Strategic Review of Innovation

Consultation and Review Process

In May 2010, the Board announced that it would undertake a strategic review of innovation in the payments system. The review, which has a medium-term perspective, is looking at trends and developments in overseas payment systems and potential gaps in the Australian retail payments system that might be addressed through innovation.

Following a call for submissions in July 2010, an initial round of informal consultations took place. These preliminary discussions suggested that while innovation in the Australian payments system is occurring in some areas, deficiencies remain in other areas. For example, new online systems have begun to emerge, EMV chip technology is being implemented and contactless technology is being deployed. On the other hand, the demand for the transmission of additional data with payments or for real-time (or near real-time) transfers is yet to be fully addressed.

In June 2011, the paper *Strategic Review of Innovation in the Payments System: Issues for Consultation* was released. This consultation paper draws on the initial discussions with interested parties, as well as the second study on the use of payment methods by consumers, and work the Reserve Bank has been involved in with other central banks to assess innovation in other countries. The consultation paper highlights issues to be examined more closely in the coming months through a process of formal consultation. The Board intends to finalise its conclusions around the end of 2011 or early 2012.

Attributes of an Efficient System

The consultation paper outlines some of the characteristics that are considered desirable in an efficient payments system. The Australian retail payments system appears to be deficient in respect of some of these characteristics.

Two important attributes of an efficient system are accessibility and ease of use. Clearly it is desirable that those who need to make and receive payments should have ready access to the payments system. Equally, systems that are easier to use are preferable to those that are more cumbersome. A key element of the ease of use is the process of providing details of the accounts to be debited and credited when the payment is made. For instance, systems that require manual entry of account and transaction details are prone to errors, which can be costly to correct and discourage use. The need to know a recipient's account details can further deter use of such systems. While the issues of correctly addressing bill payments have been dealt with through the BPAY system, there is no similar system currently available for individual payments across financial institutions.

Timeliness of payments is also considered important. While not all payments are time-critical, users of the payments system should have options available that give recipients timely access to their funds and allow timely confirmation to both the sender and the receiver. Further, when payments are time critical (for example, government emergency payments) availability of funds the next day – as occurs for many of Australia's main retail payment systems – might not be sufficient. In recent times, many such payments have been made using the real-time gross settlement (RTGS) system (intended for high-value payments) because there has been no suitable alternative.

Typically payments are made as part of a process that requires reconciliation and recording of information associated with the payment by the parties involved. It is desirable that payment systems should be able to integrate efficiently with these processes. A key factor enabling them to do so is the capacity of payment systems to carry additional reconciliation information with the payment; however, the difficulty in doing so was an important theme from the Reserve Bank's initial consultation.

An efficient payments system would be expected to deliver these and other characteristics in a cost-effective manner. Ideally costs will be transparent, so that choices between payment systems can be well informed.

Traditionally, some of the attributes mentioned above have been delivered by cheques. For the user, cheques are cheap, accessible, easy to use and capable of facilitating an instant face-to-face exchange of value. The person paying by cheque does not need to know the recipient's bank account details, just the recipient's name and in some cases address. Additional information can readily be written on the back of the cheque or attached to the cheque.

However, over time, cheques are becoming an increasingly expensive form of payment. The number of cheques written in Australia has been declining by an average of 9 per cent per year over the past decade. As the number of cheques declines, the cost per cheque increases. While moving from paper-based to electronic-based payments offers efficiency gains, moving away from cheques may be dependent on the industry's capacity to develop suitable electronic alternatives. The review seeks the views on the decline of cheques to assist the Board in forming its own views, and to test the public benefit of any possible solutions. The Australian Payments Clearing Association (APCA) also undertook a separate consultation on the future of cheques following the release of its consultation paper in June 2011 and it intends to release a proposal paper presenting recommendations for the future development of the payments system in the December quarter 2011.

In addition to the above attributes, end users of a payment system must also have confidence that the system will be available when needed and that payments will reach the intended recipient at the time promised. They need to be confident that the system is secure, so that using it will not expose them to future losses as a result of information being fraudulently obtained.

One way to promote reliability, safety and efficiency is to use standards. A well-designed system will utilise appropriate standards to promote interoperability and security, but will not set unnecessary hurdles. Standards themselves cut across many areas of payments, including messaging, device and security standards. The increasingly global nature of commerce suggests that adoption of internationally compatible standards will be very important for maintaining a world-class payments system. The review seeks views on what standards should apply within the Australian context and how compliance with those standards ought to be implemented and monitored.

Collaboration, Governance and Connectivity

Some innovations can be described as proprietary, meaning they occur largely at the discretion of a single commercial entity. The decision to proceed with this type of innovation is typically based on the benefit to the innovator and its customers. Where decisions in relation to an innovation are in the hands of a single entity, and there is a demand for that innovation from end-users, its provision will be a matter of the provider assessing the potential returns given expectations regarding demand. In the absence of market failures, the innovation will most likely proceed if it is expected to generate a net profit. The scope of proprietary innovation can, however, be relatively limited. For instance, while a bank may implement a proprietary mobile payment system to service its own customers independently, extending that system to provide the same level of service for payments to and from another bank's customers requires co-operation.

System-wide innovations tend to require at least some degree of co-operation between competitors to take place. However, the benefits of this type of innovation typically accrue to users of the system as a whole and there may be little incentive for individual institutions to invest or innovate in something that offers them little competitive advantage.

In Australia, significant co-operative innovations have been difficult to achieve, with key stakeholders often unable to reach agreement. Where significant co-operative innovation has occurred, it has often been with the aid of some form of official intervention. Examples range from the creation of the RTGS system in the 1990s, to ATM reforms and implementation of the industry Community of Interest Network (COIN) for the clearing of retail payments between payments system participants. The review asks for feedback as to whether current governance arrangements adequately promote payments system innovation, particularly in the area of co-operative innovation.

The initial consultations have highlighted the perception that some industry players do not have a representative voice in current governance arrangements, largely as a result of the payments clearing focus of APCA structures. For instance, the rules for the ATM system are largely set through the APCA processes, but some of the largest owners of ATMs have no direct input into these decisions.

Similarly, there is a perception that the needs of end-users for new or altered product offerings are not always taken into account sufficiently. There are a number of examples where the needs of the business community and government agencies are not being fully met. Also, although not expressly stated by consumers, there are areas where improved capabilities may provide benefits (such as improved ease of addressing payments, as mentioned above). Even more difficult to accommodate in an industry-based model of governance are the interests of potential entrants to a system. These issues will be further explored through the formal consultation process.

System-wide innovations require not just co-operation, but connectivity between competitors. Payment systems in Australia have traditionally been based on bilateral connections. While the bilateral relationships and architecture that underpin some of Australia's main retail systems have been relatively effective in facilitating the initial establishment of payment systems, such as the ATM and eftpos systems, such systems, once established, have tended to be difficult to access and not conducive to innovation.

The establishment of the industry COIN is resolving some of the complexity of access to payments clearing and settlement in Australia by allowing new entrants to establish just a single physical connection to the network, rather than individual connections to each other participant. Nonetheless, these arrangements maintain bilateral logical and business relationships between participants. The consultation paper asks whether there may be additional advantages to further centralisation, including the possibility of centralised architecture through which payment messages are directed to the recipient.

The consultation paper noted that the major banks and BPAY had been working for some time on a new, hub-based retail payments system, referred to as MAMBO, which might have been able to address a number of the unmet needs of end-users identified by the Review. More recently, BPAY announced that it would not be proceeding with the MAMBO project. The demise of this project means that the need for solutions to fill the gaps identified by the Review is even more pressing.

Consumer Payments Use Study

The Reserve Bank commissioned Roy Morgan Research to undertake a study of consumer payments (Consumer Payments Use Study) on its behalf in November and December 2010. This was the second study of its kind undertaken by the Reserve Bank; the first was part of the Board's 2007/08 review of the payments system reforms. The 2010 Study provides insight into how payment methods, including cash, are currently being used by consumers, and how their use has changed in the period between the first and second studies. The 2010 Study also provides some insights into consumers' perceptions about different payment methods, which may shed light on the ways in which the Australian payments system can be made more responsive to the needs of its users.

Respondents were asked to record in a diary every payment they made during a week, including the date, amount, payment method, merchant category, channel (in person, phone, internet or mail) and whether a surcharge was paid in the case where a credit card was used. Respondents were also asked to record when and how they withdrew cash and, if an ATM was used, whether a direct charge was paid. At the end of the week, respondents were asked to complete a separate questionnaire that, among other things, asked them about factors that influence payment decisions, their use of newer payment methods and what would make them more likely to make specific types of payments online. These questions were aimed at understanding gaps in current consumer payment options.

In total, 1 240 valid responses were received, including 317 responses from participants who completed both the 2007 and 2010 studies. This resulted in a sample of almost 19 500 payments for a total value of around $1.3 million. In addition, around 1 800 cash withdrawals were recorded, with a total value of around $320 000.

Results from the diary suggest two main conclusions on consumer payment patterns. First, the broad patterns of payments behaviour observed in the first study still hold. Cash remains the most widely used payment method in Australia and the dominant method for low-value payments (under $40). Cards are the dominant payment method for transactions between $50 and $500. BPAY, internet/telephone banking and cheques are important payment methods for higher-value payments, particularly those greater than $500, although cheque use continues to decline overall.

Second, payment patterns have nonetheless evolved in the three years between the first and second studies. Notably, despite its continued wide use, cash as a share of both the number and value of payments by individuals has declined significantly. Debit cards appear to have been substituted for cash, with both eftpos and scheme debit cards now being used for an increasing share of lower-value payments.

The 2010 Study also explicitly captured the use of online payment methods for the first time. Even though only 2 per cent of the number of all payments are made via internet/telephone banking (reflecting the fact that the bulk of consumer payments are made in person), these have a high average transaction size and as a result account for 9 per cent of the value of consumer payments. Specialised online payments providers, such as Paymate, PayPal and POLi, account for around 1 per cent of both the number and value of transactions.

Despite the small share of total consumer payments, the Study suggests that most consumers are comfortable with online payments and do not believe that there are factors that would lead them to increase their use of these payments. Around 60 per cent of consumers with internet access pay most of their bills online, and around the same proportion have used online banking to transfer money to friends or family. Around 80 per cent have made an online purchase at some stage. Nonetheless, consumers are concerned about the risk of online fraud and indicated that this is a significant deterrent to greater use of online payments. Further, despite some initial consultations for the strategic review of innovation highlighting that current (particularly online) payment methods provide little scope for data of a detailed nature to accompany a payment, this did not stand out as a factor constraining consumers' use of online payments, suggesting that this aspect is more relevant for business than for consumers.

The separate questionnaire asked about consumers' use of newer payment methods, such as contactless and mobile payments. The findings suggest that adoption of contactless payments (where the consumer needs only to hold their card in proximity to the terminal, or tap their card against it) is quite low to date. Around 3 per cent of respondents indicated that they had made a contactless payment in the month prior to the survey. Of those that had, the most common payment value was between $20 and $50. This suggests that this technology may currently be replacing some payments that would otherwise have been made as more traditional (e.g. swipe transaction) credit or debit card payments, rather than in place of lower-value cash payments for which it has been marketed.

Finally, around 9 per cent of consumers with a mobile phone have made a mobile payment at some stage, although these payments were mainly to purchase ringtones, games or applications ('apps') for their phone. Most of the remaining use seems to be internet payments made via mobile phone; for example, internet banking (43 per cent of mobile payments users), bill payments (40 per cent) and online purchases (32 per cent).