It is my pleasure to be speaking here at the ASIC Forum. The Reserve Bank of Australia has a number of roles in the payments system. It operates the real-time gross settlement system for high-value payments, it provides banking and payment services to government clients, and it oversees and regulates the payments system. It is in the capacity of overseer that I am talking to you today.

The Payments System Board of the Reserve Bank has a mandate to promote efficiency and competition in the Australian payments system, as well as stability of the system. The Reserve Bank oversees the system to determine how best to achieve these objectives, including regulating if necessary. So today, I'm going to talk about something that can be very important in achieving these goals – collaboration.

Payment systems are networks and as networks they have a couple of important features. The first is that there are externalities associated with networks. As they get larger, the benefits increase disproportionately. We see this in all sorts of payment systems. The more merchants that take cards, for example, the more benefit there is to holding a card. And the more people that hold cards, the more benefit there is to merchants accepting cards. The network effect is both what can make it difficult for new systems to get off the ground and also entrench large networks.

The second feature of networks is that they involve people working together. In order to get the positive benefits from networks, there needs to be a commonality of interest among participants that are often competitors. When this is done well, it benefits both participants and end-users, and the wider community. Conversely, when some participants don't collaborate, they can make it difficult for everyone else to realise benefits.
Today I am going to talk about examples where collaboration is necessary to improve our payment systems in Australia – instances where firms that are typically competitors are being asked to 'lean in'. There are two that I am going to highlight: the New Payments Platform and efforts to reduce fraud. I will finish up with a few remarks on one area of the payments system where we would like to see continued competition.

The New Payments Platform

A very good example of industry collaboration in recent years has been the development and then the implementation of the New Payments Platform, or the NPP. The NPP is an infrastructure that allows instant payments to be made and received 24/7, with richer information and simpler addressing. Its genesis was the Payments System Board's Strategic Review of Innovation in the payments system (the Strategic Review). When the Strategic Review was announced in 2010, it was noted that the objective was to identify areas of innovation in the Australian payments system that could be improved through more effective cooperation between stakeholders and regulators. The final conclusions released in 2012 set out some high level strategic objectives for the payments system and invited the industry to determine how best to meet those objectives. They included the ability for users to:

- make real-time payments
- send more complete remittance information with payments
- address payments in a relatively simple way
- make and receive payments outside normal business hours.

The industry response was to develop and build the NPP to meet these objectives. The NPP went live in February 2018 and is slowly but steadily building volume.

This was a very ambitious project. It was long – it took around 4 years from the industry commitment until 'go live'. And it still is not complete. It was complicated technically, requiring not only a central build but also substantial work within financial institutions. And, as a large cross industry project it was complicated logistically.

But despite this, and the fact that there is still work to do, it has been a successful project. I think there were a few things that contributed to the effective collaboration that delivered the NPP.

First, the Reserve Bank and the Payments System Board, with the public interest in mind, gave a very clear message to the industry that building this new infrastructure was important. The conclusions of the Strategic Review set out very clearly what the Reserve Bank was expecting the industry to deliver on. And while it provided the industry with an opportunity to devise a proposal, it was always clear that the Reserve Bank regarded this as a must do if the Australian payments system is to be capable of providing the services expected by users into the future. The Payments System Board followed progress closely and provided continued encouragement both publicly and, where necessary, privately through senior-level contact between the Reserve Bank and other participating financial institutions.
Furthermore, the Reserve Bank demonstrated its own commitment to the project in numerous ways. It was a member of the project steering committee and numerous working groups, committing senior resources to these groups. It also took up a shareholding in NPP Australia Limited (NPPA) and it built the Fast Settlement Service to settle payments individually in real time, 24/7.

A second reason why collaboration was successful was that most institutions realised that they were participating in a project that would have significant and broad benefits. There were already a number of fast retail payment services around the world and customers were increasingly expecting payments to keep up with their 24/7 lifestyle. I think that most participants understood this.

A third element was the way that the project was organised with a dedicated independent team to manage the project and repeated reminders of the shared vision agreed early in the project's life. One key aspect of this was the social contract that all participants agreed to. This contract emphasised such things as constructive challenge, respect, active listening, positivity and innovative thinking.

The result is that we now have a first-rate payments system infrastructure that will be a platform for ongoing innovation. In many respects, Australia's fast payments system is at the cutting edge of such systems. We were not the first to have a fast payments system. But we have been able to learn from experience overseas and improve the model with features such as ISO 20022 message formats, real-time settlement and the addressing service. And the design of the system, which allows for competitive ‘overlay’ services to use the infrastructure, gives the system flexibility to meet the future needs of users of the Australian payments system.

Since going live in February 2018, the system has been gradually increasing its volumes (Graph 1). In April, 16 million transactions were processed through the NPP amounting to $13 billion. This is still small relative to the volumes that pass through other retail payment systems. But it is growing steadily and at least as quickly as some comparable overseas fast payment services when they were introduced (Graph 2). One of the positive aspects has been the broad participation of many small financial institutions. Customers of around 50 small banks, credit unions and building societies were able to make and receive fast payments from Day 1 and that number has since grown to nearly 70.
Graph 1

New Payments Platform*  
Monthly flows

* April 2019 observations are estimates

Source: RBA
On a less positive note, we have been somewhat underwhelmed by the progress of some of the major banks. Some of them have been much slower to provide their customers with fast payment services. The majors have all taken different approaches to which functionality they will provide and which customers to bring on first. This is their prerogative. We know they have a lot on their plates and they are in the best position to make decisions on what to prioritise. We also know that they have large and complex IT systems. But with some big banks slow to complete NPP related changes to their internal systems, there remain large numbers of customers that do not have a full range of convenient options for initiating fast payments even if their accounts can be reached by incoming fast payments. There is also more work to be done on increasing the number of accounts that are reachable using the NPP. These gaps have made it very difficult for NPP participants to market the new service to their customers. So the value of the NPP to users is much lower than it could be if payment initiation and account reach were more progressed. That is, the positive network effects have been held back. In order to realise the full benefits of the NPP, most financial institutions, particularly the larger ones, need to be involved in sending and receiving fast payments.

There is still more to be done and NPPA is keen to facilitate new applications that use the real-time, data-rich functionality. But industry should be aware that the regulator and the public in general will be expecting the payments industry to deliver on the promise of the NPP. In light of concerns that had been raised by a number of stakeholders, the Reserve Bank, with assistance from the Australian Competition and Consumer Commission (ACCC), has recently undertaken a public consultation on
NPP access and functionality. We are expecting to publish the conclusions and recommendations from this consultation in the coming weeks.

**Fraud**

Another area where collaboration is important in payment systems is fraud prevention and mitigation.

Individual institutions all have their own ways of dealing with fraud. In card payments, for example, most institutions have algorithms that look for payments that seem to be out of the ordinary. They then seek to verify with the customer as soon as possible whether the payment was genuine. Fraud tends to move to the point of least resistance so there are strong incentives for individual institutions to make sure that their systems for preventing, detecting and mitigating fraud keep pace with their competitors. Otherwise they might find themselves targeted.

But there are also good reasons to think about fraud mitigation collectively. First, if there is one participant in a payment system that is very prone to fraud, it could impact the confidence of consumers in using the system. There is therefore a collective incentive to ensure that everyone in the system is meeting certain minimum standards of fraud prevention. Second, and relatedly, payment systems often have protections for users of the system so that if a user finds themselves the victim of fraud through no fault of their own, they are not out of pocket. For example, card systems have protocols for dealing with fraudulent transactions on cards that arise through theft of card details. These protocols need to apply to all participants in the system to meet their aims.

PIN@POS was a good example earlier in this decade of a successful collaboration between financial institutions in Australia to improve the security of card transactions at the point of sale. While card transactions through the domestic eftpos system have always required authorisation by Personal Identification Number (PIN) at the terminal, authorisation of transactions through other card systems (American Express, Diners, Mastercard and Visa) was typically via signature. Signature authorisation was much more susceptible to fraud so the industry agreed on a project to move to PIN authorisation for all card transactions. This was a classic collaborative opportunity. If one institution tried to go it alone, it might find resistance from its customers – card holders who don't want to change and merchants who might have to upgrade their terminals. Furthermore, the fraud would probably just move to a merchant that didn't require PINs. Maybe the problem would be solved in the end, but in order to realise the benefits of a move to PIN in a reasonable timeframe, the individual participants had to move together.

Another more recent example of industry collaboration to address fraud is in ‘card-not-present’ transactions. Consumers are increasingly making purchases on line and cards are an easy way to do this. But it is more difficult for an online merchant to verify that the card being used belongs to the person using it. As a result, fraud rates on card-not-present transactions are high and rising. This can reduce confidence in the card payment system. And as merchants typically bear the cost of online fraud, it increases their costs of doing business and ultimately prices to consumers. It is bad for society as a whole.
There are ways of authenticating consumers online. But the greatest resistance to adopting these has come from merchants who worry that any anti-fraud measures would introduce friction in the checkout process, causing the purchaser to drop out. Indeed, there is a bit of a ‘prisoner’s dilemma’ here. Two merchants would be better off if they both introduce anti-fraud measures. But they each worry that if they adopt such measures, they will lose sales to their competitor who hasn’t adopted the additional measures. So neither will adopt.

Recognising that this a problem that would benefit from a collaborative solution, Australian financial institutions are currently working together to develop a framework for dealing with card-not-present fraud. Under the auspices of the Australian Payments Network, the industry will be mandating strong customer authentication at merchants that have high fraud rates. This will involve a process that checks two or more independent factors to authenticate the customer. For example, a one-time authentication code might be sent to the consumer's mobile phone, or there may be a fingerprint authentication. The goal is to reduce the cost of fraud as a whole, rather than just shifting it between individual merchants and financial institutions.

**Other Aspects of Card Payments**

I want to finish by speaking briefly about competition in the debit card market in Australia.

Debit cards are the non-cash payment method of choice for many Australians. Debit cards are connected to a customer's deposit account and draw funds for payment directly from that account. Over the past 10 years, the annual number of debit card transactions per person in Australia has risen from around 80 to around 260.

Most debit cards in Australia are dual-network cards. That is, payments made using these cards can be processed across two networks. The network brand on the front, and the most obvious, is typically an international scheme – Mastercard or Visa. On the back is usually the eftpos brand, the Australian domestic debit system.

The Payments System Board and the Reserve Bank have been supportive of these cards because they provide convenience and choice to both consumers and merchants. When dipping or swiping their card, consumers could choose the credit button to direct the transaction through the international scheme or the cheque/savings button to direct it through the eftpos system. Merchants could also indicate to customers which network they would prefer to be used. So dual-network cards can play a role in keeping downward pressure on the costs of card acceptance to merchants (and indirectly to consumers).

The move to contactless payments (‘tap-and-go’), however, has muted some of the competitive pressures that can come from dual-network cards. Since eftpos moved to tap-and-go later than Mastercard and Visa, a substantial number of payments that were previously processed by the eftpos network are now being processed by the international schemes. While consumers would not have noticed anything different, businesses have seen their costs of card acceptance rise as processing through the international schemes is more expensive than eftpos.
The Bank has attempted to ensure that merchants continue to have choice by obtaining commitments from banks to allow their merchant customers to choose the network through which contactless transactions are processed. Some smaller acquirers – for example Tyro and First Data – have been faster than the major banks to provide their customers with this functionality. But the major banks are now offering or are about to offer merchant choice. This should assist in keeping downward pressure on the fees that merchants pay.

But as payments move to different form factors, such as mobile phones or wearables, and new technologies are introduced, there is a risk that some may use it as an opportunity to lock out competitors. The Reserve Bank is of the view that in moving to new technologies, merchants and consumers should continue to have a choice of debit card network. Rules or policies of any scheme that have the effect of removing choice will reduce competition and result in rising costs to merchants. The Bank will be looking closely at developments in the debit card market to ensure that, as far as possible, there is a level playing field for the alternative debit schemes. We will also work with the ACCC as necessary to identify and address any anti-competitive behaviour. In the specific case of least cost routing, we would not want to see the benefits to competition from this innovation thwarted by issuers taking eftpos off dual-network cards.

**Conclusion**

Competition is important in payments. It delivers better customer experiences, more convenience and innovative products. But as networks, collaboration is also often required. The development of the NPP and recent work on addressing fraud in card payment systems are good examples of where participants that are normally competitors have cooperated to ultimately deliver better outcomes for Australian consumers and merchants. These collaborative efforts, however, are not without their challenges. As the payments system regulator, the Reserve Bank remains willing to engage with industry and facilitate collaboration where this is in the public interest.