Retail Banking, Technology and Prudential Supervision

Talk by Deputy Governor, Mr G.J. Thompson, to Australian Association of Permanent Building Societies (AAPBS) 1996 'Information Exchange Seminar', Gold Coast, 16-19 April 1996.

Introduction

I am advertised as talking about trends in retail banking. In line with the general theme of your Seminar, I would like to focus particularly on the effects of new technology on the industry and on the interests of prudential supervisors such as the RBA.

Trends

For purposes of this talk I will temporarily disregard the restrictions of the Banking Act's

s.66 on the use of the term 'bank' and include building societies and credit unions in the 'retail banking' sector. Retail banks basically accept deposits from individuals and others, lend for housing and other personal purposes and provide payments services.

Let's look at some of the trends affecting retail banking.

In each decade since the 1960s the proportion of household *saving* going into deposit-type accounts with retail banks has declined. During the 1990s, less than 40 per cent of households' net acquisition of financial assets has been with retail banks, compared with around 45 per cent in the 1980s and 55 per cent in the 1970s (Table 1). Correspondingly, the proportion of household saving going to funds managers (including superannuation) and life offices has been on the rise. This trend is likely to continue as the Government aims to increase personal saving for use in retirement, thereby reducing the potential demands on future taxpayers.

Table 1: Household Saving Flows (Percentage of total)							
	Banks	Building societies	Credit unions	Other	Total		
1970s 1980s 1990s	42 36 28	12 6 4	3 3 4	43 55 63	100 100 100		

In this situation, retail banks will have to compete vigorously for their share of the household savings dollar.

There have also, of course, been substantial changes in market shares within retail banking, as you are well aware. Over the past decade following deregulation of the banks - the authorised banking sector has regained all of the market (measured by assets) which it lost during the 1970s. This has been particularly at the expense of the building societies and finance companies, with conversions to banking status of several large building societies and the taking onto banks' own balance sheets of the business done previously in their finance company subsidiaries. Banks presently have about 47 per cent of financial system assets, with building societies and credit unions another $1^{1/2}$ per cent each.

While they are attracting a larger share of the household sector's savings, the life insurers, superannuation funds and other funds managers are not major *suppliers* of finance to the household sector. Those institutions do little lending, investing mainly in equities, other securities and property.

Consequently, the retail banks provide over 90 per cent of total funding to households, with about 80 per cent of this in loans for housing.

Even here, however, the picture is changing. Recently we've seen some new entrants in the field for retail banking assets, particularly home loans.

Specialist mortgage managers are the most prominent new sales group in this market,

financing the loans they arrange mainly through banks and securitisation vehicles, with a small amount from building societies and credit unions. Mortgage managers are currently responsible for around 9 per cent of new housing finance commitments, compared with a negligible share only a few years ago.

Life insurance companies are also lending directly for housing, although they remain much less important in that market than they were thirty years ago. Along with superannuation funds, however, insurance companies are major holders of the mortgagebacked securities being issued to finance the loans arranged by mortgage managers.

The effects of heightened competition for home loans can also be seen in interest rates. Compared with mid 1994, official cash rates are up by $2^{3/4}$ per cent, but rates for home loans have risen by much less – the banks' standard variable rates have increased by $1^{3/4}$ per cent over that period and 'honeymoon' rates by only about 1 per cent, while standard rates from the mortgage managers have gone up by about $1^{1/4}$ per cent. Fixed rates generally have actually fallen a little, although that also owes quite a bit to movements in bond yields.

Flows of funds and balance sheet aggregates are not the only indicators of retail banking trends. Another is *transactions* business. The total volume of non-cash payments has probably expanded at an average annual rate of around 5 per cent over the past decade. Within this, there has been a marked movement from cheques to electronic payments of various

Table 2: Non-Cash Payments (Percentage of total)							
	Vol: 1991	ume 1995	Val 1991	lue 1995			
Paper Electronic	60	50	59	35			
– Retail – Wholesale	$\frac{40}{\cancel{\star}}$	50 <u>*</u> 100	2 <u>39</u> 100	1 <u>64</u> 100			

* Below 0.1 per cent.

kinds – direct entry, EFTPOS etc. The number of EFTPOS terminals has more than quadrupled to over 93,000 in that period, with EFTPOS transactions increasing even faster.

Payment trends in the past five years are summarised in Table 2.

Notwithstanding the natural growth in payments-related business, *income* in retail banking still depends very heavily on net interest revenue. Banks have made a start on reducing the cross-subsidisation of transaction and account-keeping services from interest margins; I understand that building societies and credit unions are not as advanced in this process. It is interesting that, despite the public attention which fees attract, available data show no evidence yet of any increase in the significance of fee income for retail banks. In fact, their aggregate non-interest income has, if anything, declined as a proportion of total income in the past few years.

It is not easy to get a clean measure of *profitability* for retail banking in its own right, but profits have no doubt been robust in recent years – with the strength of housing finance a major contributor. In 1995 the regional banks enjoyed an average $17^{1/2}$ per cent rate of return on equity. More recently, weaker aggregate demand for housing finance and the stronger competition have combined to put pressure on profits – as indicated by that tightening of interest margins. In response, retail banks are looking to closer control of operating costs and strategies to diversify their income sources and loan portfolios.

Technology and the Future

When talking generally about factors for change in financial markets it is customary to touch on deregulation, globalisation and technological change.

Of these, *deregulation* is hardly news any longer – for a decade now the financial system has not been regulated, in the sense of interest rate controls, quantitative and qualitative lending guidelines, and so on. *Globalisation* is important in wholesale financial markets, but has had less impact on retail banking. The potential for extra competition from foreign entrants to Australia was, indeed, much overstated. It is true, of course, that larger retail banks now have greater opportunity to access foreign funds markets, and this can help in diversifying their liability base and bridging the gap between the growth in assets and domestic deposits.

In contrast, *technological change*, the third of the triumvirate, is having a considerable impact, and promises to interact with competitive pressures as a continuing force for change.

I'm not going to recount for you all the exciting, whizz-bang things which the technological revolution in informationprocessing and communications is making possible, or might in the future. You probably know as much about that as I do. And if you don't already, you certainly will by the time you've heard all the other speakers at this Seminar.

I would like, however, to summarise how technological change seems to be impacting on retail banking, pose a couple of questions arising from this and, finally, say a little about technology and the interests of regulators and prudential supervisors.

It seems to me that technology is changing retail banking most significantly through making possible *new delivery channels* – new ways for banks to communicate and transact with their customers. Under this head we have ATMs, now well established, and – at various stages of development – phone banking, mobile banking and computerised banking, both from home and through 'virtual reality' kiosk branches. One bank has already set up links on the all-pervasive Internet, while others have 'home pages' carrying product information. These innovations are, of course,

From this quick tour of the current scene it is clear that stronger competition in the housing finance market and, on the liabilities side, from the funds management sector will be important influences on the future of retail banking.

challenging the place of banks' traditional delivery channel – the local branch.

Technology is also producing *new products* and services. In retail banking this is probably most dramatic in the payments system, where EFTPOS is now an established way of buying goods and stored value cards are the coming phenomenon. Further along, interactive home shopping – perhaps internationally – may be common. Meanwhile, the growth in markets for derivatives, aided by the data-processing capacity of computers, has helped banks to offer loans with a wider variety of features (long-term fixed rate home loans, capped rate loans and so on).

Finally, greatly expanded *information*processing capacity is enabling banks to store, retrieve and reassemble customer profile data much more efficiently. This offers them the potential to improve the quality of customer service by targeted selling and tailoring of products; and to refine risk management with more sophisticated credit-scoring. Meanwhile, imaging technology promises to speed up the cheque-clearing cycle.

For retail bankers these technological innovations are opening up both opportunities and threats – more hopefully called 'challenges'.

The *opportunities* are clear enough - to provide services to customers more flexibly, conveniently and reliably at lower unit costs, and to develop new products and services to meet customer needs and increase the value of franchises.

The *challenges* arise because:

- new technology is usually expensive both to install and to maintain – and, moreover, can become redundant relatively quickly;
- new technology is complex, making greater demands on management, on resources for staff training and on back-up facilities;
- new technology is less labour-intensive, giving bank managements a substantial task in reducing staff levels sensitively and smoothly;
- not all customers enthusiastically embrace the new delivery systems and products, so that traditional systems have to be run in

parallel with the new ones, perhaps for a long time;

- new players can have a comparative advantage in new technology, while not carrying some of 'the baggage' (including expensive branch networks) of the established financial institutions; and
- modern communications technology will make it easier for customers to shop around and, with banking becoming more remote and products more 'commoditised', customer loyalties might weaken.

A couple of key questions are prompted – the answers to which might be clearer after this Seminar.

First, *transition strategy* – what is the optimal pace for a retail bank to invest in new technology? Cost and the behaviour of competitors are obviously important. Another key factor is the readiness of its customers to accept change.

In the payments area, transition strategy has been made especially complicated by inherited pricing policies. The rate of migration of customers to electronic payment methods is determined in part by relative pricing of the new technology and the old (particularly cheques). Historically banks have undercharged in this area, making customer resistance to transaction fees particularly strong. Although easier said than done, it is increasingly important that retail banks get their pricing 'right' in payments and other services, because competition will continue to erode the interest margins which have previously cross-subsidised them.

A second key question: how much will the high capital and maintenance costs of up-to-date technology increase the minimum *sustainable size* of a retail bank?

It's popularly thought that banks will have to become larger to survive. This is almost certainly correct, as a generalisation – and the number of retail banks has indeed fallen in the past decade. On the other hand, opportunities to form alliances with software suppliers and network providers, to outsource processing work to specialist bureaus and to share facilities on an industry basis should surely help to protect the viability of smaller operations. Such approaches can also, of course, involve sharing some profit with others. But it may be no bad thing for smaller retail banks to concentrate on those aspects of the business where their comparative advantage should lie – customer relations and the design of financial services.

Regulatory Issues

Let me turn briefly to some of the issues which technological change in banking raises for regulators.

One impact is on competition and merger policy. Technological innovations are rendering obsolete judgments about market competitiveness which are based on numbers of branches in a particular geographic area, or even existing market shares for deposits or loans. This is because the new delivery systems are making regional markets more readily contestable by institutions – whether banks or others – without a strong physical presence in those areas.

Innovative technology in financial products and delivery channels also raises new 'consumer protection' issues – privacy, security, dispute resolution and so on – as the developers of reloadable stored value cards are discovering.

For *prudential supervisors*, technological advances in banking are very much a twoedged sword. In the recent words of Federal Reserve Chairman, Alan Greenspan, 'The way we supervise financial institutions is an area in which technology is both creating problems and simultaneously giving us and the institutions we supervise the tools to solve them'. While he had wholesale banking particularly in mind, the comment applies more widely.

Technology has facilitated the manufacture of complex derivative products – some highly leveraged – which carry the potential for large losses, even for the sophisticated user. At the same time, computer power gives banks more scientific risk management techniques, whether for modelling 'value-at-risk' in derivatives activities or in compiling comprehensive customer risk profiles and credit scoring for personal and small business loans. It helps banks to price more precisely for risk and allows more objective approaches to provisioning. Technology also enables the quicker compilation of information and its transmission to regulators.

Nowhere is the double-edged impact of technology better illustrated than in the payments system. Advanced technology in data transmission is enabling the RBA and the Australian Payments Clearing Association (APCA) to build a secure, real-time gross settlement system for high-value interbank transactions, thereby removing one source of risk to financial system stability. This is the same technology, of course, which facilitates enormous volumes of transactions in complex financial products and which has multiplied the speed with which a settlement problem in one institution or country may be transmitted more widely.

Because activities such as payments processing are now so dependent on computers and electronic data transmission, the managers and supervisors of banks are having to give more attention to system security and to the reliability of back-up arrangements which can be activated quickly in the event of malfunction. In supervising banks, the RBA is paying closer attention to the robustness of risk management systems and their underlying technology.

Finally, a potentially major issue for supervisors is in technologically-sophisticated corporations – who are not currently subject to regulation – becoming significant providers of financial services in their own right. The usual 'suspects' are telecommunications companies and computer software suppliers which might try to set up their own payments networks.

At the least, such players are another potential source of competition for retail banks. In the doomsday scenarios purveyed by some industry participants, they totally bypass and overwhelm today's banks.

It is very difficult to assess how far we might go down this track (if at all), because that will depend a good deal on how adept the established banks are at looking after their existing customer base and working *with* specialist suppliers to take advantage of new technology. The prospect is also, of course, a reminder to regulators not to burden the established players with compliance costs which reduce unduly their competitiveness.

If non-traditional players were to become important suppliers of payment and other retail banking services, the case for extending existing prudential and consumer regulation to their activities would, of course, have to be considered seriously. From the RBA's particular viewpoint, we will be paying very close attention to developments which carry risks in relation to one of our prime responsibilities – the stability and efficiency of the financial system.

I conclude by noting that the various impacts of technological innovation on retail banking, including the potential for greater involvement by non-traditional players, seem to be a fruitful subject for review by the Government's foreshadowed financial system inquiry.