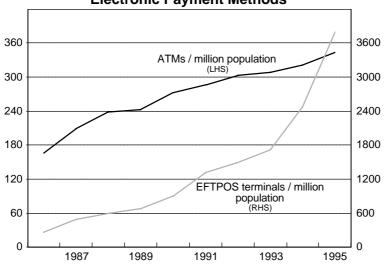
- 39. The banks have been responding to these pressures on a number of fronts. In the housing loan market, banks have substantially narrowed the gap between their standard mortgage rates and the bill rate, first by raising mortgage rates less quickly than the bill rate during 1994, and more recently by interest rate reductions that were a direct response to the competitive pressures outlined above. They also introduced reduced-rate loans like "honeymoon" loans and "no-frills" loans. More generally, the retail banks seem to be adopting marketing strategies that emphasise the full-service nature of their products, aiming thereby to differentiate themselves from more specialist institutions. In this regard the ability to smooth interest rates gives standard bank loans a potentially attractive characteristic compared with the new securitised loans.
- 40. Banks have also sought to reduce costs through measures to increase operating efficiency, particularly through reductions in branch and staff numbers, and they have accelerated their move toward more efficient modes of product distribution - mobile banking, telephone, Internet and so on. Increased account fees can also be thought of primarily as a cost containment measure, since these fees are still pitched well below cost and appear to be designed mainly to discourage excessive use of transactions facilities. Particularly important has been the structuring of fees to encourage a shift to

electronic payment methods. There has been considerable expansion of the ATM network and the number of EFTPOS terminals in recent years (Figure A9), and these and other card-based payment systems now account for more than half the volume of remote payment transactions. A by-product of this technology, however, and of banks' relatively low transaction charges, has been a greatly increased capacity for bank customers to make low-value transactions. To an important degree the result has been to stimulate demand for additional transactions services rather than significantly displacing demand for over-the-counter transactions at bank branches. ¹⁷

96.

41. Against the background of these developments, banks have also set their eyes increasingly on the burgeoning superannuation and funds management sector as a potential long-term offset to these pressures. Aggregate funds under management currently total over \$300 billion and, on latest estimates, banks already control around 25 per cent of that total. Growth of banks' activities in this area has been rapid over the past five years, and they have gained market share (Table A4).





Source: Australian Payments System Council Annual Reports.

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¹⁶ See Mackrell (1996).

⁷ Prices Surveillance Authority report (1995, p. 179).

Table A4: Assets of Funds Managers^(a)

Control by ultimate manager^(b) (%)

As at June

	1990	1991	1992	1993	1994	1995
Life office groups	45	45	44	42	39	39 ^(c)
Banking groups	21	23	23	25	26	25
Other	34	32	33	33	35	36

- (a) Excludes general insurers.
- (b) Some estimation involved.
- (c) Includes State Bank of NSW funds management operations.

Source: Reserve Bank of Australia.

42. It should be emphasised that the competitive pressures, and potential responses analysed in this section are still emerging. Bank profits, on the whole, remain high if judged by recent results and the real pressures would appear to lie ahead.

Financial markets

- Growth of financial market activity has been a major feature of financial sector 43. development since the 1970s. Important early developments were the freeing of certificates of deposit (CD) rates in 1973, subsequent growth of the CD and commercial bill markets, and the introduction of a bill futures market in 1979. 18 Additional impetus came from the introduction of market tenders for treasury notes (1979) and government bonds (1982), the float of the exchange rate and removal of exchange controls in 1983. New foreign bank entrants after 1985 further stimulated growth and innovation. Another important factor has been the growth of the funds management sector and the associated demand for risk-management and financial trading services. In a sense, the increasing liquidity of the main financial markets created a momentum of its own by making it increasingly possible to compare funds managers' performances over short periods and thereby stimulating competition among them as to comparative rates of return. This in turn generated demand for highfrequency financial trading and for new instruments of risk management. Financial market volatility was itself also a factor in stimulating trading activities and demand for risk management products.
- 44. In many of these areas, the Australian market is quite large in international terms. Australia has the ninth largest foreign exchange market and the sixth largest interest rate futures market in the world, ahead of a number of countries with much larger economies. The markets have also become increasingly sophisticated, though the products most heavily traded have been at the simpler end of the spectrum. Issuance and trading of corporate bonds remain relatively small, however, underlining

¹⁸ This was the first interest-rate contract offered on an exchange outside the United States.

the point that the growth of financial markets has been primarily related to the risk management function of these markets, rather than to any shift to securitisation of financial flows to the business sector. Growth of the main markets is summarised in Table A5.

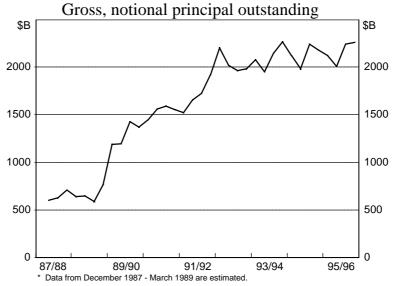
Table A5: Average Daily Turnover in Financial Markets \$ billion

	Commo Treasur	nwealth y bonds	State Govt bonds	Bank	Bills	Equi	ities	Prom- issory notes	Fore	eign exc	hange
Year ended June	Physical	Futures		Physical	Futures	Physical	Futures		Swap	Spot	Forward
1980	0.1	_	_	_	_	0.03	_	_	_	_	_
1985	0.3	_	_	0.3	0.5	0.07	0.07	_	0.8	2.0	0.3
1990	1.2	1.7	2.0	1.7	11.4	0.23	0.19	0.5	7.5	8.6	1.4
1995	6.0	6.0	2.9	1.0	19.0	0.47	0.44	0.8	14.0	7.2	1.0

45. Much of the development and innovation in these markets occurred within the banking system. Similarly, trading activity in the new financial markets has been largely dominated by banks. For example almost 90 per cent of foreign exchange dealing and around 80 per cent of over-the-counter interest-rate derivatives dealing fell to these institutions. Figure A10 shows the rapid expansion in banks' derivative activities, especially over the latter part of the 1980s. Financial market growth has thus provided an important field for banks to expand their activities during the post-deregulation period.

¹⁹ For a review, see Reserve Bank of Australia (1996).

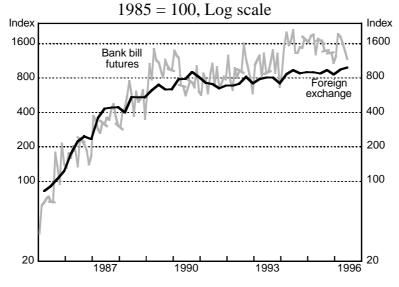
Figure A10
Banks' Derivatives Activity



Source: Reserve Bank of Australia internal.

46. Financial market trading is highly competitive and margins on established products generally thin. This has been increasingly the case in recent years. Good returns can be obtained if new products or new financial markets can be exploited but growth and profitability potential decline as the 'product cycle' matures. This phenomenon is clearly evident in the two largest financial markets (foreign exchange and bill futures) illustrated in Figure A11, although to some extent the recent slower growth may be related to more stable trading conditions and a consequent reduction in demand for risk management products. A number of major market players have reduced their financial trading activities or withdrawn from particular segments where profitability is lowest. Since 1994, many banks have greatly scaled down their proprietary trading (active position-taking).

Figure A11 Financial Market Turnover



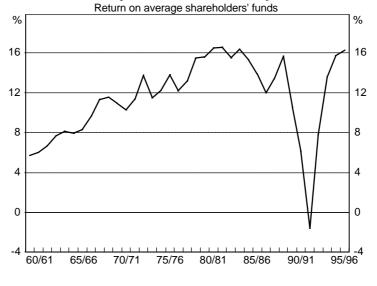
Source: Reserve Bank of Australia and Sydney Futures Exchange.

47. This characteristic of the product cycle suggests that future profitability of financial market activities will depend on continued growth and innovation in these markets. On that score, prospects for growth are likely to be supported by continuing growth of the funds management sector. The scope for continued product innovation, however, is hard to predict. Equity and commodity-related derivatives are gaining in interest among specialist market players and the more sophisticated institutions have begun to investigate the potential offered by the development of other new markets, such as the emerging market for electricity in a number of Australian states. There is also a very tentative examination of the scope for developing credit derivatives by some institutions, an innovation that is embryonic even in the US. Many institutions are looking also at the use of derivatives to differentiate and add value to their balance sheet products via the use of swaps and options, a potential growth area for derivative activities.

Profits, productivity and efficiency

48. Although banking was highly regulated prior to the 1980s, with controls over most lending rates and various controls over the composition of bank asset portfolios, entry was also tightly restricted. While the former influence acted to limit profitability of the banking sector, the latter would tend to have enhanced it. Available data suggest that profitability of banking in Australia, in fact, grew steadily over the 1960s and 1970s, probably reaching a peak by the early 1980s (Figure A12). At that point, profitability in banking appeared to be well above the average of other Australian industrial sectors (Table A6).

Figure A12
Major Banks: Profitability



Source: Banks' financial statements.

Table A6: EarningsPer cent of shareholders' funds

	Tel celli of si	archorders ru	ilus	
	1980-82	1990-92	1994	1995
Banks and finance All companies	14.6 10.8	3.5 4.9	14.4 7.2	16.0 8.0
Source: Australian Stock Ex	change Financial and	d Profitability Study.		

- 49. Following deregulation profitability stabilised, albeit at a relatively high level, in the first half of the 1980s as the combination of increased freedoms within the system interacted with greater potential for price competitiveness and, around the middle of the decade, increased competition from new entrants to the market. Over this period, Australian banks sought to expand their operations both domestically and internationally in the search for new sources of revenue and comparative advantage. For some, this expansion was halted and reversed in the early 1990s. There were tentative signs by the middle years of the 1980s, however, that profitability in banking may have begun to ease a little from the high points of earlier years.
- 50. Further interpretation of the effects on profitability of the structural changes in the financial sector was complicated greatly in the late 1980s and early 1990s by the effects of the first post-deregulation cycle in the banking sector (and the most significant cycle in the banking system since the 1930s). Profitability in the banking system fell sharply with the collapse of the asset boom which had fuelled much of the speculative lending activity of the late 1980s, and the recession of 1990/91. While the timing of losses varied, all the main groups of banks major, State and others registered overall losses at some point between 1990 and 1992. Foreign banks as a

group were the hardest hit with losses amounting to 30 per cent of their capital in 1990 alone. Between 1986 and 1990, aggregate foreign bank losses absorbed an amount equal to their original start-up capital. State banks lost heavily over the period (with concentrated effects in Victoria and South Australia) and some major banks suffered large losses in the early 1990s. Similar episodes of losses, in some cases more severe, were experienced in the non-bank sector (particularly amongst merchant banks), as well as in the banking systems of other countries over a comparable period.²⁰

51. The response to the downturn in profits around the turn of the decade was a process of rationalisation which continues today. Costs, which had risen over the 1980s, became a new focus as did the viability of many of the overseas operations which had expanded in the previous decade. Domestically, the major banks especially sought to reduce the number of branches and to reduce staff levels, which had expanded rapidly between 1985 and 1989. These factors, together with improved economic conditions, and the eventual rundown in stocks of problem loans, saw profit levels in banking rise again to levels previously seen in the early to mid 1980s. Nonetheless, a question mark remains concerning the extent to which banks will be able to maintain these levels of profitability as competitive forces become more pronounced in the period ahead.

Funds management

52. As explained in the body of the Submission, a basic distinction in principle can be made between credit institutions, which offer deposit and loan services on a capital-backed basis, and funds managers, which manage but do not bear investment risk on behalf of their investors. This distinction is reflected in the differing balance sheet structures of the two types of institutions. Credit institutions require capital in order to shield depositors and other debt holders from investment risks whereas funds managers have a structure in which investment risk is borne by the members; in effect, members' funds are a form of equity. To a large extent the two sets of institutions have developed separately in Australia, and their structure and growth need to be explained in terms of rather different forces. It was also argued earlier that households have tended to view deposits and funds under management as quite distinct products and not closely substitutable; at any rate, the broad historical experience seems consistent with that interpretation. Nonetheless, a number of areas of growing competitive interaction between credit institutions and funds managers can be identified, including the increasing involvement by banks in funds management activities already discussed. The discussion that follows focuses mainly on the life insurance and superannuation sector, which comprises the bulk of the funds

Similar experiences occurred in a range of different countries over a comparable period (the United States, Japan, parts of Europe, Scandanavia). This suggests that the processes which led to the cycle in the banking sector in Australia were not unique and may have been derived from basically similar underlying causes (see Macfarlane (1989), Borio (1990) and BIS (1993)).

management sector,²¹ considering first the historical sources of growth of these institutions and then competition between funds managers and intermediaries.

Life insurance and superannuation: sources of growth

- 53. Historically the life insurance and superannuation sector has represented around 20 to 25 per cent of the total assets of the Australian financial system. It is currently a little above that range, having grown rapidly in recent years. The structure of the industry has been influenced by a number of major policy developments during the past 10-15 years. Three have been particularly important.
- 54. The first was a shift in the tax treatment of superannuation. Prior to 1983 superannuation was taxed at extremely low effective rates, with contributions fully deductible, earnings untaxed, and only a small tax on final benefits. Subsequent tax changes (the most important of which were made in 1983 and 1988) reduced this concessional treatment substantially by introducing or raising taxes at all three of these levels; the treatment remains concessional relative to other financial savings, but much less so than previously.
- 55. The second main policy development was the introduction of award superannuation beginning in 1986, when the Industrial Relations Commission endorsed a claim for a general employer-provided superannuation benefit, set initially at three per cent of income. This benefit was gradually incorporated into employment awards as they came up for renegotiation over the next several years. Payments were directed either into existing funds or into union-created industry funds which in other respects were the same as those already in existence (ie managed by private funds management firms); these funds now represent the fastest-growing part of the superannuation industry, although their asset base remains small. A consequence of this history is that many of the structural features of superannuation coverage for the newly-covered employees (for example, the choice of fund, and the nature of benefits provided) are written into awards which continue to govern those basic conditions under the newer government-mandated scheme.
- 56. The third main development was the introduction of the Superannuation Guarantee Charge in 1991. This gave the mandatory system its current basic shape by legislating a timetable for further increases in contributions and setting tax penalties for non-compliance. The target level of employer contributions, to be phased in over a number of years, was set at 9 per cent. Further policies announced in 1995 specified a

Many of the products supplied by life offices are capital backed - and, in that sense, like deposits - but the ultimate return to investors/policyholders depends also on investment performance. Cash management trusts and other unit trusts are also, strictly speaking, funds managers.

timetable for supplementary contributions by employees of three per cent, with a matching contribution from the federal government, to bring the total contributions rate to 15 per cent by 2002.

- 57. The higher contributions rates resulting from these policies can clearly be expected to have a major impact on the industry, and indeed on the financial system as a whole, in future decades. Already the proportion of employees covered has increased dramatically from around one-third of private-sector employees in the early 1980s to around 90 per cent at present. But this increase has yet to have a significant impact on the sector's overall asset growth, which is explained largely by other factors outlined below.
- 58. Trends in the superannuation sector's overall size and its sources of funds are summarised in Figures A13 and A14.²³ Broadly, the historical growth of the superannuation sector can be divided into three phases. The first, which ended in the early 1970s, was one of moderate and fairly steady growth. In the second phase, which comprised most of the 1970s, superannuation assets shrank relative to nominal GDP, largely reflecting poor earnings performance and high inflation. The third phase, from the early 1980s onward, has been one of rapid expansion in which total assets more than doubled as a ratio to GDP, although this may have slowed down in The data presented in Figure A14 divide the sources of the latest few years. superannuation asset growth between net new contributions and a residual representing earnings on existing assets and capital gains. Although net contributions have fluctuated significantly in some periods, it is apparent that most of the variation in overall growth performance is attributable to variation in the earnings and capital gain component, rather than in contributions.²⁴ The three growth phases outlined above correspond broadly to periods of moderate, negative, and high real rates of return on financial assets, as summarised in Table A7.

Projections by Knox (1995) suggest that the superannuation sector could roughly double as a ratio to GDP, from its current level of 40 per cent, over the next 25 years, eventually reaching something like four times GDP when the system reaches its peak asset holdings.

For statistical purposes this discussion treats life insurance and superannuation funds as a single aggregate because their activities are similar and much of the historical data does not distinguish between the two.

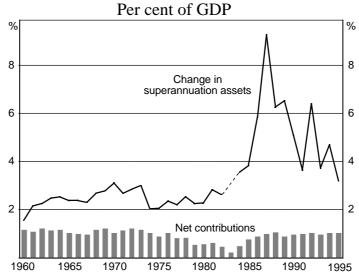
²⁴ Capital gains are likely, however, to be understated in the 1960s and 1970s, and overstated in the early 1980s, as a consequence of the widespread use of historical-cost valuations prior to the 1980s.

Figure A13
Assets of Life Offices and Superannuation Funds



Source: Reserve Bank of Australia Occasional Paper No. 8 and Australian Bureau of Statistics Cat. No. 5232.0.

Figure A14
Net Contribution and Growth in Superannuation Assets



Source: Australian Bureau of Statistics Cat. No. 5204.0 and 5232.0 and Reserve Bank of Australia Occasional Paper No. 8.

Table A7: Superannuation Fund Earnings Rates	Table A7:	Superannuation	Fund	Earnings	Rates
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Average earning rate	Inflation rate
5.2	2.5
6.8	9.8
14.9	8.4
6.8	3.0
	5.2 6.8 14.9

Source: ABS Cat. Nos: 5204.0 and 6401.0. Earnings defined as the difference between change in assets and net contributions.

Aggregate net contributions to superannuation funds do not yet show the 59. upward trend expected to result from the compulsory plan.²⁵ A number of reasons can be given for this. First, there is a strong cyclical influence on net contributions, likely to have been important in the recession periods of the early 1980s and early 1990s. Secondly, many employers were already satisfying, at least partly, the requirements of the compulsory plan under pre-existing voluntary arrangements. This has allowed some scope for absorption of the compulsory scheme into existing arrangements, and has meant that the aggregate effect of the new compulsory schedule has been relatively small so far; but it can be expected to increase as the mandatory contributions rate increases significantly above levels currently prevailing. Thirdly, an important factor in the second half of the 1980s was the phenomenon of overfunding of existing defined-benefit schemes. High rates of return meant that surpluses were accumulated in many of these schemes, enabling the employers who sponsored them either to withdraw funds, or to finance their superannuation liabilities with reduced contributions.

60. To summarise these trends, it is apparent that almost all of the variation in the growth of superannuation funds' assets in recent decades is attributable to changes in the funds' earnings rates, combined with the fact that the long-term nature of superannuation accounts tends to mean that earnings are locked in and automatically reinvested. Although a sustained lift in net superannuation contributions is projected for the future under current policies, it has not yet occurred. This observation is relevant to debate as to the potential for compulsory superannuation to divert household funds that would otherwise have gone to financial intermediaries.²⁶ On the basis of the trends outlined above, claims that this has already occurred to a significant degree would not be substantiated. Nonetheless, competition for new savings between banks and superannuation funds is likely to be an important issue in the future.

A point of caution is that the available data in this area have in the past been subject to substantial revision.

²⁶ This issue was discussed by the Martin Committee Report, House of Representatives (1991).

Competition with credit institutions

- 61. This raises the more general question of whether funds managers and credit institutions are coming more directly into competition, through overlap in their functions or increasing similarity of product lines.
- A good general case can be made that the two sets of institutions have 62. operated in fairly distinct markets. On the assets side of the respective balance sheets, the banks' core business of direct lending can be contrasted with the life and superannuation sector's main investments in debt securities, equities and property. However, one area of overlap historically was that life offices were significant mortgage lenders for a period of time up until around the early 1970s. involvement in mortgage business reflected a number of conditions prevailing at the time, including the banks' inability to meet fully the underlying demand, and the relatively early stage of development of alternative mortgage lenders. The life offices were also able to link their loans with the provision of whole-of-life policies which benefited from generous tax treatment. Life-office mortgages were generally on fixed-interest terms, which meant that their profitability declined substantially as the general level of interest rates rose in the 1960s and 1970s. Total direct lending by life offices has declined steadily in relation to their balance sheet, dropping from around 40 per cent of assets in the late 1950s to around 7 per cent at present. Similarly, superannuation funds at present have only a small involvement in direct lending (Table A8).

Table A8: Assets of Superannuation Funds December 1995				
	\$ billion	%		
Cash and short-term bank instruments	40.4	14.5		
Loans	20.7	7.4		
Fixed interest	53.7	19.2		
Equities	99.2	35.6		
Property	24.2	8.7		
Foreign	37.2	13.3		
Other	3.4	1.2		
Total	279.0			

63. In terms of liabilities, the basic differences in financial structures of credit institutions and funds managers have already been noted. Superannuation fund liabilities are the long-term savings of their members, whereas bank liabilities are a combination of transaction balances, short-term savings and marketable debt

instruments. The banking system in Australia has not traditionally been an important vehicle for longer-term saving, ²⁷ so the competition with the long-term savings institutions for household sector funds has not been particularly strong. This short-term/long-term distinction reinforces the conceptual distinction between capital-guaranteed deposits with intermediaries, and funds under management which are subject to investment risk. On the basis of these two sets of distinctions, intermediaries and funds managers have historically been competing for household funds in quite different areas of the market.

- 64. In a number of respects, this neat division is becoming less clear cut. Specialist funds management institutions, such as unit trusts, are able to offer a range of short-term investment services, some of which closely resemble deposits, and these institutions have grown substantially in recent years. Increasingly, banks are offering the same services, but not on the balance sheet of the bank itself. Also important is that the superannuation sector has become a major holder of essentially mobile or short-term savings of retirees. This trend has been boosted by increasing rates of early retirement, the wide availability of lump-sum retirement benefits and the advent of rollover funds, which retain the status of tax-favoured superannuation vehicles but offer some of the characteristics of shorter-term savings. This has provided a category of relatively high-wealth individuals with a highly attractive alternative to standard deposits for holding what are fairly liquid balances. Another important consequence of these developments is that the funds management sector has itself become an important provider of funds to credit institutions. For example, around \$40 billion or 15 per cent of superannuation assets are currently held as bank securities or deposits with financial institutions, a significant proportion of these institutions' liability base. Growth of these "wholesale" sources of funds to the banks represents a potential source of upward pressure on their average cost of funds.
- 65. The banks clearly believe there are advantages to be gained from combining their intermediation role with funds management activities, and have pushed for allowance of more direct involvement in retirement saving products, as well as having introduced a range of over-the-counter investment products in recent years. These developments, and the changing nature of the funds management sector itself, point to increasing areas of overlap between the products offered by banks and funds managers. Although the legal distinction between capital-backed and other products is preserved, the system seems to be moving towards a spectrum of more closely substitutable products in place of the clear traditional dividing line between deposits and funds management services.

This view is documented by Edey, Foster and Macfarlane (1991).

Following rule changes in 1992, rollover-fund operations can now be carried out within ordinary superannuation funds.

Financial conglomerates

- 66. As noted above, one of the responses of banks to the growing demand for superannuation and other funds management products has been to purchase or establish such operations in subsidiary companies. At the same time, some insurance companies have established intermediary subsidiaries or formed associations with banks to take advantage of their extensive distribution networks. Consequently, financial conglomerate structures have become more common and now dominate the financial system, with the top 25 holding 70 per cent of aggregate financial assets, and conglomerates in total accounting for around 80 per cent.
- 67. Financial conglomerates in Australia are not extensively diversified in the sense that most are dominated by either a bank or an insurance company. Very few have significant involvement in non-financial activities. Of the 25 largest conglomerates, 9 include a bank which accounts for more than 75 per cent of the group's total Australian assets, 3 include a life office with at least 75 per cent of group assets and 4 have a funds management arm of similar size. Table A9 shows that conglomerates headed by banks account for almost 60 per cent of financial system assets, a little higher than in 1980.

 Table A9: Financial System Assets
 Per cent of total

 1980
 1996

 Banking groups
 56
 59

 Insurance groups
 18
 23(a)

 Other
 29
 21

(a) Includes State Bank of NSW and its subsidiaries, which are ultimately owned by Colonial Mutual.

Source: Reserve Bank of Australia

68. The growth of conglomerates and the common practice of selling products of the component companies from common distribution points has contributed to perceptions of blurring in distinctions between banks, insurance companies and other financial institutions.

APPENDIX B: OVERSEAS SUPERVISORY ARRANGEMENTS

- 69. This Appendix summarises the organisation of prudential supervision in a range of OECD and other countries.²⁹ It concentrates on three main issues:
- which countries use the "mega-regulator" model;
- the role of central banks in prudential supervision; and
- reasons for any recent changes in supervisory arrangements.
- 70. Among the countries studied, the supervisory structures are organised in a variety of ways and the different national systems do not always fit conveniently into neat categories.³⁰ Nonetheless, some broad generalisations can be made:
- although there are a number of countries that combine *some* supervisory jurisdictions, only a small minority combine responsibility for all the main institutional groupings in a single prudential regulator;
- most central banks are heavily involved in bank supervision, either as the sole supervisor or by sharing responsibilities with another agency. Where central banks do not have the primary formal responsibility for bank supervision they still, in most cases, devote significant resources to monitoring the financial system and maintain an interest in system stability;
- related to this, the central bank almost always has a key role in the payments system, running settlement accounts for banks and providing some form of lender-of-last-resort facility;
- while we are not aware of instances in recent history of the bank supervision function being taken away from a central bank, there are several examples of bank supervisory responsibilities being moved into the central bank, or to a subsidiary of the central bank.

The "mega-regulator" approach

71. The exact definition of the "mega-regulator" concept is somewhat arbitrary. On the broadest possible definition, such a regulator would have responsibility for prudential supervision of all financial institutions as well as being responsible for product regulation and competition policy in the financial sector. We are aware of no example of a national system that gives such wide responsibilities to a single regulator.

²⁹ Information in this Appendix has been gathered from a variety of sources including direct from the supervisors.

Regulatory structure charts for most of the countries discussed in this Appendix are available from the Reserve Bank.

Sweden is perhaps the closest approximation to this extreme, combining wide supervisory responsibilities and product regulation in the one agency. In virtually all countries, however, the three broad regulatory areas of prudential supervision, product regulation and competition policy are separated, with competition policy in the financial sector generally the responsibility of the economy-wide competition authority.

- 72. A more practical approach to the "mega-regulator" concept is to focus on the allocation of responsibilities within the field of prudential supervision. A number of countries have agencies which are responsible for supervision of more than one of the main groups of financial institutions. The allocation of responsibilities in these countries is summarised in Table A10. The table defines a "mega-regulator" in the prudential sphere as one that combines responsibility for the three main industry groupings of banks (or credit institutions generally), insurance, and funds management operations. On this definition there are four countries with mega-regulators outside the central bank: Denmark, Norway, Sweden and Japan. Of these, the Japanese regulator is located in the Ministry of Finance while the others are stand-alone regulators. In addition, Singapore has a "mega-regulator" which is part of the central bank.
- 73. The Scandinavian "mega-regulators" were established in the late 1980s and early 1990s through the merger mainly of insurance and bank supervisors. These mergers took place in 1986 in Norway, 1988 in Denmark and 1991 in Sweden. The Danish regulator's coverage was further expanded in 1990 to include mortgage credit institutions. A number of reasons were given for merging the supervisory authorities in these countries. These included the emergence of financial conglomerates and the growth of competition across traditional institutional boundaries. There was also a view that staff resources could be used more efficiently by gathering the supervisory expertise together into one organisation. In Norway, for example, there had reportedly been difficulties in keeping up with market developments and in attracting staff, particularly for the insurance regulator, and it was felt that a combined agency would generate improved performance in this regard. Notwithstanding these expectations, it appears that the organisation of supervisory resources within the Scandinavian "mega-regulators" still reflects the fundamental differences between banks and insurance companies. The regulators have made some moves towards supervision of bank/insurance conglomerates but continue to require specialist staff groups focussing on the different component entities.

Table A10: Range of Supervisory Functions in Countries with Broadly-based Supervisors					
Country	Banks/credit institutions	Insurance companies, pension funds	Securities companies	Other	
"Mega-regulator	r" outside the cen	tral bank			
Denmark	Credit institutions	Insurance, pensions	Securities companies	Fund management	
Japan	Banks	Insurance	Securities companies	Fund management	
Norway	Credit institutions	Insurance, pensions	Stockbrokers	Fund management	
Sweden	Credit institutions	Insurance	Securities companies	Fund management	
"Mega-regulator	" within the cent	ral bank			
Singapore	Banks	Insurance	Securities dealers	Fund management	
Other countries	with broadly-base	ed supervisors			
Canada	Banks	Insurance, pensions			
Finland (part of central bank)	Credit institutions		Securities brokers	Fund management	
Germany	Credit institutions			Fund management	
Malaysia (central bank)	Credit institutions	Insurance			
Netherlands (central bank)	Credit institutions			Fund management	
Switzerland	Banks		Securities dealers (from 1997)	Fund management	

- 74. A number of other countries have financial supervisors with broadly based responsibilities but whose scope falls short of the "mega-regulator" definition adopted in Table A10. Finland has a combined supervisor for credit institutions and securities markets (the Financial Supervision Authority) but a separate supervisor of insurance companies. As discussed below, the Financial Supervision Authority was brought under the administration of the central bank in 1993. Canada has a broadly-based supervisor, the Office of the Superintendent of Financial Institutions, responsible for federally-incorporated institutions. It emerged in the late 1980s out of a perception that the regulatory system needed to be rebuilt following some financial failures. Its creation also reflected a general view that financial developments were moving ahead of existing regulatory arrangements. The separate supervisory agencies covering banks (which was not the central bank), insurance companies and pension funds were merged, but the new authority does not have general responsibility for the funds-management industry.
- 75. In Germany, the Netherlands and Switzerland the bank supervisor has responsibilities for funds managers and collective investments but not for insurance, which has a separate supervisor in each country. The grouping of banks and funds managers reflects the universal nature of banks in those countries, so that bank supervisors' regulation of collective investments was a natural progression from their involvement in banks' securities activities.
- 76. A proposal to merge prudential supervisory authorities in a stand-alone regulator was recently considered, and rejected, in South Africa. The issue was investigated in 1992 by the Jacobs Committee and subsequently by the Melamet Committee, which recommended that a single prudential supervisor be established. After public comment and close examination of the proposal, however, the Government decided to continue with South Africa's existing regulatory structure where the central bank supervises banks, and the Financial Services Board supervises all other financial institutions (there is a separate Registrar of Companies). As discussed further below and in Appendix C, a move in the opposite direction was recommended but not implemented in Norway. In 1992, a parliamentary inquiry recommended bringing the existing "mega-regulator" under the central bank, but the proposal was not adopted by the full parliament.

Involvement of central banks in supervision

77. The preceding section has outlined a limited number of cases where the main prudential regulator of banks is a "mega-regulator" outside the central bank, but this is not the dominant pattern. In the majority of countries, it is the central bank that has primary responsibility for supervision of the banking system, sometimes in conjunction with responsibility for other types of financial institutions as well. The overall pattern is illustrated in Table A11: of the 27 countries listed, 17 place responsibility for bank supervision primarily with the central bank, and in another four countries the central bank shares the responsibility with other agencies. In only six cases does the central bank have little or no involvement in bank supervision.

Table A11: Degree of Central Bank Involvement in Bank Supervision

Primary Responsibility	Shared Responsibility	Little or No Involvement
Australia	Germany	Austria
Finland	Japan	Belgium
France	Switzerland	Canada
Greece	US	Denmark
Hong Kong		Norway
Iceland		Sweden
Ireland		
Italy		
Luxembourg		
Malaysia		
Netherlands		
New Zealand		
Portugal		
Singapore		
South Africa		
Spain		
ÚK		

- 78. There are four countries listed in Table A11 where the central bank shares close monitoring of the banking system with another agency (or agencies): sometimes, as in Germany and Japan, this occurs despite formal responsibility resting with another body. The Federal Reserve System in the US is the primary supervisor for bank holding companies and state-chartered member commercial banks. Other banks, including some owned by bank holding companies, are supervised primarily by the Office of the Comptroller of Currency, the Federal Deposit Insurance Corporation, and by state supervisors. Each of these supervisory agencies has a role in supervising the US operations of foreign banking organisations. Because of the often overlapping roles of the various supervisory agencies, there is a close degree of co-operation among them.
- 79. In Germany, the Bundesbank is closely involved in the supervision of banks. It carries out on-site inspections and reviews and follows up on reports by external auditors before they are passed on to the Federal Banking Supervisory Office (FBSO). Despite not being the primary supervisor, the Bundesbank employs more supervisory staff than the FBSO. Under German legislation, the FBSO and the Bundesbank "...shall communicate to each other any observation and findings which may be of significance for the performance of their functions". The FBSO can be required to consult with the Bundesbank before changing policy directives (eg Principles Concerning Capital or Liquidity). Nonetheless, the FBSO has prime carriage of legal responsibilities connected with supervision; these include granting and withdrawing

banking licences, ordering special audits or issuing special instructions to banks' management.

- 80. The Ministry of Finance in Japan supervises banks, insurance companies and securities companies and markets. Bank supervision is conducted in conjunction with the Bank of Japan (BOJ), whose supervisory role lies mainly in bank examinations, and is based on contractual agreements struck between the BOJ and financial institutions at the time they open current accounts with the BOJ. The BOJ uses off-site and on-site techniques in supervising banks. Information gleaned from on-site visits is passed onto the Credit Department. The BOJ is also involved in decisions regarding both privately-managed payments systems and those in which final settlement is made through the BOJ accounts.
- 81. In the Scandinavian countries where the central bank is described as having little or no involvement in bank supervision (Denmark, Norway and Sweden), the supervisory authority is a "mega-regulator". The central bank in each country is nonetheless the lender of last resort, there is generally some degree of formal or informal co-operation with the supervisory authority, and the central bank maintains an interest in financial system stability. The Swedish Riksbank for example has recently noted that it "cannot disregard the stability of particular institutions because the failure of a sizeable institution may constitute a systemic risk". ³¹
- 82. The Bank of Canada appears to have the least involvement in bank supervision of any central bank studied. However, the Bank of Canada has acted as lender of last resort to banks and has recently acquired statutory responsibility for payments system policy. Appendix C discusses problems that have resulted from the Bank of Canada effectively outsourcing credit assessment procedures for its lender-of-last-resort role. Partly as a consequence of those problems, the Financial Institution Supervisory Committee was formed and the Bank of Canada has taken a somewhat closer interest in financial system issues in recent years.

Recent moves to shift supervisory responsibility involving the central bank

- 83. The involvement of central banks in bank supervision has been extensively debated in a number of countries in recent years, both at the official level and among academics. These debates are reviewed in detail in Appendix C. There have been at least four countries in recent history where a shift in the institutional responsibility for bank supervision has occurred: Spain (1962), Luxembourg (1983), Finland (1993) and Hong Kong (1993). In each case the supervisory responsibility was moved from a separate authority into the central bank, or into a subsidiary body of the central bank.
- 84. In Finland the banking crisis of the early 1990s prompted a review of regulatory arrangements in 1992 (see Aranko (1994) and Tuya and Zamalloa (1994)). Prior to that review, bank supervision was the responsibility of a separate Banking

³¹ Sveriges Riksbank, Quarterly Review, No 1, 1996, p. 72.

Supervision Office. The old regulatory arrangements were criticised on several counts, including an excessive focus on judicial compliance rather than risk evaluation, underfunding of the banking supervisor, and inadequate provision of information to the central bank. The working party responsible for the review recommended that the Banking Supervision Office be incorporated into the administration of the central bank. This recommendation was accepted by the parliament. The working party felt that the two organisations had parallel objectives, that the central bank was better resourced, and that there were considerable gains in efficiency that could be realised by combining the two institutions. To prevent conflicts of interest, the decision making processes of the Bank of Finland and the supervision area are separate; each has its own board. The Board of the Financial Supervision Authority (which is chaired by the representative of the Bank of Finland) also has representatives from the Ministry of Finance and the Ministry of Social Affairs and Health (which supervises insurance companies and pension funds).

- 85. Another recent example of bank supervision being brought into the central bank comes from Hong Kong. In April 1993, the Hong Kong Monetary Authority was formed by merging the office of the Exchange Fund (monetary policy) with the office of the Commissioner of Banking (bank supervision). The merger aimed to ensure that the central banking functions of maintaining monetary and banking stability were properly co-ordinated and conducted, particularly in the lead up to 1997 and beyond. Primary influences on the changes were a series of banking crises in 1982-86 and the BCCI collapse in 1991, which illustrated the importance of the central bank having a close knowledge of the banking system if it was to respond quickly to requests for emergency liquidity support.
- 86. There are also two recent examples of a shift in supervisory responsibilities being recommended by an official inquiry but not implemented. In Norway, a parliamentary inquiry recommended moving supervisory responsibilities into the central bank in 1992. As in Finland, the proposal reflected serious dissatisfaction with the performance of the supervisory regime in the recent banking crisis; however, unlike in Finland, the proposal was not adopted by the parliament. In South Africa two recent government inquiries recommended moving bank supervisory responsibilities to a "mega-regulator" outside the Reserve Bank, but again the proposal was not implemented. These debates, along with those in other countries where the central bank's supervisory responsibilities have been reviewed but not fundamentally changed, are discussed in Appendix C.

APPENDIX C: SHOULD BANK SUPERVISION BE CARRIED OUT BY THE CENTRAL BANK OR BY A SEPARATE AUTHORITY?

Introduction

- 87. This appendix reviews the literature on the institutional separation of monetary policy and bank supervision and discusses the background to some recent proposals for institutional change. In summary, it finds three main arguments for bank supervision to be combined with monetary policy in the central bank and three offsetting arguments which advocate bank supervision being placed in a separate institution.
- 88. The three main arguments for bank supervision to be combined with monetary policy in the central bank are:
- a central bank has responsibility for financial system stability, and will have to play a central role in the resolution of a financial crisis due to its capacity to quickly provide system liquidity or lender-of-last-resort loans. It should, therefore, always be in a position to assess the health of the banking system, rather than having to rely on a report from another body;
- a thorough knowledge of the health of the banking system contributes to better monetary policy; and
- a combined authority is likely to give appropriate weight to economic efficiency in framing regulation.
- 89. The three main arguments for a separation of bank supervision and monetary policy are:
- ultimately it is taxpayers' money that is put at risk when banks are supported, so it should be taxpayers (through their government) who make decisions about bank rescues;
- there is a potential conflict between the goals of monetary policy and supervision; and
- the reputation of the bank supervisor would be damaged by a bank failure. If the supervisor is in the central bank, the loss of reputation would also affect the central bank's credibility in its monetary policy responsibilities.
- 90. As in so many such discussions in economics, there is no unanimity about which set of arguments are more powerful. Similarly, there is no single institutional model; some central banks have direct responsibility for supervision of the banking system, while others do not. A recent survey by the International Monetary Fund found that central banks are the primary bank supervisor in over 60 per cent of member countries (Tuya and Zamalloa (1994)). In many of the countries in which the central

bank is not the primary supervisor, it devotes considerable resources to bank supervision. Among G7 countries, the central banks are the principal or joint supervisor in six countries; Canada is the exception. A fuller account of arrangements in the main industrialised countries is given in Appendix B. The remainder of this Appendix provides a brief overview of the evolution of central banks' supervisory responsibilities and reviews the debate on whether supervision should be conducted by the central bank.

Some history

- 91. Central banks have long had responsibility for both monetary policy and the stability of the financial system, although the latter historically has played a more important role in their formation. The original European central banks had two initial roles: providing financial concessions to the government and facilitating the development of the payments system (by controlling note issue and the country's metallic reserves) (see Goodhart (1988)). Their ability to provide cash eventually saw them take on the role of provider of liquidity to the banking system. From this responsibility evolved a broader responsibility for the stability of the financial system.
- 92. For countries establishing central banks in the twentieth century, the maintenance of financial stability has often been the prime consideration from the outset. Indeed, in the US, concern about the stability of the banking system following the banking problems of 1907 was the principal reason for the founding of the Federal Reserve. The importance of supervision in maintaining system stability is reflected in the preamble to the Federal Reserve Act (1913) which calls on the Federal Reserve to establish more effective supervision of banking (see Volcker (1984)).
- 93. In Australia, the preservation of financial stability was also a factor in the origins of central banking, although it played a less explicit role than in the US. The proximate reason for providing the Commonwealth Bank with central-bank-type responsibilities (in 1924) was to gain greater control over note issue. This move took place in an environment in which the private banks were seen by many people as a major source of financial and economic instability, particularly after the banking problems in the 1890s. The establishment of central-bank functions in the Commonwealth Bank was seen as a tentative step towards creating a more stable financial system.
- 94. The Banking Commission of 1937 explicitly acknowledged that the central bank had a role in supervising, and maintaining the integrity of, the financial system. The Commission argued that the central bank should play an active role in the supervision of the system and should take control of any bank which was unable to meet its immediate obligations. In the following years, banks became subject to greater regulatory control, and by the time the Banking Act (1945) was drafted, depositor protection was seen as a key responsibility of the Commonwealth Bank. This responsibility was transferred to the Reserve Bank with the 1959 Banking Act (see Dwyer (1985) and Schedvin (1992)).

95. Prior to widespread deregulation of financial systems, prudential requirements were often a by-product of the regulations designed for macro-economic management. Controls over the structure of banks' balance sheets and their interest rates were designed to limit risk taking by banks and to serve a macro-economic role. As the financial system was deregulated, the mechanisms of monetary control became more clearly separated from those of prudential supervision. Deregulation also saw the focus of supervision move towards monitoring and understanding credit and market risk, rather than imposing restrictions on the activities that financial institutions can undertake.

Public inquiries and academic discussion

96. Recent years have seen increased attention given to the question of whether both monetary policy and bank supervision should be in the central bank, or whether bank supervision should be in a separate institution. Much of the debate has been stimulated by proposals for regulatory reform following problems in the banking industry in a number of countries. As a result, the main contributions have been from official sources - central banks, parliamentary committees and government departments and agencies. Academics have also contributed to the debate, but many have been more interested in the wider issue of whether regulation of the financial system is needed in the first place.

Official positions

- 97. The most extensive debate has occurred in the US. The issue received considerable attention in the early and mid 1980s as a result of the Task Group on Regulation of Financial Services Report (Bush (1984)). This group argued that removing the Federal Reserve from involvement in bank supervision might "undercut the long-term stability of the financial system" (p. 48). Seven years later (1991), the US Treasury argued for a raft of reforms which included a proposal for two regulatory agencies, with the Federal Reserve being responsible only for the state-chartered banks. More recently, the Clinton Administration proposed to merge the four bank regulators into a single banking regulator outside the control of the Federal Reserve system. This latest proposal was largely motivated by the desire to reduce supervision and to reduce the possibility of "regulatory shopping".
- 98. On each occasion the Federal Reserve argued strongly in favour of maintaining its supervisory role (see for example, Volcker (1984), Corrigan (1991a), Federal Reserve Board (1994), Greenspan (1991, 1994) and Syron (1994)). The line of argument has been that the Federal Reserve's system-stability obligations require it to have practical knowledge of the banking system and the authority to influence banking organisations' actions. The Federal Reserve has also argued that the information gained as part of its supervisory responsibilities is important in the formulation of monetary policy, and that a stand-alone supervisor, without macroeconomic responsibilities, would have a long-term bias against risk taking, which would inhibit economic growth (see later).

- 99. The Bank of England's role in supervision has also been subject to considerable debate, again largely in response to the failure of financial institutions. In 1984, as a result of the collapse of Johnson Matthey Bankers, the government commissioned a report into supervision arrangements. The Committee and a subsequent government White Paper recommended that bank supervision remain with the Bank of England, and that this role be strengthened by the creation of the Board of Banking Supervision within the Bank (see UK Treasury (1986)). The Bingham (1992) Inquiry into the collapse of BCCI re-affirmed this arrangement.
- 100. In 1993 another inquiry was conducted, this time by the Treasury and Civil Service Committee of the House of Commons (this inquiry also considered the role of the Bank of England in monetary policy). It concluded that "there is no overwhelming case for separating out the responsibility for prudential supervision to a separate body" (p. xxviii). The Committee recognised that the main argument against a separate regulator was that the Bank of England needed to undertake some oversight of the banking system in its capacity as the lender of last resort. It also concluded that conflicts between monetary policy and supervision are rare, and that when they do arise, they do so regardless of *who* is responsible for supervision.
- 101. In the wake of the collapse of Barings there were renewed calls for the Bank of England to lose its supervisory function. Again, the Bank of England argued against such a move with Governor George saying that he thought there were strong links between monetary policy and supervision, and that there is a synergy between "prophylactic supervision" and the lender-of-last-resort function of central banks (Australian Financial Review (1996)).
- 102. In Norway, a parliamentary working party was established in 1992 to review regulatory arrangements (see Norges Bank (1992) and Tuya and Zamalloa (1994)). The working party recommended moving supervision into the central bank by incorporating the Banking, Insurance and Securities Commission into it. While the proposal was supported by the central bank, it was rejected by the parliament, on the grounds that there was a conflict of interest between supervision and monetary policy, and that it would centralise too much power within the central bank. The Banking, Insurance and Securities Commission therefore remains separate.
- 103. There have been two recent examples Finland and Hong Kong of responsibility for bank supervision being shifted into the central bank from an outside authority, both in 1993. The background to these cases is discussed in detail in Appendix B. In both cases, the decision reflected dissatisfaction with the performance of the previous supervisory arrangements and a view that there were important synergies between bank supervision and monetary policy responsibilities.
- 104. While most central banks have argued that they should be responsible for bank supervision, not all have done so. The Bundesbank is the most frequently quoted example. Tietmeyer (1991) has argued that "a successful monetary policy does not require that the central bank itself be given full control over the banking system and thus for banking supervision; indeed, this could even reduce the effectiveness of

monetary policy. Experience also shows that central banks that are not charged with such additional responsibilities enjoy a higher degree of *de facto* independence" (p. 185). This public statement is weakened by the fact that the Bundesbank has more staff involved in monitoring the condition of the banking industry (including bank inspections) than are employed in the main supervisory authority.

105. The Bank of Canada stands out because it has virtually no role in bank supervision. In 1986, the Inquiry into the Collapse of the CCB and Northland Bank (the Estey Inquiry) examined the structure of bank supervision in Canada. In submissions to the Inquiry, the Bank of Canada argued that there was an inherent conflict between the conduct of monetary policy and financial supervision. The Inquiry's Report also noted that there was no support in any of the submissions for the Bank of Canada to have control of supervision but did point out a number of problems arising with the Canadian arrangement (see later for more discussion). 32

106. The Swedish central bank also has little role in bank supervision. A 1989 committee of inquiry examined the question of whether the stand-alone bank supervisor (as it was at that time) should be brought under the central bank, and recommended against such a move. The main reason for the recommendation was a view that it could undermine the perceived independence of the central bank, because bank supervisory rulings would be subject to administrative review by other parts of the government.

107. The involvement of the central bank in supervision has also been extensively debated in South Africa. In the early 1990s, the South African Reserve Bank (which only began supervising banks in 1987) was criticised when a number of financial institutions failed. Subsequently, the Bank became a defendant in litigation when investors who had suffered losses claimed financial assistance from the Bank. While the Reserve Bank had no formal responsibility for deposit protection, it felt that there was a misguided perception that it had a "duty of care" to protect depositors. It argued that this perception could undermine its credibility as a monetary authority.

108. In response, the government commissioned two inquiries. The Jacobs Commission on Equal Competition for Funds recommended that the government establish a Financial Regulation Policy Board and that the Registrar of Deposit-Taking Institutions (the Reserve Bank's supervision department) report to this Board, rather than to the Reserve Bank. The subsequent Melamet Inquiry into Financial Supervision argued that the government should establish a *single* regulatory body for the entire financial system (the Financial and Investment Services Commission). While both inquiries envisaged the Reserve Bank losing its supervisory responsibilities, this did not occur. The Registrar of Deposit-Taking Institutions remains within the Reserve Bank, although the government did establish a Policy Board to help formulate and coordinate regulatory policy (see South African Reserve Bank (1992 and 1993)).

³² Crow (1993) provides a brief summary of the Bank of Canada's approach to financial stability.

124.

Academic discussion

109. Principal contributions by academic economists have come from Goodhart and Schoenmaker (1993, 1995), Mishkin (1992 and 1994) and Goodfriend and King (1988). Goodhart and Schoenmaker conclude that there is no overwhelming case in either direction, with the strongest argument in favour of combined functions resting on the role that the central bank plays in preventing/resolving payment and financial system problems. On the other hand, they argue that the central issue in deciding who should be responsible for supervision should be who pays the bill in case of a bank failure. They conclude that the government's role as the ultimate source of funds swings the balance towards separate institutions, although they acknowledge that the institutions would need to work closely together. Against this, Schoenmaker (1995) has recently argued that since the European Central Bank will be the only body that could alleviate a general liquidity crisis in the European monetary system, it will need to be closely involved in bank supervision and need to develop a capacity to understand and monitor the potential for systemic risk.

110. Mishkin (1992) comes down strongly in favour of the central bank having supervisory responsibilities. There are three planks to his argument. First, he argues that financial crises are defined by periods in which asymmetric information becomes so intense that financial institutions are not able to perform their intermediation function adequately, with adverse implications for the real economy. Second, in such periods, the central bank has a legitimate and important responsibility to provide directed liquidity to the system through lender-of-last-resort loans. Third, if such loans are to be made, the central bank needs to have regulatory oversight of potential borrowers to reduce moral hazard problems and to ensure that borrowers are financially sound.

In general, economists who see an important role for the lender-of-last-resort 111. facility also see the central bank as undertaking bank supervision (see, for example, Brimmer (1989) and Calomiris (1993)). In contrast, those who believe that there is no compelling rationale for the public provision of lender-of-last-resort loans, argue that a central bank should not have supervisory responsibilities. Perhaps the most frequently cited paper is Goodfriend and King (1988). They argue that the existence of lender-oflast-resort loans leads to an increase in risk taking, and that the system is better served if open market operations are used to inject liquidity into the system in a (potential) crisis.³³ They conclude that because the central bank should not make lender-of-lastresort loans, it does not need to undertake supervision. By inference, a similar conclusion would probably be drawn by those who have recently argued for the abolition of the discount window in the US (for example, see Kaufman (1991) and Schwartz (1992)). These authors argue either that the lender-of-last-resort function should be performed by the private sector, or alternatively, replaced by central bank open market operations. The usual argument against the lender-of-last-resort facility is

See Corrigan (1991b) and Summers (1991) for why open market operations are not sufficient to deal with a crisis.

that when deciding to make loans the central bank will err by supporting insolvent institutions. This will blunt market discipline and produce riskier less-efficient banks (see Bordo (1990)).

The arguments in detail

- 112. The various issues and arguments can be classified under three broad, but related, headings:³⁴
- the role that the central bank plays in preserving system stability;
- the synergies and conflicts between supervision and monetary policy;
- organisational and cultural issues.

The role of the central bank in preserving system stability

113. The strongest argument in favour of the central bank having supervisory responsibilities is that it is uniquely positioned to prevent and resolve financial system crises. By virtue of its macro-economic responsibilities, its daily involvement in financial markets and its central position in the payments system, the central bank has the ability to react quickly to financial disturbances. This makes it the best-placed institution to protect the real economy from financial system shocks.

A financial crisis?

114. Defining a financial crisis is difficult but a central feature must be that a crisis has the potential to cause a contraction in economic activity (see Corrigan (199lb) and Mishkin (1994)). Mishkin argues that the definition needs to incorporate some reference to the process of financial intermediation. He argues that: "a financial crisis is a disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities" (p. 9).

115. The financial system can be subject to disturbances from many sources: the collapse of a bank through poor commercial loans, a disturbance in securities markets, problems in the payments system and rumours concerning the solvency of a bank. Whether or not these disturbances constitute a financial crisis depends on their potential to undermine the process of financial intermediation. In some cases, a bank failure will have no implications for the rest of the financial system. In other cases, confidence effects and the direct links through the payments system can have important implications for other institutions. By increasing uncertainty as to the creditworthiness of counterparties, financial disturbances have the potential to

Goodhart and Schoenmaker (1995), Tuya and Zamalloa (1994) and Federal Reserve Bank (1994) provide the most detailed discussion of the arguments. See also Shull (1993), Swinburne and Castello-Branco (1991) and de Swaan (1994).

undermine the confidence that institutions have in their credit assessment procedures and thereby damage the process of financial intermediation, perhaps with severe macro-economic consequences.

- 116. It is usual to think of a financial crisis as resulting from a bank failure (usually due to it making poor commercial loans). This is the sort of situation that is discussed in most of the literature dealing with crisis management (see later). However, it is not the only disturbance which could threaten to create a financial crisis. Increasingly, the source of the disturbance is something that occurs in a financial market, such as the ones listed below (see, for example, Brimmer (1989), Calomiris (1993), Corrigan (1991b), Mishkin (1994) and Federal Reserve Board (1994)):
- (i) The failure of Penn Central Railroad (1970). The failure of Penn Central to meet its commercial paper obligations caused the commercial paper market to seize up. As a result, firms with maturing obligations could not issue new notes and therefore sought to borrow from banks. In these uncertain circumstances, there was some unwillingness on the part of banks to extend credit until the Federal Reserve made it clear to the banks that it would provide the necessary liquidity through the discount window, although the banks remained responsible for the credit risks involved in lending to their business borrowers. (A similar experience occurred in Sweden in 1990; when the commercial paper market crashed, even well-managed non-financial companies found it difficult to raise finance (Davis, 1992).)
- (ii) The Ohio and Maryland thrift problems (1985). ESM, a small securities firm in Florida, defaulted on its loans to an Ohio thrift when it incurred losses in its government securities trading business. This triggered runs on privately insured thrifts in Ohio and Maryland. The institutions were closed and their reopening was conditional on their being found eligible to access the Federal Reserve's discount window and obtaining federal insurance. Under the Federal Reserve's direction, examiners entered the institutions to evaluate assets that might serve as collateral and to monitor currency outflows. As a result, the Federal Reserve was able to expeditiously provide discount window loans and meet all demands for currency. Corrigan (199lb) argues that the problems in these thrifts came very close to producing full-scale grid-lock in the entire mortgage-backed securities market, and had the potential to produce systemic damage.
- (iii) The stock market crash (1987). The fall in share prices meant that large margin payments had to be paid by brokers. As a result, brokers sought extra loans from their bankers. However, as banks became more risk averse and more concerned about their capital ratios, they became less willing to extend this credit. This threatened a collapse of the clearing and settlements system and the possible failure of securities firms. To counteract this, the Federal Reserve announced that it was ready to serve as a source of liquidity to the system, making it clear that it would provide discount loans so that the banks could lend to their brokerage clients.

- (iv) The Drexel Burnham failure (1990). The problems at Drexel meant that market participants were extremely reluctant to deliver securities or to make payments to Drexel. This reluctance could have brought the liquidation of Drexel's mortgage-backed securities to a halt. Had this occurred, capital markets would have been interrupted and the financial system would have become more vulnerable, as all players became much more uncertain about the creditworthiness of their counterparties. This could have led to a major disruption to the process of financial intermediation. Given this risk, the Federal Reserve used its knowledge of the payments system, the institutions involved, and its close working relationship with key personnel to develop procedures with the banks and securities houses that allowed the orderly winding down of Drexel's securities.
- 117. In each case, developments outside the banking system threatened the stability of the financial system. Credit rationing intensified and liquidity threatened to dry up. In each case, the Federal Reserve's understanding of the linkages between securities markets, the payments system and commercial banking, and the linkages between the financial system and the macroeconomy, allowed it to design responses which removed these threats at no cost to the taxpayer.
- 118. Looking forward, the rapid pace of technological change and innovation in financial markets increases the chance that other shocks will originate outside the banking sector, but quickly involve the banks in their transmission to the wider economy. When new instruments are evolving rapidly, the potential for a re-evaluation of their pricing is high, particularly if the pricing is extremely complicated. Calomiris (1993) notes that one of the reasons that the failure of Penn Central had such a large effect on the commercial paper market was that the market had grown so quickly in the 1960s that few had stopped to evaluate the risks and appropriate pricing of commercial paper. When the problem arose, risk assessments had to be updated and few were sure how to do this. Information about credit-worthiness and the real value of commercial paper became scarce. Davis (1992) suggests a similar situation occurred in Sweden in 1990. The repricing of junk bonds in the US in the early 1990s is another example.

The role of the central bank

119. Many economists argue that a central bank with supervisory responsibilities is the right starting point for preserving a stable and efficient financial sector. In a crisis, the central bank can inject liquidity into the market through open market operations, or in more extreme circumstances, lender-of-last-resort loans. It can also have an important impact on developments through what it says. Statements along the lines that "the Bank will ensure that the system has sufficient liquidity" or that "in the Bank's opinion, a particular institution is solvent" can, in certain circumstances, supply the information that the market is seeking, and head off a potential crisis. The central

As was done in the cases of the Bank of Melbourne and Metway Bank in 1990, and the Rural and Industry Bank of Western Australia in 1992.

bank can also play a leadership role in negotiating solutions to payments problems which threaten to bring down the system, and in negotiating the merger of a solvent institution with an institution that has closed.

- 120. Could another institution perform these roles of crisis containment and resolution? In principle it could, but in practice there would be difficulties. In many crisis situations prompt action is needed and this requires that the responsible institutions have an understanding of:
- the potential macro-economic implications of the crisis;
- the operation and dynamics of financial markets;
- the potential problems in the payments system; and
- the creditworthiness of the banks with which it is dealing.
- 121. For a central bank, the first three requirements are satisfied as a by-product of its other responsibilities, and the final requirement is met through it having supervisory responsibility for the banking system. An institution that was solely a supervisor would not meet the first three requirements, although it could try to keep itself well informed. It would also not have the daily contact with markets needed for prompt action, and so would have to rely on the central bank if this was required.
- 122. Knowledge of the quality of banks' balance sheets is essential, not only in responding to shocks originating in the banking system, but *also* to those in securities markets. If there is some shock that leads to liquidity drying up in a securities market, non-financial firms may turn to banks for liquidity support. Failure to provide that support might lead to major problems for non-financial firms. In such a case, the correct response may be for the central bank to lend to the private banks so that they have the funds for short-term liquidity support of solvent, but illiquid non-financial firms. In Mishkin's terminology, the central bank would be using the banks as its "delegated monitors" that is, the private banks would be monitoring the creditworthiness of their customers, while the central bank monitors the creditworthiness of the banks to which it is lending.
- 123. The central bank may also be helpful in leading a rescue package for troubled institutions, or in attenuating fears that a problem in one part of the system could spread to other parts. In the US examples discussed above, the financial markets and the banking sector looked to the Federal Reserve to ensure that the financial disturbances did not turn into financial crises. Where central banks do not have supervision responsibilities, a stand-alone supervisor could play that role, although perhaps less well (see next section).
- 124. There are numerous examples of central banks co-ordinating rescue packages for troubled banks. Perhaps the most well-known example is that of the Bank of England organising the "Lifeboat" to support troubled "secondary banks" during 1974-75, and more recently during 1991-93, when several small and medium-sized

banks suffered a withdrawal of wholesale deposits. The Bank was also responsible for the rescue of Johnson Matthey Bankers in 1984; at the time, it feared that the failure of this institution could threaten London's position as the leading international gold bullion market. Other examples of central banks playing a leadership role in resolving bank failures include the Banca d'Italia (Banca Steinhauslin - 1981/82), De Nederlandsche Bank (Friesch-Groningse Hypotheekbank - 1982) and the Reserve Bank of Australia (Bank of Adelaide - 1979). Interestingly, in Germany in 1983, when Schröder Münchmeyer Hengst failed, it was the Bundesbank which initiated the rescue package, bringing in the Federal Banking Supervisory Office at a later stage (see Dale (1992)). Similarly, it was the Bundesbank which organised the winding up of Bank Herstatt in 1974. In contrast, in Belgium, Denmark and Switzerland, banking commissions have played the leadership role (for more details see Goodhart and Schoenmaker (1993)).

- 125. Goodhart and Schoenmaker (1993) examine 104 banking crises in a range of countries and conclude that where the central bank remains in charge of supervision, bank rescues are "somewhat more likely" to be solved with financing from commercial banks, rather than the public purse. However, they also argue that as competition in banking increases, the central bank (or anyone else) may find it more difficult to "encourage" private banks to help fund a rescue.
- 126. The international orientation of central banks is another argument in favour of assigning them supervisory responsibility (see Tuya and Zamalloa (1994)). This argument has two parts. First, financial shocks are increasingly likely to have an international element, so that it is helpful if the supervisory authority has an understanding of international financial markets and exchange rates. The central bank is likely to be better placed than other agencies, by virtue of its foreign exchange market operations and its responsibility for investing foreign reserves. Second, central banks are in frequent contact with one another and have well-established formal and informal lines of communication. This makes timely recognition of adverse developments in banks with international activities more likely. These relationships may also prove useful in formulating an international response to a world-wide financial disturbance.

A stand-alone supervisor and system stability

- 127. The alternative proposition to the one argued above is that the system stability objectives can be best satisfied with a stand-alone supervisor who is answerable either to parliament or to the Minister of Finance (see for example Hilton (1994) and Taylor (1995)). Proponents of this approach argue that the information collected by the supervisor could be passed onto the central bank where appropriate.
- 128. This argument is explicitly rejected by most central banks, and implicitly rejected by many others, who, even through they do not have formal responsibility for bank supervision, employ a large staff examining the health of the banking system. As the Federal Reserve (1994) notes "central banks in all but one G-7 country, in most

cases *de jure* but always *de facto*, are closely involved with the supervision of banks in their countries and internationally" (p. 22).

- 129. The one exception is Canada. Despite having lender-of-last-resort responsibilities, the Bank of Canada is reliant on the Office of the Supervisor of Financial Institutions (OSFI) for supervision of the banking system and assurances as to an individual bank's solvency. The Bank of Canada is comfortable with this arrangement and supports it publicly.
- 130. Critics of this type of arrangement see a number of problems. First, in a crisis, time is of the essence. Slight delays in the transmission of information or any ambiguity about its contents could have damaging effects. Second, without direct responsibility for supervision, the central bank's practical "hands-on" feel for what is happening would diminish. It would not have the person-to-person contacts that would enable it to broker a deal in a crisis such as accompanied the 1987 share market crash in the US. The Federal Reserve has argued that if its staff were forced in to the position of simply reading a stand-alone supervisor's reports, or even being relegated to the junior member of a supervisory team, "the tendency would to be retreat into a kind of ivory tower, adversely affecting both monetary *and* supervisory policy" (Volcker (1984) p. 549).
- 131. This point is illustrated by the German and Japanese arrangements. In Germany, while the Federal Banking Supervisory Office (FBSO) is the formal banking supervisor, the Bundesbank carries out on-site inspections and reviews and follows up on reports by external auditors *before* they are passed to the FBSO. Despite not being the formal supervisor, the Bundesbank employs more supervisors than the formal supervisory agency. A similar situation occurs in Japan, where the Ministry of Finance is the statutory supervisor, but the Bank of Japan conducts regular on-site inspections, and has a large supervision staff. This duplication of supervisory activities increases the total cost of bank supervision.
- 132. The Canadian experience in the mid 1980s provides an example of the practical problems which can arise when the central bank has no supervisory responsibilities. The Estey Inquiry noted that when CCB and Northland Bank were experiencing difficulties, "The Bank of Canada ... found itself in an invidious position in the events surrounding the collapse of CCB. The Governor of the Bank of Canada was seen as the leader of the banking system. Naturally, therefore, he was looked to for leadership in times of crisis. Indeed, it was taken for granted by all participants that the Governor of the Bank of Canada was the appropriate person to preside over the 22 and 24 March meetings to determine the fate of CCB. Unfortunately, the Bank of Canada is not clothed with the necessary statutory powers or staff to select the appropriate program in such circumstances and to guide its performance." (Estey (1986), p. 165).
- 133. The Canadian example illustrates the point that if the central bank has no supervisory responsibility, it has little option but to rely on the advice of the supervisor. In this episode, the supervisor originally assessed the banks as solvent and

the Bank of Canada arranged loans for the banks. The Bank of Canada was active in informing the public that the banks were solvent and in arranging liquidity support from other banks. This was despite its having no independent way of assessing the solvency of the institutions. Subsequently, the supervisor reversed its decision and the Bank of Canada stopped extending credit. The initial determination that the banks were solvent meant that depositor protection had to be extended to all depositors, not just insured deposits (those less than \$60,000).

- 134. Some economists support the Canadian-style system on the argument that the central bank is already a powerful institution, by virtue of its monetary policy responsibilities and that granting it supervisory responsibilities gives it too much power and reduces the "checks and balances" in the system. Another argument is that since taxpayers' money is often put at risk in bank rescue operations, it is the taxpayers, through their representative (the government-controlled supervisor), who should make any decision.
- This latter line of argument can be criticised on a number of grounds. First, the taxpayer is going to be at risk whether the rescue is financed by a stand-alone supervisor or the central bank because the government owns both institutions. It is true that a stand-alone supervisor would probably be more directly answerable to the political process than a central bank, but that could cause a second problem in that it would increase the chance that political decisions would dominate economic ones. In Taylor's (1995) proposal for a stand-alone supervisor in the UK, he argues that the Treasury would need to indemnify the Bank of England for any support funds it provides at the request of the FSC (Financial Services Commission). This leads him to conclude that "The Treasury would therefore need to be closely involved in any decision to provide LLR support, although it would act on the advice of the FSC and the Bank" (p. 14). This implies that a committee representing three organisations, with at least one member under possible political pressure, would have to make a decision about whether to lend to a bank under extreme time constraints. Finally, the perceived independence of the central bank may be damaged by a system whereby the government directs the central bank to make loans to banks, or alternatively, by the central bank being obliged to extend credit to the supervisor (so that it can make loans to banks). The notion that the central bank does not lend to the government (or its agencies) and that the government does not direct the central bank to make loans to private firms is a cornerstone of responsible monetary management, and should not be discarded lightly.

Are there conflicts or synergies between supervision and monetary policy?

Conflicts

136. The argument is that if a central bank is the bank supervisor, then it will have divided loyalties, which will interfere with its monetary policy objective of maintaining low inflation. The usual situation envisaged is where the monetary authority wishes to raise interest rates for anti-inflationary purposes, but the regulatory authority opposes it because of the weakness of the banking system. This argument

suggests that if the two functions are separate, the monetary authority would go ahead and raise interest rates, regardless of what happens to the banking system. On the other hand, if the two functions are in the same institution, an internal compromise would be reached whereby interest rates would not be raised as much (or at all), resulting in a less anti-inflationary monetary policy.

- 137. A problem with this argument is that it seems to imply that the monetary authority should not take into account the condition of the banking system in setting monetary policy. But if it failed to, it could inadvertently bring about a financial crisis which could have large effects on economic activity and inflation, and hence result in worse monetary policy than otherwise. One way or another, the condition of the banking sector is a relevant piece of information for monetary policy and should be factored into the decision making process (see later for more detail). The argument for separation would have to rest on a different and more restricted form of conflict, whereby the combined institution deliberately chooses a setting of the monetary instruments which will give a sub-optimal economic outcome (including higher inflation), but will "prop up" some weak banks and hence preserve the combined institution's reputation as a supervisor. This more precise form of the argument recognises that it is correct to take into account the condition of the banking system when deciding on monetary policy settings, but believes that a combined institution may misuse the information to serve its own self-interest.
- 138. Is there any empirical evidence for the idea that central banks have acted in this way? To the best of our knowledge, neither the literature on the subject, nor our observation of recent history, provide any such evidence. Australia and New Zealand, for example, which both have monetary policy and bank supervision combined in the central bank, went through a period of anti-inflationary monetary policy at a time of substantial bank losses in the period between 1989 and 1992. Looking back over that period, no-one has suggested that either central bank "went easy" on its monetary policy in order to "prop up" its banks and so preserve its reputation as a supervisor. To the contrary, most current views of the monetary policy of that time (which have benefited from hindsight) accuse it of having erred on the tough side.
- 139. There are two episodes in the US that are sometimes quoted (see Goodhart and Schoenmaker). The US abandoned the non-borrowed reserve base scheme for setting monetary policy in 1982 and moved to a more pragmatic system, which quickly led to a fall in interest rates. Many people attribute this to worries about the solvency of US money-centre commercial banks as a result of their exposure to LDC debt, but virtually no-one now feels that the change in monetary policy procedure was a mistake, or that it was inflationary. In the early 1990s, the Federal Reserve was accused of giving a high weight to the weakness of the Savings and Loans Industry (S&Ls) in setting its monetary policy. Again, there are few who would now say that monetary policy was too easy at that time, and, besides, the Federal Reserve was not the supervisor of the S&Ls and could not be accused of trying to protect its own reputation.

- 140. An alternative empirical approach has been provided by Heller (1991) who found that the average inflation rate for countries with separation of supervision and monetary policy was lower than for countries with both combined in the central bank. This result was necessarily based on a small sample, and heavily influenced by some Latin American countries where the central bank was responsible for bank supervision. Goodhart and Schoenmaker (1993) did their own compilation excluding these countries and still found that the average inflation rate was lower for countries where the central bank was not the bank supervisor. This is not surprising since Germany, Switzerland, Japan and the US, which have relatively low inflation, were in the group of countries where the central bank is not the sole bank supervisor. But the central banks in each of these countries do have some responsibility for bank supervision, although it is shared with other institutions (see Attachment B). They, therefore, would have some reputation as a supervisor to protect, so the comparison between the two groups is an ambiguous one.
- 141. Neither author claims much rigour for this type of exercise and Goodhart and Schoenmaker sum up by saying, "Our final conclusion is therefore that a Central Bank's involvement in supervision does not necessarily weaken its stance on monetary policy; and consequently we consider a Central Bank's inflation performance and its role in supervision as two, more or less, separate issues".

Synergies

- 142. For monetary policy to achieve its objectives, it is important that the central bank has a good understanding of the transmission mechanism the chain of events that lead from a change in the instrument of monetary policy to the final outcomes in terms of inflation and output. This is not an easy task as there is no mechanical link that applies over time; each cycle is different in intensity and the length of lag.
- 143. One important element in the transmission process is how the banking sector will react in its vital role of providing credit. The provision of credit always involves taking risks, and banks' attitude to risk will depend importantly on the health of their balance sheets. Will they pass on to their customers the full increase in official interest rates? Will they still compete aggressively for new business? Will they stay with their present credit standards, will they lower them to get new business, or will they raise them to protect themselves from future losses? In different circumstances, the results will be different. For example, in 1988 and 1989, the banks seemed oblivious to high interest rates and still competed vigorously for business, lowering credit standards by more than they had in earlier cycles. On the other hand, they became extremely risk averse in the 1990-to-1993 period, despite the lowest interest rates for 20 years.
- 144. Thus, a given tightening of the monetary instrument will have different effects depending on the health of the banking system. If it is in good shape, a tightening may produce a modest slowing, but if it is in bad shape, it could result in a severe contraction. In order to do the job of monetary policy properly, it is important to have

as thorough a knowledge as possible of the health of the banking system, and this would be most efficiently achieved by being the bank supervisor.

- 145. The argument that monetary policy will be better conducted if the central bank does not have responsibility for supervision amounts to saying that it will do a better job if it does not have access to full information. The alternative view and the one the RBA would support stresses the synergies between the two responsibilities. It believes that monetary policy would do a better job if it had all the available information at its disposal.
- 146. A counter to the above argument is to agree that the central bank should take into account the health of the banking system, but to point out that it could receive its advice on this matter from a separate supervisor rather than doing the job itself. Such advice would obviously be a help, but it is hardly the same thing as having direct knowledge of the situation. A stand-alone supervisor with no economic responsibilities or market involvement is bound to have a different perspective from an economic agency such as a central bank. The stand-alone supervisor would probably concentrate on judging the health as it was at a point of time, rather than assessing its susceptibility to possible changes in monetary policy.
- 147. The RBA attitude to this question is perhaps jaundiced by its recollection of the Pyramid Building Society episode. The Reserve Bank had no supervisory responsibilities in that case and had to rely on the assessments of the Victorian Registrar of Building Societies.

Organisational and cultural issues

The reputational argument for separation

- 148. A good supervisor does not attempt to prevent individual banks from failing if they are badly managed and if the failure has no significant systemic implications. However, this is not widely perceived by the public, who tend to regard any failure as a sign of incompetence on the part of the supervisor. Supervision is a thankless task there being no rewards during the long period of stability but often severe recriminations from the public, the press and politicians if a failure occurs.
- 149. For this reason, some commentators feel that it would be better if the reputation of only the supervisor was sullied when an institution failed, rather than having it rub off on to the monetary policy arm of a central bank as well. This is an argument which has been used often in the case of the UK, where the Bank of England has been severely criticised for the failure of Johnson Matthey Bankers, BCCI and Barings. There is some weight in this argument, although it has never been strong enough for a central bank to propose divesting itself of its supervisory functions.

Cultural and incentive issues as arguments for a combined entity

150. There are two arguments here of relevance, both of which favour a combined organisation rather than separation. The first argument is that a single regulator with a

focus on safety, and subject to the same sort of pressures described above, will have a long-term bias towards excessively tight supervision and will give less weight to the importance of flexibility and capacity to adjust to market forces. It would receive little, if any, credit for the ability of the banks to adjust to market forces and contribute to growth, but would be subject to severe criticism if an institution failed. These incentives could lead to supervisory policies which, at the margin, inhibit economic performance and possibly encourage the growth of financing outside the supervised sector. This is an argument that has been put regularly by the Federal Reserve in the US. It sees itself as having a better capacity to trade off safety versus adaptability than a more-narrowly focused regulator.

- 151. A related argument is that a stand-alone supervisor would develop a culture based on rules and their interpretation, and hence tend to be dominated by lawyers, and possibly accountants. In a central bank, however, while the supervisory wing may have some of these tendencies, it will have to battle constantly with the economists and financial markets professionals in the monetary-policy wing of the central bank. This creative tension would tend to reduce the extent to which an overly rules-based and legalistic approach was followed.
- 152. On balance, it is hard to weigh up these arguments, and much will depend on the point of view of the person doing the weighing up. If the aim is light regulation, and emphasis is on the need for market forces to play a large role, a combined supervisor would have the advantage. On the other hand, if the emphasis is on minimising the risk of failure, a separate supervisor would probably be superior.

APPENDIX D: INTERNATIONAL FRAMEWORK OF BANK SUPERVISION

- 153. Much of the supervisory architecture in Australia is of fairly recent origin, and has been shaped in the full knowledge of international best practice. Finance must rank with telecommunications and air travel among the most international of industries. Australian financial institutions operate in a growing number of countries (for example, ANZ operates in 43 countries). A large number of foreign financial institutions operate in Australia (27 banking groups are foreign owned, a further 36 merchant bank groups have parents who are banks in their home countries, and 23 life insurance companies are foreign-owned). The supervision and regulation of the finance industry is as international as the industry itself. There are well-regarded and well-functioning international groupings of supervisors in each of the banking, securities and, more recently, insurance businesses. The constant refrain from the international conferences organised by these bodies over the past decade has been the need for harmonisation, co-operation and co-ordination.
- 154. In the area of banking supervision international harmonisation has been guided by the Basle Committee on Banking Supervision. This Committee was established by, and reports to, the Governors of the central banks of the G10 countries; its permanent Secretariat is located at the Bank for International Settlements in Basle, Switzerland, The Basle Committee's 1975 Concordat stated the principle that all international banks should be subject to effective consolidated supervision, and set out the division of responsibilities between home and host country supervisors. The Committee is probably best known, however, for its 1988 guidelines on the measurement and minimum levels for bank capital. These were developed to underpin a concerted response to the secular decline in bank capital. The definition of capital (Tier 1 and Tier 2 capital), the concept of risk weights which differentiated between broad classes of assets according to risks, the inclusion of off-balance sheet risks in the framework, and the 8 per cent minimum requirement, have been adopted by supervisors all around the world.
- 155. The original intention of the Basle Committee had been to produce a common capital standard for all internationally operating banks, but most countries adopted the BIS standards for all of their banks. It is not much of an exaggeration to say that it is no longer possible to be a bank and have a BIS capital ratio below 8 per cent. Close consultation between banking supervisors has meant that a reasonable degree of uniformity has been achieved in the implementation of the BIS capital regime. In Australia, it has been applied to all banks and also to building societies and credit unions.
- 156. In recent years the international banking community has agreed that the 1988 capital accord should be extended to capture the market risk in banks' trading activities. The design of the capital regime for market risk has involved consultation between international groups of banking and securities supervisors, consultation with groups of banks and consultation and opportunity to comment for non-G10 supervisors

like the RBA. In other words, a gigantic effort has been made over half a decade to come up with a system which, by its acceptability to the broad sweep of banking supervisors around the world, would ensure that the status of the BIS capital ratio as the global benchmark for a bank would be retained.

- 157. The Basle Committee over its twenty-year history has produced work on most aspects of banking supervision restrictions on concentrations of risk/large exposures, liquidity management, risk management systems for derivatives, to name just a few. There is a global orthodoxy for the methods to be employed in supervising a bank. It is normal for the authorities to have requirements about who can own a bank, who can manage a bank, how much capital it needs, how much liquidity, how big a single exposure it can have, how much information it has to publish and how much it must report to the regulatory authority.
- 158. The RBA has been a keen contributor to the international development of the techniques of bank supervision. While Australia is not a member of the G10, the RBA maintains close links with the Basle Committee on Banking Supervision through its membership of the BIS. At each stage of the development of the common standards for imposing a capital requirement for market risk, Australia has made a comprehensive submission to the Basle Committee.
- 159. The Basle Committee has continued to aim for the implementation of effective supervision for all international banks. In 1992, it released Minimum Standards which contained four main principles:
- All international banks should be supervised by a home country authority that capably performs consolidated supervision.
- The creation of a cross-border banking establishment should receive the prior consent of both the host country and the home country authority.
- Home country authorities should possess the right to gather information from their cross-border banking establishments.
- If the host country authority determines that any of these three standards is not being met, it could impose restrictive measures or prohibit the establishment of banking offices.
- 160. The International Conference of Banking Supervisors in Stockholm in 1996 adopted a paper designed to strengthen the implementation of these principles. As implied by the second Minimum Standard, supervisors in host countries increasingly apply pressure on home country supervisors of banks wishing to expand internationally, to adopt internationally accepted approaches. The most notable example of this is the US, where the Federal Reserve rates the ability of a foreign head office to provide support to its US operations; this includes giving a specific rating to the quality of bank supervision in the home country. In Australia's case, US supervisors visit the RBA annually as part of their assessments. Similarly, the Bank of England has felt obliged to make assessments of the soundness of international

banking groups with a presence in their country, taking into account the quality of home country supervision. In short, there are great pressures for countries to conform to international norms in supervision.

- 161. Nevertheless, not all supervision policy reflects international agreements. In some areas such as definitions of impaired loans, and bank involvement in funds management and securitisation, the RBA has produced prudential guidelines without clear international precedents. This reflects a reaction to Australian experience with bad debts in the early 1990s, growth in banks' involvement in funds management and interest in securitisation.
- 162. In the area of securities market and insurance industry regulation, harmonisation has not been as successful as in banking but strong efforts are now being made through international bodies of supervisors. Australia has played a prominent role in the growing status of both IOSCO and, more recently, in the IAIS.
- 163. The trend towards conglomerate structures, which include banks, insurance companies and investment houses has not been restricted to Australia. Concern with the need to develop a consistent approach to the supervision of financial conglomerates is an international one. The Basle Committee, IOSCO and IAIS have formed a Joint Forum on Financial Conglomerates to develop internationally agreed standards for supervising such groups. Through the ISC and the ASC, Australia has two seats of twenty eight on the Forum. Its work is described in Appendix E.
- 164. The Joint Forum's mandate does not extend to reviewing the approaches of the banking, securities and insurance supervisors to the companies within their jurisdictions. The international community will, therefore, continue to think in terms of separate supervision for the banking, insurance and securities arms of a conglomerate. This illustrates that the need for a level playing field internationally for each of the banking, insurance and securities businesses, may be at least as powerful as the demands for a level playing field between the three different classes of financial institution domestically.

APPENDIX E: OVERSIGHT OF FINANCIAL CONGLOMERATES - INTERNATIONAL DEVELOPMENTS

The Tripartite Group

165. Internationally, supervisors have been investigating issues raised by the emergence of financial conglomerates. In July 1995, a report entitled "The Supervision of Financial Conglomerates" was produced by a Tripartite Group of banking, insurance and securities supervisors drawn from the main international groups of supervisors but acting in an informal capacity. The report identified a number of problems which financial conglomerates pose for supervisors, and discussed ways in which these problems might be overcome. Although not formally endorsed by the Basle Committee on Banking Supervision, the International Organisation of Securities Commissions or the International Association of Insurance Supervisors, the report has been seen as the basis for further collaborative efforts in the area. The key issues which it identified, and responses suggested, are outlined below.

Access to information/co-ordination of regulation

166. The recommendations of the Tripartite Group were based on the premise that, while the supervision of individual entities in a conglomerate continues to be of primary importance, it needs to be complemented by a prudential assessment from a group-wide perspective. A necessary implication of this finding is the need for close co-operation between supervisors - including the right to exchange otherwise confidential information. The Tripartite Group advocated the use of a lead regulator (or convenor) - most likely, the supervisor of the dominant operational business entity in a group - to facilitate the performance of these activities for each conglomerate. Some tasks identified for the lead regulator include making an assessment of group capital adequacy, informing supervisors of constituent entities about developments affecting the viability of the group, and co-ordinating combined regulatory action. It is not intended that the existence of the lead regulator interfere with the powers and responsibilities of the solo supervisor.

Capital adequacy

167. Banks, insurance companies and securities firms face different risks and are, therefore, subject to different prudential requirements. Consequently, supervisors face a fundamental problem in determining whether there is adequate capital coverage in a financial conglomerate. The attention paid to the capital adequacy issue reflects supervisory concerns about "excessive" or "double" gearing. It is possible for all entities in a group to fulfil their capital requirements on an individual basis, but for the own funds of a group as a whole to be less than the sum of those requirements. Such a situation occurs where the same own funds are used as a buffer more than once - for example, to cover the capital requirements of the parent as well as the subsidiary; this can lead to the under-capitalisation of a group. The Tripartite Group discussed this issue in some depth and concluded that the desired group-wide perspective could be

achieved either by adopting a type of consolidated supervision, or by a "solo-plus" approach.

- 168. Consolidated supervision focuses on the parent or holding company, although individual entities may (and the Group advocates that they should) continue to be supervised on a solo basis according to the capital requirements of the respective regulators. In order to determine whether the group has adequate capital, the assets and liabilities of individual companies are consolidated, capital requirements are applied to the consolidated entity at the parent company level, and the result is compared with the parent's (or group's) capital. Under "solo-plus" supervision, individual entities are supervised on a solo basis according to the capital requirements of their respective regulators but this supervision is complemented by a qualitative assessment of the group as a whole and, usually, by a quantitative group-wide assessment of the adequacy of capital.
- 169. The Group recognised several techniques by which capital adequacy can be assessed. It concluded, however, that some of these techniques (including consolidation) were suitable only for homogenous groups that is, groups only consisting of banks or securities firms. In heterogenous groups (those including insurers, banks and securities firms), the nature of insurance liabilities, differences in valuation principles, the different correlation between asset and liability risks in insurance, and the definition of insurance capital requirements, mean that alternative techniques of assessing capital adequacy have to be employed. Notwithstanding this judgment, the Group stated that a range of techniques could provide an adequate insight into group-wide capital adequacy. It suggested that these techniques might form the basis of a set of minimum ground rules and that some form of mutual recognition of their acceptability by regulators would be desirable.

Contagion

170. Contagion was recognised as one of the most important issues facing supervisors in relation to conglomerates. This problem manifests itself in two forms: psychological contagion - where problems in one part of a group are transferred to other parts by market reluctance to deal with a tainted group; and contagion resulting from the existence of extensive intra-group exposures. The Tripartite Group concluded that, while it is difficult for supervisors to guard against the former, the risk of the latter can be contained by regular liaison between group supervisors on the existence and nature of such exposures. It also advocated that supervisors be given powers to limit or prohibit imprudently large exposures.

Large exposures at group level

171. A combination of large exposures to the same counterparty in different parts of a conglomerate can be dangerous to the group as a whole. While the Tripartite Group acknowledged that differences between the large exposure rules pertaining in the banking, securities and insurance sectors provide scope for regulatory arbitrage, it was accepted that these differences are unlikely to be eliminated in the near future. The Group proposed that the lead regulator concept be used as the way forward. The lead

regulator would be provided with information to enable it to assess large group-wide exposures to individual counterparties. Armed with such information, the lead regulator may then be able to identify "trigger points" of concern which, when reached, would prompt discussion on a case-by-case basis between the supervisors involved.

Fit and proper tests for managers

172. While most supervisors already have the power to check the fitness and propriety of the managers of the firms for which they are responsible, the rise of financial conglomerates means that it is possible that decision-making processes will be shifted away from individually-regulated entities to the parent or holding company level of the structure, enabling managers of other (perhaps unregulated) companies in the group to exercise control over the regulated entity. In order to deal with this problem, the Group recommended that solo fit and proper tests should extend upstream to managers able to exert a material influence on the regulated entity.

Structure

173. The way in which a conglomerate is structured is crucial to effective supervision. The Group counselled that supervisors need powers, at both the authorisation stage and on a continuing basis, to obtain adequate information regarding managerial and legal structures, and, if necessary, to prohibit structures which impair adequate supervision. Where supervision is impaired, supervisors should be able to insist that conglomerates organise themselves in a way that makes adequate supervision possible.

Suitability of shareholders

174. The Group was of the view that shareholders who have a stake in a financial conglomerate (enabling them to exert material influence on a regulated firm within it) should meet certain standards, and that supervisors should endeavour to ensure that this is the case by applying an appropriate test, both at the authorisation stage and on a continuing basis. Responsibility for applying such a test clearly rests with the supervisors of individually-regulated entities, but the Group advocated close co-operation between supervisors and the sharing of information on shareholders in this respect.

Joint Forum on Financial Conglomerates

175. The work of the Tripartite Group is being carried forward by a new body, the Joint Forum (JF). Unlike its predecessor, the JF is officially sanctioned by the Basle Committee, IOSCO and the IAIS. It has a mandate to draw up proposals for improving co-operation and the exchange of information between bank, securities and insurance supervisors, and to work towards developing principles for the future supervision of financial conglomerates. The JF is made up of nine members each from the Basle Committee, IOSCO and the IAIS. It is chaired by Mr Tom de Swaan, Executive

Director of the Netherlands' central bank, who was also chairman of the Tripartite Group. Australia is represented by the ISC and the ASC.

- 176. A focus of the work of the JF has been an examination of the concept of lead regulation, with discussion centred on two broad areas: the method of selection and the responsibilities of the lead regulator. While there is support for making the supervisor of the dominant entity in the group the lead regulator, supervisors are keen to develop a formula that permits flexible application. In recognition of concerns about national sovereignty members have agreed that international lead regulatory arrangements will not be reflected in domestic law. The JF does not envisage lead regulators acting as supra-national enforcement agencies.
- 177. The JF is supporting a system of asymmetrical information flows. Information flows upstream should be at the lead regulator's discretion; the lead regulator would probably request regular reports from solo supervisors in order to obtain a group-wide perspective. Information flows downstream would be less frequent in most cases in order to avoid information overload and the possibility that solo supervisors could become excessively reliant on the lead regulator. The JF's advocacy of the concept is based on the idea that the framework will promote mutual trust and co-operation of regulators.
- 178. The JF has undertaken some work looking at the mechanism for establishing a lead regulator framework. It has ruled out the viability of a fixed multilateral memorandum of understanding model. Instead, work has begun on a set of principles for bilateral memoranda of understanding which can accommodate inter-country variations. The JF is also examining the question of the adequacy of group capital. No consensus has yet emerged; however, the JF has agreed to establish a working group of its members to develop the Tripartite Group's findings and codify a set of principles. This group's objective will be to focus on techniques and principles of assessing capital adequacy. A particular concern will be the identification and prevention of double gearing.
- 179. As part of its efforts to identify gaps and overlaps in, and legal impediments to, effective supervision of financial conglomerates, and more broadly to understand better how these groups "tick", the JF has established a Task Force to co-ordinate a "mapping" exercise, extending some initial work undertaken jointly by US and UK supervisors on banking and securites firms. The proposed work involves the collection of extensive details for a selection of conglomerates from member countries on their corporate structures, operations, management structure/approach, and the supervisory and regulatory requirements they face. The Chairman has not indicated when he expects the work of the JF to conclude; however, there seems some interest in reporting an outcome to the mid-1997 summit of the G7 Finance Ministers.

APPENDIX F: REFERENCES

- Aranko, J. (1994), "Reorganization of Financial Market Supervision in Finland", *Bulletin (Bank of Finland)*, 2, pp. 8-94.
- Australian Financial Review (1996), "The Governor Has Doubts", 3 June, p. 33.
- Bank for International Settlements (1993), 63rd Annual Report.
- Bernanke, B (1994), "The Macroeconomics of the Great Depression: A Comparative Approach", National Bureau of Economic Research Working Paper Series No.4814, July
- Bernanke, B and H James (1990), "The Gold Standard, Deflation, and Financial Crisis in the Great Depression: An International Comparison", National Bureau of Economic Research Working Paper Series No. 3488, October
- Bingham (1992), *Inquiry into the Supervision of the Bank of Credit and Commerce International*, Her Majesty's Stationary Office, London.
- Bisignano, J. (1991), "Banking Competition, Regulation and the Philosophy of Financial Development: A Search for First Principles", London School of Economics, Financial Markets Group Conference, 8 November.
- Bordo, M. (1990), "The Lender of Last Resort: Alternative Views and Historical Experience", *Federal Reserve Bank of Richmond Economic Review*, 76, January-February, pp. 18-29.
- Borio, C.E.V. (1990), "Banks' Involvement in Highly Leveraged Transactions", Bank for International Settlements Economic Paper No. 28, October.
- Borio, C.E.V., N. Kennedy and S.D. Prowse (1994), "Exploring Aggregate Asset Price Fluctuations Across Countries: Measurement, Determinants and Monetary Policy Implications", Bank for International Settlements Economic Paper No. 40.
- Brimmer, A. (1989), "Central Banking and Systemic Risks in Financial Markets", *Journal of Economic Perspectives*, 3, 2, pp. 3-16.
- Burrows, G. and K. Davis (1995), "Costs and the Pricing of Retail Transactions Accounts", Inquiry into Fees and Charges Imposed on Retail Accounts by Banks and Other Financial Institutions and by Retailers on EFTPOS Transactions, report prepared for the Prices Surveillance Authority, No. 65, pp. J-1-J18, June.
- Bush, G. (1984), Blueprint for Reform. The Report of the Task Group on Regulation of Financial Services, July, Government Printer, Washington, D.C.
- Calomiris, C. (1993), "Is the Discount Window Necessary? A Penn-Central Perspective", *NBER Working Paper No. 4573*.
- Corrigan, E.G. (199la), Statement before the Committee on Banking, Housing and Urban Affairs, US Senate, 15 May.
- Corrigan, E.G. (199lb), "The Risk of a Financial Crisis", in M. Feldstein (ed.), *The Risk of Economic Crisis*, University of Chicago Press and NBER, Chicago.
- Crow, J. (1993), "Central Banks, Monetary Policy and the Financial System", *Bank of Canada Review*, Winter, pp. 55-69.
- Dale, R. (1992), International Banking Deregulation: The Great Banking Experiment, Blackwell, Oxford.
- Davis, E.P. (1992), Debt, Financial Fragility, and Systemic Risk, Oxford University Press, Oxford.
- Dilnot, A.W. (1990), "The Distribution and Composition of Personal Sector Wealth in Australia", *Australian Economic Review*, No. 89 (Autumn).

- Dwyer, J. (1985), "The Political Economy of Trading Bank Regulation in Australia 1959-1985", Honours Thesis, James Cook University of North Queensland.
- Edey, M., R. Foster and I. Macfarlane (1991), "The Role of Superannuation in the Financial Sector and in Aggregate Saving: A Review of Recent Trends", Reserve Bank of Australia Research Discussion Paper No. 9112.
- Edey, M. and K. Hviding (1995), "An Assessment of Financial Reform in OECD Countries", OECD Economics Department Working Paper No. 154.
- Estey, W. (1986), *Report of the Inquiry into the Collapse of the CCB and Northland Bank*, Canadian Government Publishing Centre, Ottawa.
- Fraser, B.W. (1996), "Financial Regulation and the Financial System Inquiry", *Reserve Bank of Australia Bulletin*, August.
- Federal Reserve Board (1994), "The Views of the Board of Governors of the Federal Reserve System on the Consolidation of Bank Supervision and Regulation".
- Foster, R.A. (1996), *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia Occasional Paper No. 8.
- Fraser, B. (1994), "Some Current Issues in Banking", Reserve Bank of Australia Bulletin, June.
- Goodfriend, M. and R. King (1988), "Financial Deregulation, Monetary Policy and Central Banking", *Economic Review Federal Reserve Bank of Atlanta*, 74, 3, pp. 3-22.
- Goodhart, C. (1988), The Evolution of Central Banks, MIT Press, Cambridge.
- Goodhart, C. (1995), "Some Regulatory Concerns", LSE Financial Markets Group Special Paper No. 79.
- Goodhart, C. and D. Schoenmaker (1993), "Institutional Separation Between Supervisory and Monetary Agencies", *LSE Financial Markets Group Special Paper No. 52*.
- Goodhart, C. and D. Schoenmaker (1995), "Should the Functions of Monetary Policy and Banking Supervision be Separated?", *Oxford Economic Papers*, 47, pp. 539-560.
- Greenspan, A. (1991), Statement before the Subcommittee on Financial Institutions Supervision, Regulation and Insurance of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, 30 April.
- Greenspan, A. (1994), Statement before the Committee on Banking, Housing and Urban Affairs, U.S. Senate, 2 March.
- Heller, H.R. (1991), "Prudential Supervision and Monetary Policy", in P. Downes and R. Vaez-Zadah (eds), *The Evolving Role of Central Banks*, International Monetary Fund, Washington, D.C.
- Hilton, A. (1994), "UK Financial Supervision: A Blueprint for Change", Centre for the Study of Financial Innovation Working Paper No. 6.
- House of Representatives Standing Committee on Finance and Public Administration (1991), "A Pocket Full of Change: Banking and Deregulation", AGPS, Canberra, November.
- Kaufman, G. (1991), "Lender of Last Resort: A Contemporary Perspective", *Journal of Financial Services Research*, 5, 2, pp. 95-110.
- Knox, D. (1995), "Some Financial Consequences of the Size of Australia's Superannuation Industry in the Next Three Decades", paper presented at the Third Annual Colloquium of Superannuation Researchers.
- Llewellyn, D. (1992), "The Crisis and the Lessons", Banking World, October, pp. 20-23.
- Llewellyn, D. (1992), "The Performance of Banks in the UK and Scandinavia: A Case Study in Competition and Deregulation", *Sveriges Riksbank Quarterly Review*, 3, pp. 20-30.

- Macfarlane, I. (1989), "Money, Credit and the Demand for Debt", *Reserve Bank of Australia Bulletin*, May.
- Macfarlane, I. (1990), "Credit and Debt: Part II", Reserve Bank of Australia Bulletin, May.
- Macfarlane, I. (ed.) (1991), "The Lessons for Monetary Policy", *The Deregulation of Financial Intermediaries*, Reserve Bank of Australia, Sydney, pp. 175-201.
- Mackrell, N.C. (1996), "The Cheque's Role in Today's Payment System", talk presented to AIC Banking Conference on The Future of Cheques, 16 May.
- Mills, K., S. Morling and W. Tease (1993), "Balance Sheet Restructuring and Investment", Reserve Bank of Australia Research Discussion Paper No. 9308.
- Mishkin, F. (1992), "An Evaluation of the Treasury Plan for Banking Reform", *Journal of Economic Perspectives*, 6, 1, pp. 133-154.
- Mishkin, F. (1994), "Preventing Financial Crises: An International Perspective", *NBER Working Paper No.* 4636.
- Morling, S. and R. Subbaraman (1995), "Superannuation and Saving", Reserve Bank of Australia Research Discussion Paper No. 9511.
- Norges Bank (1992), "Financial Market Supervision Should the Banking, Insurance and Securities Commission be Amalgamated with Norges Bank", *Economic Bulletin*, 2, pp. 142-152
- Prices Surveillance Authority (1995), "Inquiry into Fees and Charges Imposed on Retail Accounts by Banks and Other Financial Institutions and by Retailers on EFTPOS Transactions", Report No. 65, June.
- Quinn, B. (1993), "The Bank of England's Role in Prudential Supervision", *Bank of England Quarterly Bulletin*, May, pp. 261-264.
- Reserve Bank of Australia (1996), "Australian Financial Markets", *Reserve Bank of Australia Bulletin*, May.
- Schedvin, C.B. (1992), In Reserve: Central Banking in Australia 1945-75, Allen and Unwin, Sydney.
- Schoenmaker, D. (1995), "Lender of Last Resort the European Central Bank", *Central Banking*, 6, 3, pp. 98-103.
- Schwartz, A. (1992), "The Misuse of the Fed's Discount Window", *Federal Reserve Bank of St. Louis Review*, 74, September/October, pp. 58-69.
- Shull, B. (1993), "How Should Regulatory Agencies be Organized?", *Contemporary Policy Issues, Xl*, pp. 99-106.
- South African Reserve Bank (1992), Annual Report and Bank Supervision Department Annual Report.
- South African Reserve Bank (1993), Annual Report and Bank Supervision Department Annual Report.
- Summers, L.R. (1991), "Planning for the Next Financial Crisis" in M. Feldstein, (ed.), *The Risk of Economic Crisis*, University of Chicago Press and NBER, Chicago.
- de Swaan, T. (1994), "Prudential Supervision: a Central Bank Function?", in *Monetary Stability through International Cooperation*, Kluwer Academic Publishers, Dordrecht, The Netherlands.
- Swinbune, M. and M. Castello-Branco (1991), "Central Bank Independence and Central Bank Functions", in P. Downes and R. Vaez-Zadah (eds), *The Evolving Role of Central Banks*, International Monetary Fund, Washington, D.C.
- Syron, R. (1994), "The Fed Must Continue to Supervise", *New England Economic Review*, January/February, pp. 3-8.

- Taylor, M. (1995), "Twin Peaks: A Regulatory Structure for the New Century", *Centre for the Study of Financial Innovation Working Paper No. 20.*
- Tease, W. and J. Wilkinson (1993), "The Provision of Financial Services Trends, Prospects and Implications", Reserve Bank of Australia Research Discussion Paper No. 9315.
- Thompson, G.J. (1996), "Prudential Supervision and the Changing Financial System", *Reserve Bank of Australia Bulletin*, April.
- Tietmeyer, H. (1991), "The Role of an Independent Central Bank in Europe", in P. Downes and R. Vaez-Zadah (eds), *The Evolving Role of Central Banks*, International Monetary Fund, Washington, D.C.
- Treasury and Civil Service Committee (UK) (1993), "The Role of the Bank of England", Report submitted to the House of Commons.
- Tuya, J. and L. Zamalloa (1994), "Issues on Placing Banking Supervision in the Central Bank", in T. Balino and C. Cottarelli (eds), *Frameworks for Monetary Stability*, International Monetary Fund, Washington, D. C.
- UK Treasury (1986), Banking Supervision White Paper, Her Majesty's Stationary Office, London.
- Valentine, T. (1991), "What the Campbell Committee Expected", in I. Macfarlane (ed.), *The Deregulation of Financial Intermediaries*, Reserve Bank of Australia, Sydney, p. 36-60.
- Volcker, P. (1984), "The Federal Reserve Position on Restructuring of Financial Regulation Responsibilities", *Federal Reserve Bulletin*, July, pp. 547-557.

APPENDIX G: LIST OF ABBREVIATIONS

ACCCC Australian Consumer and Competition Commission

AFIC Australian Financial Institutions Commission

APCA Australian Payments Clearing Association

ASC Australian Securities Commission

ASX Australian Stock Exchange

ATM Automatic teller machine

BCCI Bank of Credit & Commerce International

BIS Bank for International Settlements

BOJ Bank of Japan

CFS Council of Financial Supervisors

DFSA Danish Financial Supervisory Authority

EFT Electronic funds transfer

EFTPOS Electronic funds transfer at point of sale

ESA Exchange Settlement Account

FBSO [German] Federal Banking Supervisory Office

GDP Gross Domestic Product

IAIS International Association of Insurance Supervisors

IOSCO International Organisation of Securities Commissions

ISC Insurance and Superannuation Commission

JF Joint Forum on Financial Conglomerates

NCD Non-callable deposit

OECD Organisation for Economic Co-operation and Development

PAR Prime asset requirement

RBA Reserve Bank of Australia

RITS Reserve Bank Information and Transfer System

SFE Sydney Futures Exchange

SSA State Supervisory Authority

SVC Stored-value card

UK United Kingdom

US United States