INNOVATION AND GOVERNANCE OF PAYMENT SYSTEMS

Address by Dr Philip Lowe, Assistant Governor (Financial System), to Banktech.05 Conference, Sydney, 16 September 2005.

It is a pleasure to be here this morning to talk about reform of the Australian payments system. Throughout the reform process, the Reserve Bank has been keen to keep an open dialogue with all interested parties, and I would like to thank the organisers of the Banktech conference for giving me the opportunity to continue that dialogue today.

The Reform Process to Date

At its heart, the reform process has been about delivering a more efficient and competitive payments system for all users of the system.

An important element of this process has been removing restrictions that limit the behaviour of various users of the payments system, and thus distort competition. Here the Bank has addressed restrictions on entry to the credit card schemes, restrictions imposed by the card schemes that limited the choices available to merchants, and restrictions on information. The result is that we now have more competition in the system, more appropriate price signals to cardholders, and better information for all users of the payments system.

A second element of the reform process has addressed interchange fees – the fees paid between a cardholder's bank and a merchant's bank whenever a credit or debit card is used to make a payment. There are limited competitive forces acting on these fees, and in the Bank's view, there are few prospects of such forces emerging within the foreseeable future. At the same time, the way these fees have been historically configured has had the effect of artificially encouraging the use of credit cards, at the expense of debit cards. Given the higher costs associated with credit card payments, the result has been that we have paid higher prices for goods and services than we needed to. By requiring that interchange fees be reduced in the Bankcard, MasterCard and Visa schemes, the Bank's reforms have reduced merchant costs by around $580 million over the past year, and this cost saving is now flowing through into lower goods and services prices.

As many of you may be aware, the Reserve Bank's decision to designate the EFTPOS system, and thus open the door to potential regulation of interchange fees in that system, has been challenged by a group of merchants in the Federal Court. The case was heard in May and June this year, and the Bank has indicated that it will not take any final decisions about the regulation of interchange fees in either the EFTPOS or Visa Debit systems until after the outcome of the court case is known.

So today, instead of talking about interchange fees in the credit and debit card systems, I would like to address an issue that so far has received relatively little attention in debates about payments system reform. And this is the issue of governance and innovation in the payments system.

This issue is important, for if our payments system is to deliver efficient outcomes over time, innovation and technical change are inevitably required. And because with existing technologies and practices so many elements of the payments system require collective action, the way the system is governed, and the way collective decisions are made, can have an important influence on how the system evolves. In the remainder of my talk, therefore, I would like to make some general observations about the incentives to invest in payment systems, the way those incentives can be affected by the architecture of the system, and the importance of appropriate procedures for making decisions.

The Incentive to Invest

In most industries, firms make investment decisions without co-ordinating with competing firms, and in most cases one can be reasonably confident that the outcomes are in the public interest. Unfortunately, in payment systems things are not always so straightforward, as some decisions about investment and the architecture of the system need to be made collectively. This can pose at least three inter-related difficulties. These difficulties arise not just in Australia, but in payment systems around the world.

The first is that an existing participant in the system may be able to effectively block or delay an investment decision, or a change to processes, that needs collective approval. It may choose to do this for a variety of reasons, including being at a different point in its capital expenditure cycle to other participants, or having different strategic interests. There seems to have been some element of this in the decision a year or so ago to abandon plans to introduce PIN authorisation of credit card transactions.

The second potential difficulty is that the collective incentive to invest or innovate may be dulled because such investment sometimes offers little competitive advantage. One reason for this is that if all institutions are required to adopt the new technology or process simultaneously, there may be little competitive advantage generated for any one institution in doing so. While the investment may allow all institutions to offer payment services to their customers at lower prices, the benefit of this to any individual institution is diminished if all competing institutions do likewise at the same time. Another reason is that a technical change can, under some circumstances, make it easier for new firms to enter. In this case, an investment could be doubly unattractive – offering no competitive advantage against existing institutions, and increasing competition through allowing new entrants! The same issues, obviously, do not typically arise in other markets where competitors do not need to co-operate.

A third potential difficulty with decision-making in payment systems arises if institutions are concerned that during the process of discussing the various options they might reveal critical information about their own business strategies. As a result, there may be a reluctance to have meaningful dialogue among competitors. This reluctance will be compounded if participants are concerned that such dialogue might be viewed unfavourably by competition authorities.

An illustration of the types of issues that can arise when collective decision-making is necessary is provided by the process of reforming cheque clearing times in Australia. In the early 1990s, the public became increasingly frustrated with the five business days that it typically took before the proceeds of a deposited cheque were available. Financial institutions responded to this pressure, but struggled to reach an agreement about what should be done. While adopting new processes that would allow funds to be made available earlier represented a significant benefit to businesses and consumers, doing so gave no individual bank a competitive advantage if all banks could do the same. Further, given the co-operative nature of cheque clearing, no bank could unilaterally offer to make funds available earlier to its customers without taking on additional risk. All up, it took six years and considerable prompting by the Reserve Bank to put the new arrangements in place!

I would like to make it clear that none of these difficulties necessarily mean that there will generally be too little innovation in payment systems, or that investment will be misdirected. Clearly, in many situations if institutions perceive a commercial benefit from an investment, they will undertake that investment. A good example of this is the resources that banks have spent on internet banking packages that have made it much easier, and in many cases, cheaper, for customers to make payments. However, the very real potential for the difficulties I have just discussed to affect outcomes means that it is reasonable to ask whether the processes that we currently have for making decisions are always working in the best interests of consumers of financial services.

Overall, I think it is fair to say that Australia has a reasonable record in terms of payments system innovation, although clearly some of our systems are no longer at the cutting edge. Notwithstanding this generally positive record, over recent years a number of parties have indicated to the Bank that they have considerable difficulty in gaining access to the system, and that, in some cases, the existing architecture and decision-making processes are inhibiting further innovation. Given this, I would like to make a few remarks about that architecture and the decision-making processes.

Architecture

In terms of architecture, payment systems can be classified into two broad groups – those that are built around *bilateral* contracts and technical links between financial institutions and those that are more centralised, typically with a business entity at the core of a *hub-and-spoke* system. In bilateral systems, each of the main participants will typically have a contract with each of the other main participants, and will exchange messages with each other through direct technical links. In the more centralised systems, messages pass through a central point and there is no need for each participant to negotiate contracts and establish physical connections with other participants.

In Australia, the EFTPOS system, the cheque system, the ATM system and the direct credit and debit systems all operate on a bilateral basis, while the credit card and BPay systems operate under the hub-and-spoke model. This heavy reliance on bilateral arrangements in Australia is somewhat unusual compared to the arrangements in many other countries, where systems with more centralisation are common.

Bilateral arrangements clearly offer some advantages. In some cases, they may be cheaper to operate and offer an extra degree of resilience, and they may also help in the development phase of a system. If, for instance, it is difficult to get multiple institutions to agree to develop a comprehensive system, an alternative is for two institutions to agree to exchange payments with one another and thus provide services to those who have accounts with either of them. Over time, if the arrangement is successful, other institutions may seek to establish similar bilateral connections, and in this way a network of bilateral connections can develop. In a sense, both the ATM and EFTPOS systems developed in this way.

Bilateral systems, however, also pose some particular challenges.

The first of these is that gaining access to these systems can be more problematic than gaining access to centralised systems. In a bilateral system, a new participant can be faced with the difficulty of negotiating bilateral arrangements with all existing participants. These existing participants often have little incentive to establish new connections with outsiders within a reasonable time frame, or at a reasonable cost, particularly if the new entrant is a competitor. The alternative for a new entrant is to use the 'gateway' service of a single existing participant, but this too can create difficulties, including additional costs. Among these difficulties is that the institution providing the gateway service may have little incentive to offer competitive pricing if it is in competition with the new entrant in parts of the payments system. In contrast, gaining access to a centralised system is often more straightforward. In particular, a new participant needs only to connect to the central hub, and does not need to negotiate bilaterally with its competitors.

A second challenge is that there is often no single entity responsible for bilateral systems and, as a result, there is very little system-wide promotion of these systems; where promotion does occur, it is usually done so by a single financial institution.

A third is that bilateral arrangements may not be particularly conducive to technological innovation, although they may work very well in terms of the day-to-day operation of the system once it is established. This is not simply a result of the different access and promotion arrangements, but also reflects the decision-making process among existing participants. If there is not a strong central co-ordinator of the system, with an incentive to promote the system and the ability to influence collective technology decisions, innovation in the system can be delayed, partly for the reasons that I discussed earlier.

Of course, none of these challenges mean that bilateral systems are necessarily inferior to more centralised systems. They do, however, mean that careful thought needs to be given to the issues of access and innovation, and particularly the governance arrangements in these systems. It is to this issue that I would now like to turn.

Governance

Some time ago, the various participants in Australia's bilateral payment systems recognised that there were advantages in establishing a common set of basic rules and procedures that applied to bilateral arrangements. These rules and procedures are now overseen by the various management committees of the Australian Payments Clearing Association – or APCA. They cover such things as message formats, exchange times, security arrangements, cheque formats, and rules that apply if an institution fails to settle. These rules and procedures have contributed to the efficiency and safety of the system, and have been recognised as doing so by the Australian Competition and Consumer Commission (ACCC), which has judged that the rules provide a net public benefit.

APCA itself, as an organisation, has relatively little authority, with the decision-making powers resting in the hands of the member institutions that make up the Board and the various management committees. Membership of the committees and voting rights are largely determined by market shares and are essentially limited to individuals directly employed by one of the existing participants. There is considerable overlap in the institutional membership of the various committees and, partly as consequence, there is little collective promotion of one system over another. In addition, a major change to the rules and procedures can only occur if the vast bulk of institutions agree to make the change, with the largest institutions effectively able to block some outcomes. Finally, APCA has little power to enforce decisions.

It is easy to see how this structure evolved. The various committees were designed to introduce more consistent standards and procedures into payments clearing and thus ensure that the existing bilateral clearing arrangements work effectively. Given this role, one can see how it might make sense to restrict membership to those who are party to the arrangements, link voting rights to market shares, give significant power to the largest institutions, and to give the APCA management relatively little power compared to its members.

While these arrangements have many useful features and have worked reasonably well over a number of years, I would like to pose the question of whether some alternative set of arrangements may better serve the long-run interests of users of the payments system. In particular, is there a case for a private-sector central body that has a broader mandate than simply being the keeper of the rules? This mandate could include promotion of various payment systems, the facilitation of access, and provision of leadership on some technology issues.

Over the past year or so, there has been a modest step in this direction with some of APCA's members developing an access code for the EFTPOS system. Under the code, a new participant will have the right to connect to existing participants within a specified time, and at a specified maximum cost, provided they meet certain technical requirements. This code was developed following pressure from both the ACCC and the Reserve Bank, and will represent a significant improvement over current arrangements. I might add that there may be a case for similar codes to be developed for the other bilateral systems, and in particular the ATM system and the direct entry system.

While the Bank has indicated its in-principle agreement to the EFTPOS access code, and is working with APCA on its implementation, the process has not been an easy or straightforward one. Some of the existing institutions sought to impose more stringent conditions than the Bank felt appropriate, with a satisfactory outcome only being reached after the Bank indicated it would consider imposing an access regime. While it is encouraging to see that the industry finally developed an acceptable proposal, the process illustrates some of the potential problems in a regime in which access arrangements are heavily influenced by existing participants.

Conclusion

I would like to conclude by making two points.

The first is that ongoing improvement in the technology used in Australia's payments system is imperative to improving the efficiency of the system over time. While the payments system serves most of its users well, there is the scope for providers of payment services to offer users of those services more flexibility and more choice, and to do so at lower cost.

The second is that I would encourage those in the industry to think seriously about how the current architecture and decision-making arrangements might evolve over time. Over the coming year, the Reserve Bank will be looking at these issues more closely. As we do so, I hope that we can continue the dialogue with both users and providers of payment services, and we look forward to hearing from all interested parties on these important issues.

Thank you.