



RESERVE BANK
OF AUSTRALIA

**Payments
System Board
Annual Report**

2010

Reserve Bank

Payments System Board

ANNUAL REPORT 2010

Contents

Functions and Objectives of the Payments System Board	1
Governance	3
Payments System Board	5
Developments in Retail Payment Systems	7
Competition and Co-operation in Retail Payments	21
High-value Payments System	27
Oversight of Clearing and Settlement Facilities	31
International Regulatory Developments	37
Other Regulatory Responsibilities	41
Liaison Activity	45
The Board's Announcements and Reserve Bank Reports	47

Reserve Bank

Payments System Board

It is the duty of the Payments System Board to ensure, within the limits of its powers, that:

- the Bank's payments system policy is directed to the greatest advantage of the people of Australia;
- the powers of the Bank which deal with the payments system, set out in the *Payment Systems (Regulation) Act 1998* and the *Payment Systems and Netting Act 1998*, are exercised in a way that, in the Board's opinion, will best contribute to controlling risk in the financial system; promoting the efficiency of the payments system; and promoting competition in the market for payment services, consistent with the overall stability of the financial system; and
- the powers of the Bank which deal with clearing and settlement facilities, set out in Part 7.3 of the *Corporations Act 2001*, are exercised in a way that, in the Board's opinion, will best contribute to the overall stability of the financial system.

Functions and Objectives of the Payments System Board

The responsibilities of the Payments System Board are set out in the *Reserve Bank Act 1959*. In particular, the Act requires the Board to determine the Reserve Bank's payments system policy so as to best contribute to:

- controlling risk in the financial system;
- promoting the efficiency of the payments system; and
- promoting competition in the market for payment services, consistent with the overall stability of the financial system.

In order to give effect to these responsibilities, the Bank has powers that are set out in two Acts: the *Payment Systems (Regulation) Act 1998* and the *Payment Systems and Netting Act 1998*.

Under the *Payment Systems (Regulation) Act* the Bank has the power to designate payment systems and to set standards and access regimes in designated systems. The Act also sets out the matters that the Bank must take into account when using these powers. The *Payment Systems and Netting Act* provides the Bank with the power to give legal certainty to certain settlement arrangements so as to ensure that risks of systemic disruptions from payment systems are minimised.

In addition, the *Reserve Bank Act* gives the Board responsibility for ensuring that clearing and settlement facilities contribute to the stability of the financial system. The relevant powers are set out in the *Corporations Act 2001*, which gives the Bank the power to determine financial stability standards for licensed securities clearing and settlement facilities.

This Report discusses the activities of the Board over 2009/10.

Governance

Composition of the Payments System Board

The Payments System Board comprises the Governor, who is Chairman, one representative of the Bank appointed by the Governor, one representative of the Australian Prudential Regulation Authority (APRA) appointed by APRA and up to five other members appointed by the Treasurer for terms of up to five years. Details of the current members are set out on pages 5 and 6. Five members form a quorum at a meeting of the Board.

Meetings of the Payments System Board

The Reserve Bank Act does not stipulate the frequency of Board meetings. Since its inception, the Board's practice has been to meet at least four times a year, and more often as needed; there were four meetings in 2009/10.

Conduct of Payments System Board Members

On appointment to the Board, each member is required under the Reserve Bank Act to sign a declaration to maintain confidentiality in relation to the affairs of the Board and the Bank. Further, members must by law meet the general obligations of directors of statutory authorities, as set out in the *Commonwealth Authorities and Companies Act 1997* (CAC Act). The CAC Act sets standards of conduct for directors and officers of Commonwealth authorities, with many of these requirements being modelled on comparable areas of the Corporations law. As such, members of the Payments System Board must:

- discharge their duties with care and diligence;
- act in good faith, and in the best interests of the Bank;
- not use their position to benefit themselves or any other person, or to cause detriment to the Bank or any person;
- not use any information obtained by virtue of their position to benefit themselves or any other person, or to cause detriment to the Bank or any person; and
- declare any material personal interest where a conflict arises with the interests of the Bank.

Table 1: Number of Meetings Attended by Each Member in 2009/10^(a)

Glenn Stevens	4	(4)
Malcolm Edey	4	(4)
John Laker	4	(4)
Joe Gersh	4	(4)
Robert McLean	4	(4)
John Poynton	3	(4)
Catherine Walter	4	(4)

(a) Figures in brackets show the number of meetings each member was eligible to attend

Members must also adhere to a Code of Conduct that sets out specific requirements relating to confidentiality, conflicts of interest and public commentary on payments policy issues.

The confidentiality of information – including the Payments System Board materials and the discussion at the meetings – must be strictly maintained, including after members have left the Payments System Board. Members are also required to avoid any situation where they might be perceived as having acted with the benefit of knowledge not available to the general marketplace.

The Code requires conflicts of interest, whether of an actual or potential nature, and whether involving a member's personal or business affairs, to be promptly and fully disclosed. In the event that a member becomes aware of a conflict of interest associated with a particular issue facing the Payments System Board, the member is required to immediately disclose it to the Payments System Board, as required in the CAC Act, which also sets out how such conflicts are to be handled. Members considering taking on a material interest that might present, or might be perceived as presenting, some risk of conflict with their role as a Payments System Board member are required to consult the Governor before committing themselves.

In order to avoid any possibility of perceived conflicts that could damage the Bank's reputation, members are required to exercise due care in accepting from third parties entertainment, travel or accommodation, or any other benefit that is offered solely or mainly on the basis of membership of the Payments System Board.

Finally, the Code requires that members generally shall refrain from public commentary about current payments system policy issues, respecting the confidentiality of Payments System Board discussions. Members who, in the ordinary course of their activities outside the Reserve Bank, have occasion to discuss payments system policy matters generally, may do so on the basis that the views so presented are personal or affiliated with another institution, not the Bank. The Governor, as Chair, and the Deputy Chair will on occasion need to speak on payments system policy issues as part of their official duties, but in doing so will still respect the confidentiality of the Payments System Board discussions.

The Governor and the Deputy Chair are required to adhere not only to this code but also to the Reserve Bank staff code of conduct.

Where questions of interpretation of this Code arise, members shall consult with the Governor. Where issues arise that cannot be specifically foreseen in this Code, members will be expected to exercise sound judgement and behaviour consistent with the general principles outlined in the Code. Members will, where appropriate, consult with the Governor and, if necessary, the Treasurer.

Remuneration

Fees of the non-executive members of the Payments System Board are determined by the Australian Government Remuneration Tribunal.

Indemnities

Under the provisions of Section 27 of the CAC Act and pursuant to a resolution by the Reserve Bank Board on 3 November 1998, members of the Payments System Board have been indemnified against liabilities incurred arising out of the proper discharge of their responsibilities, provided that any such liability does not arise from conduct involving a lack of good faith. This indemnity does not extend to claims by the Bank itself or any subsidiary of the Bank.

Payments System Board

August 2010



Glenn Stevens (Chairman)

Chairman since 18 September 2006
Present term ends 17 September 2013
Governor – Reserve Bank of Australia
Chairman – Council of Financial Regulators



Malcolm Edey (Deputy Chairman)

Deputy Chairman since 14 April 2009
Assistant Governor (Financial System) – Reserve Bank of Australia



John Laker AO

Chairman – Australian Prudential Regulation Authority
Member since 24 July 1998



Joe Gersh AM

Member since 15 July 1998
Present term ends 14 July 2013
Executive Chairman – Gersh Investment Partners Ltd
Chairman – Australian Reinsurance Pool Corporation



Robert McLean

Member since 29 November 2006
Present term ends 28 November 2011
Director – LJ Hooker Pty Ltd
Senior Advisor – McKinsey & Company



Catherine Walter AM

Member since 3 September 2007
Present term ends 2 September 2012
Chairman – Australian Synchrotron
Director – Australian Foundation Investment Company
Director – Melbourne Business School
Director – Victorian Funds Management Corporation
Director – Victorian Opera

John Poynton AM

Mr Poynton's term ended on 24 May 2010

Developments in Retail Payment Systems

The Board closely monitors trends and developments in the Australian retail payments system. 2009/10 saw a continuation of the broad trends of recent years, with the use of non-cash payments rising at a steady pace and ongoing substitution of electronic methods of payment for more traditional methods. The recent strong growth in debit card payments relative to credit cards also continued, although growth in the use of credit cards picked up modestly from the low rates experienced during the global financial crisis. Patterns for accessing cash shifted in 2009/10 as consumers adjusted their behaviour to the new charging arrangements at ATMs; the use of ATMs declined while EFTPOS cash-outs experienced relatively strong growth.

Other developments during the year included a sharp rise in the rate of debit card fraud and a further increase in the proportion of merchants applying a surcharge to credit and charge card transactions.

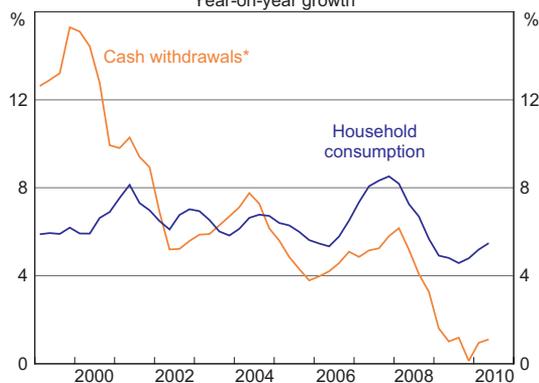
Trends in Retail Payments Use

Cash payments

Because cash transactions occur directly between merchants and consumers without the involvement of financial institutions, they are difficult to measure. The best available data come from a consumer survey conducted by the Reserve Bank in 2007 and due to be updated in 2010/11. These data indicate that cash payments account for around 70 per cent of the number of consumer payments made in Australia. But since cash is used predominantly for small transactions at particular business types, it accounts for only 38 per cent of the value of transactions.

More recent trends in cash payments can be inferred from data on cash withdrawals, which are reported by financial institutions. In 2009/10, the value of cash withdrawals increased by 1.1 per cent, substantially slower than the 5.5 per cent increase in nominal household consumption over the same period (Graph 1). The rate of growth of cash withdrawals has been less than growth in consumption for a number of years. So while growth in cash withdrawals over the past year may have been distorted to a degree by the introduction of ATM direct charging in 2008/09, the trend is suggestive of a longer-term shift away from cash payments.

Graph 1
Value of Cash Withdrawals and Household Consumption
Year-on-year growth

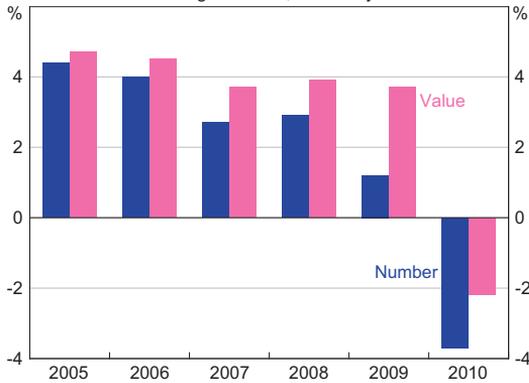


* Data from September 2004 onwards include ATM, over-the-counter, EFTPOS cash-outs and credit card cash advance withdrawals; prior to September 2004, the data only include ATM withdrawals
Sources: ABS; RBA

Graph 2

ATM Withdrawals

Annual growth rate, financial year



Source: RBA

Over 2009/10, there were also some significant changes in the way consumers access cash. In particular, cash withdrawals from ATMs declined and those using EFTPOS rose. ATMs have been the main means of accessing cash for some time, comprising nearly two-thirds of the value and three-quarters of the number of total cash withdrawals. Nonetheless, the number of ATM withdrawals decreased by 3.7 per cent in 2009/10; the value of withdrawals fell by only 2.2 per cent, suggesting an increase in size of the average withdrawal (Graph 2). This likely reflects the effect of the introduction of ATM direct charging during the previous financial year, which encouraged cardholders to reduce the frequency of visits to ATMs where they pay a charge. This is more clearly seen with the 14 per cent decrease in the number of 'foreign ATM' withdrawals during the year.¹ Another factor that may have contributed to the reported decrease in ATM withdrawals is the boost in the number and value of withdrawals made in the previous year as a result of the Government's stimulus payments.

After ATM withdrawals, EFTPOS cash-outs are the next most frequent means of accessing cash, accounting for 22 per cent of the number of cash withdrawals. However, because cash-outs are typically only around a third of the size of a typical ATM withdrawal, they account for a much smaller proportion of the value of withdrawals. The number of EFTPOS cash-outs increased by 7 per cent in 2009/10, most likely reflecting some substitution away from ATM withdrawals as a result of ATM direct charging; EFTPOS cash-outs are typically free to the customer.

Over-the-counter (OTC) withdrawals make up only 2 per cent of the number of cash withdrawals, but nearly 30 per cent of the value. The number of OTC withdrawals declined slightly during the year, while the value increased. Credit card cash advances make up around 3 per cent of withdrawals, but have been declining for a number of years. The trend accelerated in 2009/10, with the number of advances falling by 11 per cent.

Over-the-counter (OTC) withdrawals make up only 2 per cent of the number of cash withdrawals, but nearly 30 per cent of the value. The number of OTC withdrawals declined slightly during the year, while the value increased. Credit card cash advances make up around 3 per cent of withdrawals, but have been declining for a number of years. The trend accelerated in 2009/10, with the number of advances falling by 11 per cent.

Non-cash payments

Trends in the use of non-cash retail payment instruments have been reasonably stable over the past five years (Table 2). The total number of non-cash payments made in Australia increased by 7.9 per cent in 2009/10, slightly above the recent average. Australians made an average of 286 non-cash payments each during the year. The most common payment method was by card, with credit and debit card payments accounting for just over half the number of transactions. Direct entry payments were also popular, accounting for a third of transactions. Per head of population, there were 96 debit card, 69 credit card and 95 direct entry (direct debit and direct credit) transactions during the year (Graph 3).

While credit and debit cards were the most commonly used payment methods, they accounted for less than 3 per cent of the value of transactions. Direct entry transactions accounted for 85 per cent of the value of non-cash payments and cheques accounted for 11 per cent, reflecting the larger average transaction sizes of these payment methods. Continuing the long-run trend, the number of cheque payments fell by

¹ A 'foreign ATM' refers to a domestic ATM that is not owned by the cardholder's bank.

Table 2: Australian Non-cash Retail Payments

	2009/10			Average growth, 2004/05–2009/10		
	Per cent of total Number	Per cent of total Value	Average value \$	Per cent Number	Per cent Value	
Cheques	4.9	11.3	4 814	-9.3	-2.3	
Direct debits	10.5	37.5	7 462	7.0	8.4	
Direct credits ^(a)	22.7	47.0	4 333	6.5	6.8	
Debit cards	33.4	1.1	67	13.1	12.8	
Credit cards ^(b)	24.1	1.7	145	5.9	8.1	
BPAY	4.4	1.4	697	13.8	16.2	
Total	100.0	100.0	2 090	7.2	6.2	

(a) Excludes BPAY transactions; a reporting change by a bank caused a break in the series, increasing the number and decreasing the value of direct credits

(b) Excludes BPAY transactions

Sources: BPAY; RBA

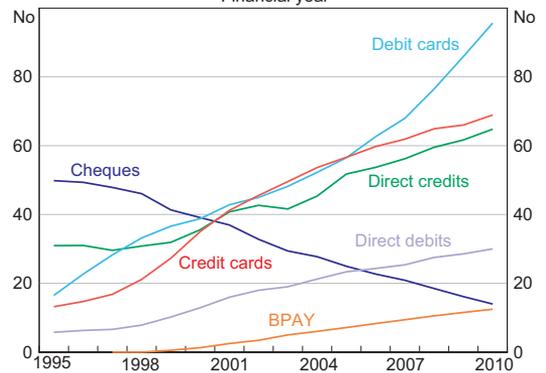
11.6 per cent over the year. There were around 14 cheques per person written in 2009/10, down from 50 cheques in 1995.

The trends in Australia are consistent with those overseas. Electronic payment instruments, in particular payment cards, continue to increase in importance while cheque use is in decline throughout the world. In 2008 (the latest period for which comparable international data are available), payment cards made up almost half of all retail non-cash payments internationally compared with less than one-third at the end of the 1990s.

Card-based payments

There were around 3.7 billion card-based transactions in Australia in 2009/10, for a value of \$365 billion. This represents an increase in the number of card-based payments of around 10 per cent from the previous year, while the value of those transactions increased by around 8 per cent. The average value of both debit card and credit and charge card transactions remained broadly steady at \$67 and \$145, respectively. Growth in credit and charge card usage picked up moderately in 2009/10 after falling to historically low levels in 2008/09 (Graph 4). The earlier slow-down may have been partly attributable to households seeking to reduce indebtedness during the global financial crisis. The recent pick-up suggests that this factor may have since declined in importance, with both the

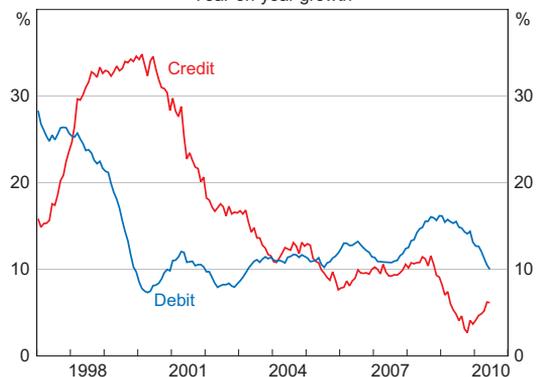
Graph 3
Non-cash Payments per Capita*
Financial year



* Apart from BPAY, data from 2002 onwards are based on the RBA's Retail Payments Statistics; data for earlier years come from APCA and the RBA, and have been adjusted for differences between these sources and the Retail Payments Statistics

Sources: ABS; APCA; BPAY; RBA

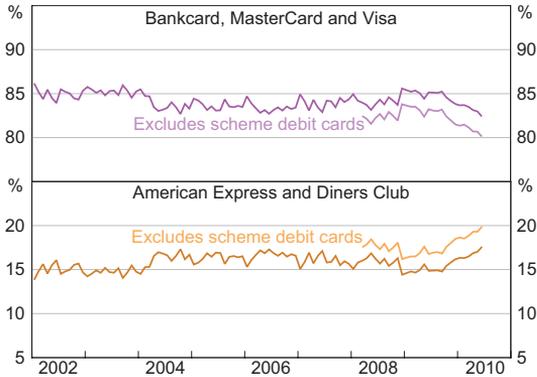
Graph 4
Value of Card Payments*
Year-on-year growth



* RBA credit card data prior to March 2008 adjusted to remove BPAY transactions

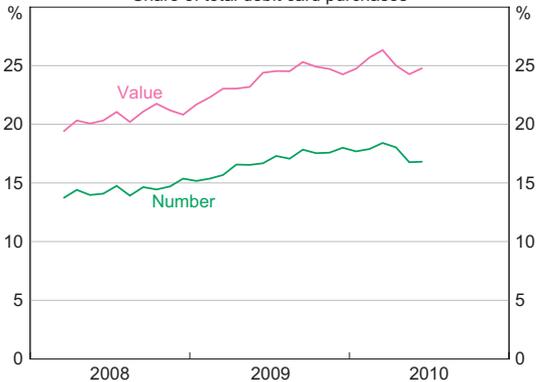
Sources: BPAY; RBA

Graph 5
Market Shares of Card Schemes
 By value of purchases



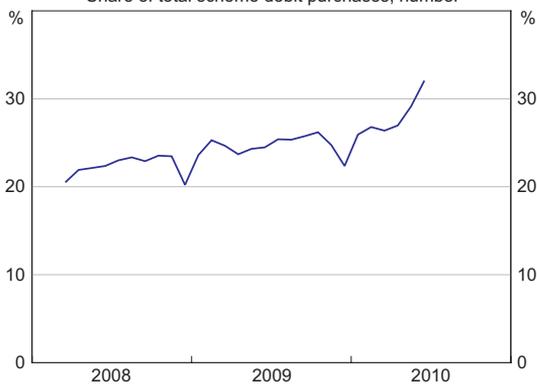
Source: RBA

Graph 6
Scheme Debit Cards
 Share of total debit card purchases



Source: RBA

Graph 7
Remote Scheme Debit Purchases
 Share of total scheme debit purchases, number



Source: RBA

number and value of credit card payments increasing by around 6 per cent in 2009/10.

Within the credit and charge card category, trends in the use of individual products have been affected by the introduction of 'companion' American Express credit cards by two major banks. Under this arrangement, existing MasterCard or Visa cardholders are issued with an American Express credit card on the same account and earn more rewards points on the American Express card. Cardholders appeared to respond to these incentives; the market share by value of the three-party schemes (American Express and Diners Club) increased from 16.8 per cent in June 2009 to 19.9 per cent in June 2010 (Graph 5). All four major banks now issue co-branded American Express cards.

Growth in the number and value of debit card purchases slowed in 2009/10, but, consistent with the trend over the past five years, remained higher than for credit cards. The value of debit card purchases rose by around 11 per cent during the year, down from 17 per cent in the previous year. Growth was underpinned by a further strong increase in the use of scheme debit cards, with the value of purchases using these cards increasing by around 25 per cent over the year, compared with an increase of around 6 per cent for EFTPOS purchases. This took scheme debit's share of the value of debit card purchases to 25 per cent on average during 2009/10, a rise of 3 percentage points from the previous year (Graph 6).

Despite strong growth over 2009/10, use of scheme debit cards appears to have slowed significantly towards the end of the year, most likely reflecting the decision by a major retailer to route all transactions on dual-function debit cards (which can access both EFTPOS and scheme debit) through the EFTPOS network from April 2010 (see discussion in 'Competition and Co-operation in Retail Payments'). This is also likely to have reinforced the existing trend towards a greater proportion of scheme debit transactions taking place remotely (that is, via mail order, telephone order or the internet). The share of scheme debit transactions that were undertaken remotely averaged around 26 per cent in 2009/10, up by close to 3 percentage points from the previous year (Graph 7).

Other electronic payments

The number of direct entry payments grew in line with longer-term trends in 2009/10. The number of both direct debits and direct credits increased by around 7 per cent, a little stronger than the previous year. However, the value of direct entry payments was much more subdued, with average transaction sizes declining. After adjusting for a significant series break, the total value of direct credits appears to have risen by around 3 per cent in the year, while the value of direct debits was little changed.

BPAY continued to grow strongly in 2009/10, with the number of transactions increasing by around 10 per cent and the value by around 8 per cent.

Cheques

The number of cheques written continued to decline in 2009/10, falling by 12 per cent, in line with their longer-term trend. However, the value of cheque payments remained broadly steady. The average value of a cheque transaction increased by 13 per cent, to \$4 814, suggesting that cheque use is mainly declining for lower-value payments. The use of cheques for transactions such as housing settlements remains widespread, reflecting the lack of an electronic substitute for those transactions at the present time. Cheques accounted for 5 per cent of the number of non-cash transactions in 2009/10, down from 6 per cent in 2008/09.

Other Retail Payments Developments

Interchange fees

The Reserve Bank regulates interchange fees in the MasterCard and Visa credit card systems and the Visa and EFTPOS debit card systems.² Standards imposed by the Bank cap the weighted average of multilateral interchange fees in each system on specified compliance dates – 1 November of every third year after 2006 and the date that any interchange fee is introduced, varied or removed. This approach allows for significant flexibility in the setting of individual fees, provided that the weighted-average cap is met. MasterCard and Visa have established a variety of different fee categories, distinguished by factors such as: the type of card account (for example, consumer, premium, commercial); the type of merchant (for example, petrol station, government/utility); and the type of transaction (for example, card present/not present).

The interchange fee caps for Visa and MasterCard were unchanged in 2009/10, at 0.50 per cent of the value of transactions for credit card purchases and 12 cents per transaction for scheme debit card transactions (excluding GST). Compliance with the caps was required on 1 November 2009, resulting in both MasterCard and Visa altering their interchange fee schedules to meet the benchmark. Both schemes made further changes to fees on 30 June 2010 – the last day on which weights based on transactions in 2008/09 could be used (Tables 3 and 4).

² For debit cards, MasterCard has undertaken to voluntarily comply with the interchange fee benchmark in the Visa Debit Standard. All interchange fees quoted in this section exclude GST.

Table 3: Credit Card Interchange Fees
Excluding GST, per cent unless otherwise specified

	MasterCard		Visa	
	30 June 2009	30 June 2010	30 June 2009	30 June 2010
Consumer electronic	0.43	0.35	0.40	0.40
Consumer standard	0.43	0.40 ^(a)	0.55	0.45
Consumer chip	0.63	0.35	0.50	–
Premium/platinum	0.95	1.00 ^(b)	0.90	1.00
Premium chip	1.15	1.00	1.00	–
Super premium	–	1.60 ^(c)	–	1.70
Commercial	1.15	1.27	1.15	1.28
Commercial chip	1.35	1.27	–	–
Strategic merchant	–	0.25 or 0.34	–	0.25–0.35
Tiered merchant	0.34	–	–	–
VMAP ^(d)	–	–	0.30	–
Government/utility	0.30	0.30	–	0.30
– electronic	–	–	30.0 ¢	–
– standard	–	–	74.0 ¢	–
Charity	0.00	0.00	0.00	0.00
Petrol/service station	0.34	0.34	–	0.32
Education	–	0.30	–	0.40
Supermarket	–	–	–	0.32
Insurance	–	–	–	0.40
Transit	–	–	–	0.30
Recurring payment	0.30	0.30	0.40	0.30
Quick/express payments	0.30	0.40	0.40	–
Contactless payment	–	0.35	–	–
Micropayment	–	–	2.5 ¢	–
Large ticket ^(e)	–	–	–	\$20 + 0.20
Benchmark	0.50	0.50	0.50	0.50

(a) May be 0.30% or 0.35% depending on use of MasterCard's SecureCode online authentication system

(b) May be 0.90% or 0.95% depending on use of MasterCard's SecureCode online authentication system

(c) May be 1.50% or 1.55% depending on use of MasterCard's SecureCode online authentication system

(d) Visa Merchant Alliance Program

(e) Transactions above \$10 000 excluding travel/entertainment purchases

Sources: MasterCard website; RBA; Visa website

Table 4: Debit Card Interchange Fees
Excluding GST, cents unless otherwise specified

	MasterCard		Visa	
	30 June 2009	30 June 2010	30 June 2009	30 June 2010
Consumer electronic	9.1	6.0	8.0	8.0
Consumer standard	36.4	19.0	0.31%	0.30%
Consumer chip	13.6	12.0	–	–
Premium/platinum	–	0.50%	–	0.40%
Commercial	36.4	1.27%	–	1.00%
Commercial chip	40.9	1.48%	–	–
Strategic merchant	–	3.6	–	4.0–60.0
Tiered merchant	3.6	–	–	–
Electronic incentive	–	–	4.0	–
Government/utility	29.1	7.0	–	8.0
– electronic	–	–	8.0	–
– standard	–	–	37.0	–
Charity	0.00%	0.00%	0.00%	0.00%
Petrol/service station	9.1	4.0	–	6.0
Education	–	–	–	8.0
Supermarket	–	–	–	6.0
Insurance	–	–	–	8.0
Transit	–	–	–	6.0
Recurring payment	9.1	9.1	8.0	8.0
Quick/express payment	0.50%	4.0	8.0	–
Micropayment	0.50%	4.0	2.5	–
Large ticket ^(a)	–	–	–	\$10 + 0.10%
Benchmark	12.0	12.0	12.0	12.0

(a) Transactions above \$10 000 excluding travel/entertainment purchases
Sources: MasterCard website; RBA; Visa website

The changes implemented by the schemes included both adjustments to rates for existing interchange fee categories and the introduction of new categories. Significant changes for credit cards included the following:

- Both MasterCard and Visa introduced an interchange fee category for selected credit card products classified as ‘super premium’, with rates set at 1.6 per cent and 1.7 per cent, respectively. These fees are well above premium and platinum rates (1.0 per cent), which also increased.
- Both schemes increased their commercial rates by 12 or 13 basis points.
- Both schemes lowered their consumer standard fees, which apply for manually processed or card-not-present transactions, such as payments made over the telephone or internet, while MasterCard also reduced its rates for electronically processed card present consumer transactions.

- Both schemes introduced lower fees for ‘strategic merchants’ that meet performance requirements or thresholds determined by each scheme.
- Visa introduced a number of fee categories for specific industries, while MasterCard added an ‘education and learning’ category.
- Visa introduced new rates for certain ‘large ticket’ payments (above \$10 000).
- MasterCard introduced lower rates for transactions that use MasterCard SecureCode, which provides an additional layer of security for online purchases.

Significant changes for scheme debit cards included:

- Following the pattern for credit cards, both MasterCard and Visa introduced an interchange fee category for premium and platinum debit card transactions, set at 0.5 per cent and 0.4 per cent, respectively. On an average-sized scheme debit transaction this would amount to a fee of 43 cents for a Debit MasterCard transaction and 35 cents for a Visa Debit transaction.
- Both schemes introduced ‘strategic merchant’ rates.
- MasterCard significantly reduced its fees for consumer electronic, consumer standard, government/ utilities and petrol transactions.
- Visa introduced a new interchange fee category for commercial card transactions (1 per cent) and MasterCard replaced its existing flat-fee commercial rate with an *ad-valorem* fee (1.27 per cent).
- Visa introduced lower rates for specific merchant categories, such as service stations and supermarkets, along with a new rate for ‘large ticket’ payments.

Interchange fees in the EFTPOS system are also regulated by the Reserve Bank. As discussed in ‘Competition and Co-operation in Retail Payments’, the Payments System Board decided in November 2009 to amend the *Standard on the Setting of Interchange Fees in the EFTPOS System* to make the regulation of EFTPOS interchange fees more consistent with that for scheme debit. The amended Standard, which came into effect on 1 January 2010, caps the weighted average of multilateral interchange fees in the EFTPOS system at the same level as the benchmark for interchange fees in the MasterCard and Visa debit systems (12 cents per transaction paid to the card issuer). The regulated range for bilaterally negotiated EFTPOS interchange fees (which are paid by the card issuer to the transaction acquirer) was left unchanged at 4 to 5 cents for purchase transactions. The amendment to the Standard did not affect fees in the EFTPOS system in 2009/10 because no multilateral fees have been introduced to date.

Acquirers and self-acquirers with bilateral interchange agreements in the EFTPOS system are required to report information on the bilateral fees they receive each year. According to the data provided for 2008/09, acquirers received interchange fees for EFTPOS purchase-only transactions of between 4 and 5 cents per transaction, in line with the regulated range.

Merchant service fees

The average fee paid by merchants for transactions on MasterCard and Visa credit and scheme debit cards has changed little in recent years after significant declines following the implementation of the Board’s reforms in 2003. The average merchant service fee for payments on these cards was 0.80 per cent in 2009/10, a slight fall of 1 basis point from 2008/09 and a fall of 60 basis points since the September quarter 2003, just prior to the reforms taking effect (Graph 8). The margin between merchant service fees and interchange fees on MasterCard and Visa transactions fell substantially in the first few years following the reforms, reflecting an

increase in competition between acquirers for the business of merchants. In recent years, however, this margin has remained stable at around 30 basis points.

The average merchant service fee for payments on American Express cards has continued to decline steadily, while the fee for Diners Club transactions has remained more stable. In 2009/10, the average American Express merchant service fee fell by 10 basis points, to 1.93 per cent, and is 52 basis points lower than prior to the reforms – more than the regulated decline in interchange fees in the MasterCard and Visa systems. The average Diners Club fee was 2.13 per cent in 2009/10, little changed from the preceding year.

Since the introduction of the reforms, decreases in merchant service fees across all four schemes are estimated to have produced cumulative savings to merchants of around \$6 billion, with merchant service fees in 2009/10 around \$1.3 billion lower than they would have been if the merchant service fees prevailing prior to the reforms had been maintained.

The average merchant service fee in the EFTPOS system fell by 1 cent in 2009/10 to 6.4 cents (Graph 9). Because interchange fees on EFTPOS transactions are paid by the card issuer to the transaction acquirer, the debit card reforms initially led to an increase in merchant service fees as acquirers sought to recover some of their lost fee revenue. But, as with credit cards, increased competition in acquiring has lowered the margin of merchant service fees over interchange fees in the EFTPOS system since the introduction of the reforms. In 2009/10, this margin was around 11 cents per transaction, a cent lower than in the preceding year.

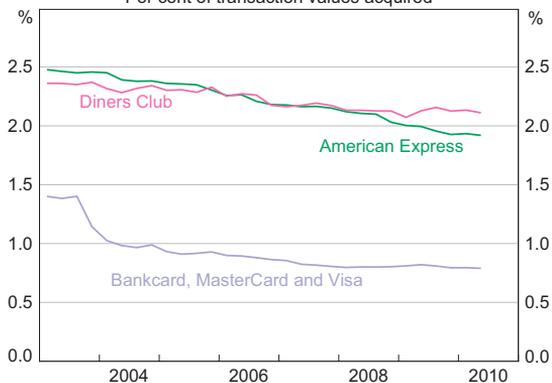
Pricing to cardholders

The structure of credit card pricing to cardholders has evolved significantly over recent years as new strategies have been adopted by issuers. In addition to price changes on existing products, new card products have emerged, such as low-rate cards and, more recently, new structures for rewards cards. As mentioned in last year's Annual Report some issuers provide complementary three-party scheme cards with some MasterCard/Visa credit card products and then offer more loyalty points to cardholders when the three-party scheme card is used than when the MasterCard/Visa card is used. Merchant co-branded cards that accrue points more quickly for purchases made at that merchant have also emerged, while other programs now cap rewards for spending above a certain amount.

Graph 8

Merchant Service Fees

Per cent of transaction values acquired

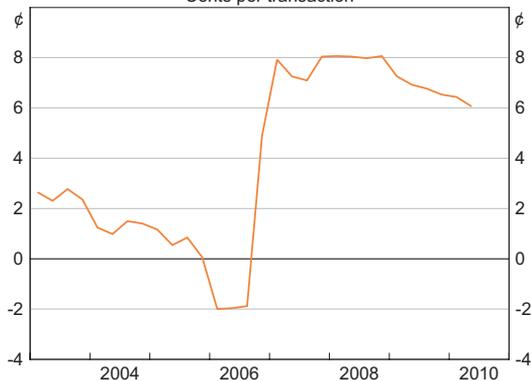


Source: RBA

Graph 9

EFTPOS Merchant Service Fees

Cents per transaction



Source: RBA

Broadly, there are five main types of credit cards that cardholders can choose to hold (Table 5). ‘Low rate’ cards are generally most attractive to cardholders with outstanding balances accruing interest (‘revolvers’), as the interest rate on these cards is on average around 6 percentage points per annum lower than the interest rate on a standard credit card. Low rate cards usually do not offer rewards points.

In contrast, cardholders who typically pay off their credit card in full each month (‘transactors’) are generally not as sensitive to prevailing credit card interest rates. Transactors who use their card infrequently may prefer to hold a ‘low fee’ card rather than paying a higher annual fee for a card that offers rewards. Transactors who use their card more regularly may be more attracted to standard, gold or platinum rewards cards. The main distinctions between these products are the level of annual fees, the generosity of rewards programs, and other ‘premium’ benefits. The average annual fee for platinum rewards cards (\$299) is more than twice as much as for gold cards (\$130), which is in turn almost twice that for standard rewards cards (\$69) (Table 5). In return for higher annual fees, gold and platinum cards on average offer more generous rewards programs than standard cards. In June 2010, a platinum card holder could earn around 94 cents (in the form of a department store voucher) for every \$100 spent, on average, compared with 71 cents for gold card holders and 67 cents on standard cards.

While product options have become more complicated, there is some evidence that fees have increased while rewards have become less valuable. Based on a sample of rewards cards issued by the major banks, annual fees for standard cards increased by around 12 per cent in the year to June 2010, while fees for the major banks’ gold cards increased 3 per cent. In contrast, the rewards benefit to cardholders as a percentage of spending fell by around 7 per cent.³

Table 5: Typical Features of Personal Credit Cards, By Type^(a)
As at end June 2010

	Average annual fee	Average interest rate	Average spending for \$100 voucher ^(b)	Average rewards benefit	Range of rewards benefit
	\$	Purchases, per cent per annum	\$	Per cent of spending	Per cent of spending
No rewards					
Low rate	74	12.9	–	–	–
Standard (‘low fee’)	21	19.3	–	–	–
Rewards					
Standard	69	19.6	14 900	0.67	0.32–1.13
Gold	130	20.0	14 100	0.71	0.37–1.00
Platinum	299	20.0	10 700	0.94	0.56–1.11

(a) The total sample comprises around 80 credit card products offered by 11 issuers; reported averages are calculated as simple averages of relevant products’ features; data are not directly comparable to figures reported in previous Annual Reports for major banks’ average annual fees or rewards benefits

(b) The value of spending required to obtain a \$100 department store voucher assumes cardholders with a credit card product containing a companion American Express card spend equal amounts on their MasterCard/Visa card and companion American Express card; figures do not factor in the ability to earn bonus points at certain merchants, caps on earning points or reduced point accrual rates for spending above certain thresholds

Sources: Credit card issuers’ websites as at 30 June 2010

3 The sample of cards used for year-to-year comparisons is smaller than the sample used in Table 5. Based on this smaller sample, fees averaged \$95 on standard cards and \$145 on gold cards in June 2010. Rewards benefits averaged 0.55 per cent of spending.

As with other features of credit cards, there is considerable variation in interest rates. As at the end of June 2010, credit card interest rates ranged from 10.8 per cent per annum for some low rate products to in excess of 20 per cent per annum. In 2009/10 average interest rates increased by 1.55 percentage points for standard cards and 1.40 percentage points for low rate cards, to stand at 19.45 per cent and 13.35 per cent, respectively, at the end of June 2010. These increases were broadly in line with increases in the cash rate.

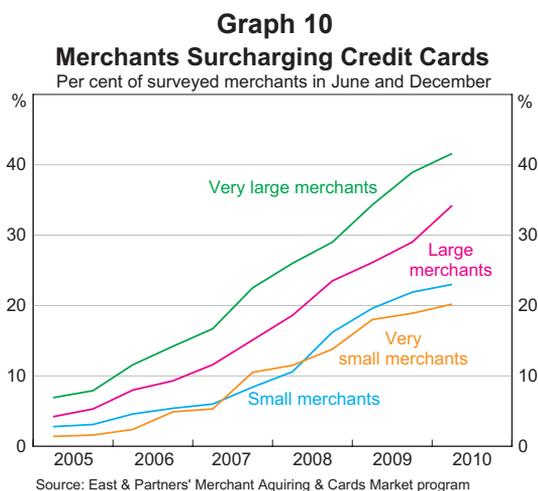
Given the close association with deposit accounts, pricing of debit cards to cardholders tends to be more closely linked to other account-keeping costs. The Bank's debit card reforms introduced in 2006 made it more cost effective for financial institutions to offer 'all you can eat' accounts whereby cardholders are charged a flat account-keeping fee, for which they can make an unlimited number of EFTPOS, 'own ATM' and internet/telephone banking transactions. Some of these accounts also include unlimited cheque and branch transactions, generally for a slightly higher monthly fee.

As noted in last year's Annual Report, pricing arrangements for debit cards have been largely unchanged in the past few years with average account-keeping fees remaining relatively constant at around \$4 per month. There is, however, variation across institutions, with some limiting the number of fee-free transactions but charging a slightly lower monthly fee, while other institutions offer 'all you can eat' accounts for a zero monthly fee.⁴

Surcharging

The removal of 'no surcharge' rules that had been imposed on merchants by the international card schemes has played an important role in improving the price signals cardholders face when making payments. Although surcharging was slow to develop initially – owing to the strong expectation of cardholders that no surcharges would apply – data from East & Partners' semi-annual survey of the merchant acquiring business show that the rate of surcharging among merchants has grown strongly in recent years. In June 2010, 26 per cent of merchants surveyed imposed a surcharge on at least one of the credit cards they accepted (Graph 10). Surcharging remains most common among very large merchants (those with annual turnover greater than \$340 million) at 42 per cent. The proportion of smaller merchants that surcharge is around 20 per cent.

The survey also suggests that surcharging is set to become increasingly commonplace in Australia, with only 17 per cent of merchants having no plans to surcharge in the near future, down from almost 65 per cent in June 2005. Less than 4 per cent of very large merchants and 26 per cent of very small merchants have no surcharging plans. The Bank is planning its own more comprehensive survey of merchant surcharging practices, the results of which will be available for publication in 2010/11.



⁴ In addition, many financial institutions waive monthly account-keeping fees if the account holder maintains a balance above a certain amount or makes sufficient deposits each month.

Fraud

Although fraud rates in Australia have risen in recent years, they remain well below international levels. Overall, payments fraud rose by 13 per cent over the past year, to 9.4 cents per \$1 000 of payments (Table 6). The weighted-average fraud rate on payment cards (credit, charge and debit cards combined) was 33 cents per \$1 000 transacted in 2009, an increase of 1 per cent from the previous year. This is around half of the rate of fraud experienced on cards in the United Kingdom.

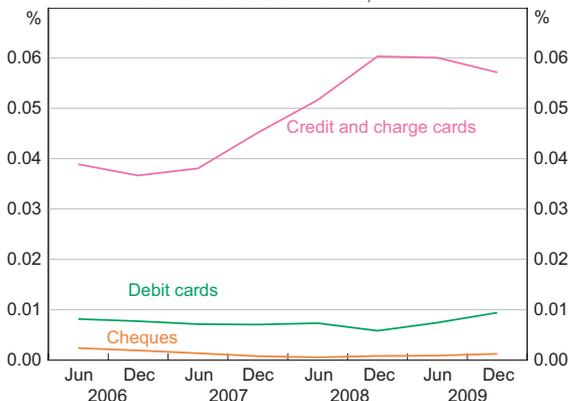
The largest component of payments fraud is credit and charge card fraud, accounting for over 75 per cent of the value of payments fraud in 2009. While the total value of credit and charge card fraud has been steadily increasing over recent years, the rate of fraud on those cards fell in 2009 to 57.1 cents per \$1 000 from 60.3 cents in 2008 (Graph 11). Over the same period, debit card fraud rose from 5.8 cents to 9.4 cents per \$1 000 transacted and cheque fraud also increased, from 0.8 cents to 1.2 cents per \$1 000 transacted.

Table 6: Fraud on Australian-issued Payments
Per \$1 000 transacted (cents)

	2008	2009
All instruments	8.3	9.4
All cards	32.7	33.1
Credit/charge card	60.3	57.1
Debit card	5.8	9.4
Cheque	0.8	1.2

Source: Australian Payments Clearing Association

Graph 11
Fraud Rates on Australian Payments
Per cent of transaction value, annual*



* From December 2008 onwards, rates of credit and charge card fraud have been revised upward and debit card fraud rates downward due to a change in reporting methodology by APCA
Source: APCA

One response to rising fraud rates on credit and charge cards has been the introduction of chip cards and personal identification number (PIN) authorisation at the point of sale. Chip cards are inherently more secure than the traditional magnetic stripe-based cards, as they are much more difficult to clone or copy. In countries where chip and PIN have been introduced, card fraud rates have fallen significantly. For example, in the United Kingdom, where the migration to chip and PIN is complete, a 28 per cent decline in card fraud losses was experienced between 2008 and 2009. The migration to chip in Australia is still underway, with full chip rollout likely to take several more years to complete. Nevertheless, the effect of chip and PIN may be starting to have positive results. In 2009, skimming fraud on Australian-issued credit cards fell to \$37.5 million from \$50.2 million in 2008, while the value of skimming fraud on foreign-issued credit cards used in Australia declined by almost 50 per cent, from \$78.3 million to \$40.6 million (Graph 12). Nonetheless, continued reliance on magnetic stripe infrastructure during the transition to chip and PIN makes Australia vulnerable to counterfeit and skimming fraud. For example, Australia and the

United States – which also still relies on magnetic stripe infrastructure – have become among the most common countries for overseas fraud on UK-issued cards.

Skimming and counterfeit fraud is not confined to credit cards. Even though the fraud rate for debit cards in Australia remains below the rate for credit cards, it rose sharply in 2009. This rise is attributed to a significant increase in the incidence of skimming fraud at ATMs and point-of-sale terminals. Skimming fraud on debit cards rose from around \$5.8 million in 2008 to \$17.6 million in 2009 (Graph 13). EFTPOS Payments Australia Limited, the company that manages the EFTPOS system, has indicated that from 2011, all newly issued EFTPOS cards will incorporate chip technology, with the transition to full chip compliance to be completed by 2014.

While the introduction of chip technology is aimed at addressing fraud committed at the point of sale, the rate of card-not-present (CNP) fraud continues to rise. CNP fraud involves the theft of genuine card details, which are then used remotely (over the internet, by phone or by mail order). In 2009, CNP fraud on Australian-issued credit cards rose from \$72.8 million to \$88.7 million. More than half of this fraud was perpetrated overseas, reflecting the increasingly borderless nature of payments fraud. The card schemes are continuing to work on developing ways of controlling CNP fraud.

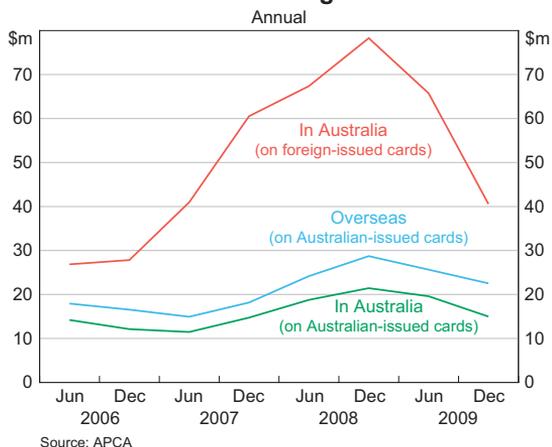
International regulatory developments in retail payments

With the decline of cheques and increase in the importance of card payments in retail payment systems around the world over recent years, these systems have faced increased regulatory scrutiny. Decisions are being made about the way to manage the decline in the use of cheques. And the level of competition and efficiency in the debit and credit card markets is under ever closer scrutiny from regulators, most notably in Europe and North America.

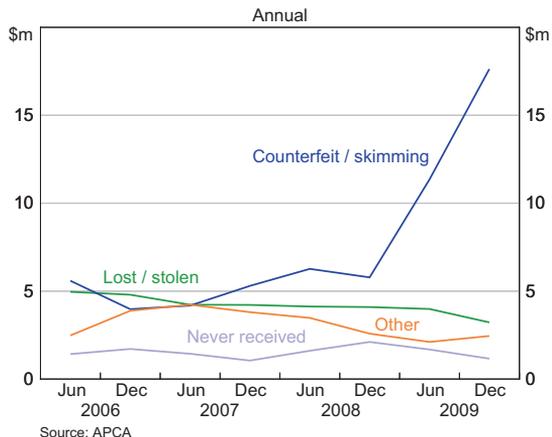
In response to the downward trend in cheque use in the United Kingdom, the UK Payments Council plans to phase out cheques, targeting an end date for cheques of 2018. In response to public disquiet about this move, however, this will only be enforced if a review of progress in 2016 shows that suitable alternative payment methods are available and a cost benefit analysis on the phase out is favourable.

Interchange fees on credit and debit cards have been intensively examined by regulators in Europe over a number of years. In December 2007, the European Commission (EC) ruled that MasterCard’s cross-border

Graph 12
Counterfeit / Skimming Fraud on Credit and Charge Cards



Graph 13
Debit Card Fraud on Australian-issued Cards



interchange fees were illegal under European Union (EU) competition law. As a result, MasterCard was required to remove its interchange fees on cross-border card transactions with MasterCard and Maestro-branded debit and consumer credit cards in June 2008. Since then, MasterCard has been in discussions with the EC on an appropriate methodology to determine its cross-border multilateral interchange fees (MIFs).

MasterCard has now provided the EC with undertakings. In return, the EC has agreed not to pursue MasterCard further on its MIFs. The undertakings are that from July 2009:

- the cross-border MIF will be calculated based on the savings to merchants obtained from transactions being made using cards rather than cash. The resulting maximum weighted-average MIF will be 0.3 per cent per transaction for consumer credit cards (down from a range of 0.8 to 1.9 per cent in 2007) and 0.2 per cent per transaction for consumer debit cards (down from a range of 0.4 to 0.75 per cent in 2007);
- scheme fee increases announced in October 2008 will be repealed;⁵ and
- there will be improvements to transparency, including merchants being offered and charged different rates for different cards (unblended rates).

The EC has also accepted commitments from Visa Europe to reduce its MIFs for debit transactions for the next few years. The reductions are for cross-border transactions, and national transactions in EU states where domestic interchange rates have not been set among local Visa participants. The reduction to 20 basis points is in line with the undertakings given to the EC by MasterCard in April 2009. Unlike MasterCard, however, Visa has given no commitments on MIFs applying to credit card transactions. Credit MIFs therefore remain under investigation by the EC, as does the honour-all-cards rule.

As well as taking action on interchange fees, European regulators have been concerned about the degree of competition in the debit card market. They have been encouraging the development of at least one new pan-European debit card scheme to compete with MasterCard's 'Maestro' and Visa's newly launched 'V Pay' scheme. Both these schemes offer Europe-wide payments as required by the European regulators, while domestic debit schemes, if unchanged, cannot.

In the United States in July 2010, Congress passed the *Dodd-Frank Wall Street Reform and Consumer Protection Act* and the President has signed it into law. The Act includes provisions to cap interchange fees on debit cards. The US Federal Reserve now has responsibility for ensuring that debit interchange rates are 'reasonable and proportional' to costs incurred (per transaction) by the issuers of the debit cards. As well, the legislation prohibits card schemes from requiring that transactions are processed only across their networks, allows merchants to discount for use of different payment instruments, and permits merchants to set minimums of up to US\$10 for transactions using credit cards.

⁵ In September 2008, MasterCard Europe notified significant increases in its 'card scheme fees' from 1 October 2008. This drew complaints from merchants and the EC was considering whether the action represented an attempt to circumvent the ban on cross-border multilateral interchange fees.

Competition and Co-operation in Retail Payments

Introduction

In its 2007/08 review of the card payments reforms, the Board indicated that it would be prepared to step back from interchange fee regulation if it was satisfied that the competitive environment was such that interchange fees would not rise in the absence of regulation. The Board reaffirmed this in August 2009, but concluded that, while progress had been made, at that time it was not sufficient to provide it with the necessary confidence to remove regulation.

In this environment, the industry has continued to focus its efforts on improving competition in the payments system. This chapter discusses some of the developments in competition between retail payment systems over the past year and outlines some of the key retail payments initiatives that are underway. Some initiatives, such as developments in the EFTPOS system and the MAMBO (Me at My Bank Online) project, have direct significance for competition between retail payment systems and, potentially, have a bearing on the future of interchange regulation. Others, such as the move to new network arrangements and the formation of a broad industry payments forum, are examples of industry co-operating on strategic issues while improving competition within payment systems.

The only regulatory change made by the Board during 2009/10 was aimed at supporting these industry efforts. Regulations on multilateral EFTPOS interchange fees were relaxed to place them on a consistent footing with the restrictions already applying to scheme debit systems.

The Competitive Landscape for Retail Payment Systems

Competition between debit card systems

The Board's preparedness to move away from regulation of card interchange fees following the 2007/08 Review was predicated on there being a sufficiently strong competitive environment to prevent interchange fees rising over time from their regulated levels. This requires not just strong competitors to the international card schemes, but for competition to work in a way that restrains interchange fees, rather than driving them up as has been the tendency overseas.

The main domestic competitor to the international card schemes is the EFTPOS system, which is well-established and relatively inexpensive to operate. However, two main factors have affected the way in which the EFTPOS system competes with the scheme products. First, although EFTPOS performs essentially the same function as a scheme debit system at the point of sale, its interchange fees flow from the issuer to the acquirer, the opposite to the scheme products. This provides quite different incentives for system participants and end users. Second, as a system based on bilateral agreements, EFTPOS historically has not had the strong centralised governance necessary to make strategic decisions in the interests of the system.

The difference in interchange fee flows has tended to result in card issuers favouring scheme debit cards and promoting them to customers, while merchants have tended to favour EFTPOS. This has been an important factor behind two significant recent developments. First, in the first half of 2009, Westpac mailed out a large number of scheme debit cards to replace its customers' EFTPOS cards. While most scheme debit cards presented at the point of sale can be processed either through the scheme networks or the EFTPOS system (depending on whether the customer presses 'credit' or 'cheque/savings') the Westpac cards carried a sticker encouraging the customer to press 'credit'. For the majority of cardholders this had little practical effect because the funds are drawn from the same account and, in most cases, the cardholder does not pay a fee for either transaction type (Westpac customers holding, for example, the standard *Choice* account do not pay per transaction EFTPOS fees). However, because of the different interchange flows, the cost to the merchant of the transaction is likely to be significantly higher if processed through the scheme networks and, correspondingly, the revenue to the issuer is higher even though the underlying transaction is identical.

A related development was the announcement by Woolworths in April 2010 that it would process all transactions on scheme debit cards in its stores through the EFTPOS system rather than the MasterCard and Visa systems – effectively turning off the 'credit' button for transactions on scheme debit cards.⁶ This is intended to counter the growing cost to Woolworths of scheme debit transactions and once again has little practical effect on most cardholders beyond the need to enter a PIN.

In declining to accept debit payments through the scheme networks, Woolworths is making use of a freedom provided by the Board in 2007. At that time, the Board required that the card schemes remove their so-called 'honour all cards' rules as they applied to debit and credit transactions. These rules required merchants that accepted scheme credit cards to also accept scheme debit cards (and *vice versa*), regardless of whether merchants considered the cost of accepting the cards to outweigh the benefits. The Board considers merchants' ability to decline acceptance of individual payment types to be beneficial for both competition and the efficiency of the payments system. Woolworths is the first major merchant to have made use of this ability.

A widespread move by other issuers to follow Westpac's strategy without any additional merchant resistance could significantly alter the competitive environment for debit cards. The Board is watching developments closely and will factor these actions into its assessment of the competitive landscape.

Regardless of the ultimate effect, these developments serve to demonstrate how important interchange fees are to the dynamics of the debit card market in Australia. While MasterCard and Visa have been able to use interchange fees to promote use of their products, EFTPOS historically has had little capacity to do the same because interchange fees have been negotiated bilaterally, with little scope for renegotiation. EFTPOS has also lacked centralised governance to set a strategic direction. EFTPOS interchange fees were lowered to between 4 and 5 cents (paid to the acquirer) in 2006, only as a result of a standard imposed by the Board.

The Board's desire to see more effective governance arrangements for the EFTPOS system led it to push for the establishment of an EFTPOS scheme that could promote and make decisions in the interests of the EFTPOS system. The Board was of the view that this would enable EFTPOS to strike the best balance between appealing to merchants, issuers and cardholders, and would provide a more competitive environment for debit cards. The industry has embraced this suggestion. Following initial work by APCA, EFTPOS Payments Australia Limited (EPAL) was established in April 2009. It is owned and funded by its fourteen member institutions,

⁶ This does not mean that customers cannot use credit cards at Woolworths, only that scheme debit cards cannot be processed through the scheme network.

including two large merchants. EPAL's board comprises eight directors appointed by the company's members and three independent directors, one of which is Chairman. The Chief Executive was appointed in March 2010.

While it has taken time, EPAL should now be able to promote the EFTPOS brand and position the system in a way that makes it attractive to the various players. In June 2010, EPAL made its first strategic announcement – that it will progressively convert EFTPOS cards to EMV chip between 2011 and 2014 to provide greater security and the potential for enhanced functionality.

At present, the EFTPOS system continues to operate with bilaterally negotiated interchange fees that have been constrained between 4 and 5 cents, paid to the acquirer. The Board has acknowledged that EPAL may wish to realign interchange fees in the interests of promoting the system. While the Board has a long-held view that there is little justification for interchange fees in a mature debit card system, it nonetheless sees the importance of placing EFTPOS on an equivalent regulatory footing to the scheme debit systems now that it has a greater decision-making capacity. The Bank issued draft amendments to the EFTPOS interchange fee standard for consultation in September 2009. These proposed a cap on EFTPOS interchange fees of 12 cents, meaning that interchange fees could be up to 12 cents paid to the issuer or any amount paid to the acquirer. After consultation, the Board decided to adopt this approach for the weighted-average of multilateral (that is, centrally set) interchange fees in the EFTPOS system, but to retain the current 4 to 5 cent range (paid to the acquirer) for bilateral interchange fees. The industry had argued that the capacity to renegotiate bilateral interchange fees might be disruptive and ultimately counterproductive. The revised Standard came into effect from January 2010. EPAL has yet to announce any intentions in respect of multilateral interchange fees.

The establishment of EPAL has meant that some broader changes in governance structures for consumer payments are required. Decision-making in relation to clearing and issues such as device standards have to date been made through APCA's Consumer Electronic Clearing System (CECS) and its management committee. CECS rules and procedures cover both the EFTPOS system and the ATM system. With decision-making in relation to the EFTPOS system now in the hands of EPAL, some recasting of the role of APCA needs to occur. APCA and EPAL are discussing these issues and APCA will be working on amending the CECS rules and procedures accordingly over the coming year.

Competition for online debit payments

The Board's conclusions to the 2007/08 Review also indicated that it saw greater competition in the online payments sphere as an important element of the competitive environment. While scheme debit (and credit) cards are readily used for online payments, the use of EFTPOS has been restricted to environments where the card can be physically swiped and a PIN entered in order to maintain transaction security. Therefore, if customers wish to make an online payment from a deposit account, they are currently restricted to using a scheme debit card, internet 'pay anyone' transactions – which are somewhat cumbersome – or a specialist online payment system like Paymate, PayPal or POLi.

The major banks indicated in a letter to the Bank in July 2009 that they intended to support a new system, operated by BPAY, which, among other things, would provide a bank-supported system to make online payments from a deposit account. Known as MAMBO, the system will provide a platform that could allow real-time confirmation of payments as required for online commerce. Work on building this capacity within BPAY has been underway for some time with development work within the banks now beginning. The major banks wrote to the Reserve Bank again in May 2010 confirming their commitment to the deployment of MAMBO by December 2011.

Network Architecture

While developments with EFTPOS and MAMBO may ultimately be important in shaping competition between retail payment systems, active competition between participants within payment systems – in most cases financial institutions – is also important for an efficient payments system. In addition to making governance difficult, the bilateral structure of some of the main retail systems in Australia has tended to dampen competition between participants. This occurs because a new direct participant must establish business arrangements and physical connections with each existing participant to be able to participate fully. The more existing participants there are, the greater the cost to a new entrant and the less likely they are to join the system.

While there have been some efforts to simplify the negotiation of business arrangements, for example via the EFTPOS and ATM Access Codes, the hurdle of physical connection also presents difficulties. Access Regimes imposed by the Bank have capped the cost that existing participants in the EFTPOS and ATM systems can charge new entrants (at \$87 776 for the EFTPOS system and \$76 700 for the ATM system), but the cost is still large when multiplied across the numerous connections required. The significant barriers to entry imposed by these arrangements were noted by the Board in its December 2008 Consultation Document on the ATM Access Regime. The Board expressed a strong desire for the architecture to be changed to overcome these problems.

The cost of moving to a different network architecture combined with the different investment cycles of participants has in the past made consideration of a wholesale change to a more efficient architecture difficult. However, the technology underpinning many bilateral links is dated and will shortly no longer be supported by its providers. Many participants using the older technology are, therefore, being faced with the need to renew their connections at around the same time. This has presented a once-in-a-generation opportunity for the industry to move to more access-friendly system architecture. During 2009, the Bank embarked on a process of garnering consensus on a move to such arrangements. The industry, through APCA, is managing this process, setting out detailed plans to migrate the industry to a Community of Interest Network (COIN) for message exchanges in the cheque, direct entry and ATM and EFTPOS systems.

The new network architecture and arrangements allow a participant to communicate with every other participant by establishing a single connection to the COIN, which takes the form of a network 'cloud'. The Reserve Bank is also offering a facility to switch messages between the SWIFT system and the COIN where required. The network began carrying live payments traffic in February and the target is for messaging in the direct entry and cheque systems to migrate entirely to the COIN by June 2011 and for ATMs and EFTPOS to migrate by December 2011. By August 2010, 11 pairs of institutions had migrated messaging for direct entry and cheques to the system and a number of migrations had already been completed for ATMs and EFTPOS.

For consumer electronic payments an additional layer of complexity exists in current arrangements because, even when participants have the ability to exchange messages with one another, participants can have slightly different requirements for the form of those messages, once again complicating access for a new participant. This was highlighted by the Board in its Consultation Document for the ATM Access Regime. In response, the industry has established standard messaging and security specifications for the benefit of new participants.

The Board believes that these developments, once fully in place, will represent a significant step forward in making direct participation in some of the key retail payment systems more accessible.

Industry Co-operation

Another way in which the industry has responded to the Board's call for industry-led improvements to the competitive environment has been the formation by APCA of the Australian Payments Forum (formerly the Card Payments Forum). While APCA has for many years provided a forum for co-ordination between the participants in payments clearing and settlement, its membership is relatively narrow – reflecting its clearing and settlement mandate – and its focus has tended to lean towards operational issues. The Australian Payments Forum has a broader membership, including the international card schemes and other stakeholders, and focuses on ways to promote innovation and system evolution over the long term, while ensuring healthy competition. One of its objectives is to generate co-operative industry solutions where a need is identified by Forum participants. The Forum has identified: network connectivity; message and interchange standards; system integrity and fraud prevention; system innovation; and public policy engagement as areas where industry collaboration could enhance the payments system and provide a better platform for competition. Most recently the Forum has called for the establishment of a financial fraud risk centre of excellence, which could collect and disseminate data and research related to fraud prevention.

Separately, the Board announced in May that it would undertake a strategic review of innovation in the payments system. The project will identify areas in which innovation in the Australian payments system may be improved through more effective co-operation among stakeholders and regulators. It will take a medium-term perspective, looking at trends and developments in overseas payment systems and potential gaps in the Australian payments system that might be addressed through innovation. As part of this process, the Bank will be conducting a second survey on the use of payment instruments by consumers and will be drawing on its relationships with other central banks to assess innovative developments in other countries.

There will be a number of opportunities for consultation with all stakeholders, including participants in the payments system, consumers, businesses and government. The Board anticipates releasing a consultation document during the current financial year and finalising its conclusions by the end of 2011.

High-value Payments System

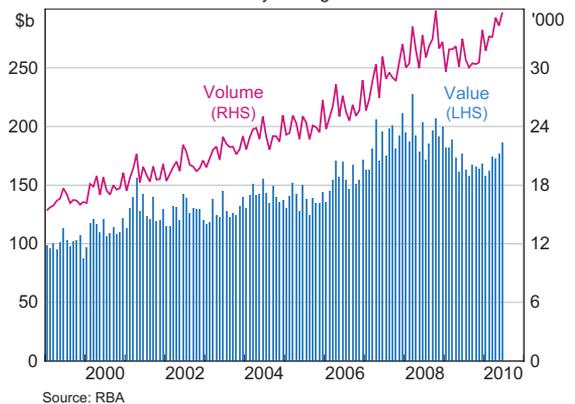
Australia's high-value payments system is the Reserve Bank Information and Transfer System (RITS), owned and operated by the Reserve Bank. RITS is a real-time gross settlement (RTGS) system in which settlement of transactions occurs, one by one, in real-time across Exchange Settlement (ES) accounts held at the Reserve Bank.

The number of transactions settled through the RTGS system increased over 2009/10, reversing the decline that occurred over the previous year following the market turbulence of late 2008 (Graph 14). Growth in the value of transactions has not been as strong, with the daily average value of transactions settled in June 2010 still 8 per cent below the levels of mid 2008.

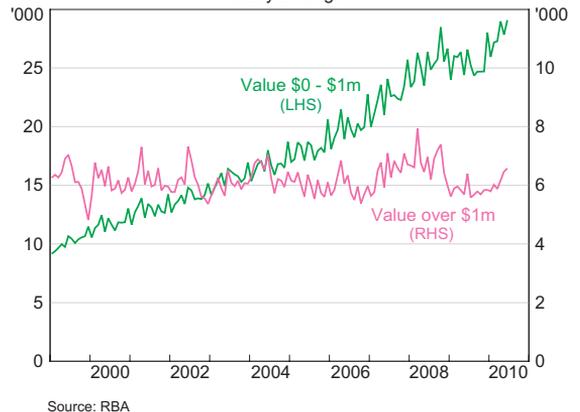
Although specifically designed for the settlement of high-value payments, the RTGS system also settles a significant number of small-to-medium sized payments. In fact, all the growth in the number of transactions over the past decade has been in payments under \$1 million (Graph 15). The number of both small-to-medium (under \$1 million) and large-sized payments declined during the market turbulence, although the number of large-sized payments fell by more and has not recovered to the same extent as the number of small-to-medium sized payments over 2009/10.

Equity transaction-related payments are settled across ES accounts once per day on a net basis. The average daily value of participants' cash settlement obligations in this batch in 2009/10 was \$508 million, down by 18 per cent from 2008/09, reflecting increased netting efficiency within the batch.

Graph 14
RTGS Transactions
Daily average



Graph 15
Number of RTGS Transactions
Daily average



RTGS system liquidity – as measured by the sum of opening ES balances and intraday repurchase agreements – increased during the market turmoil of 2008/09 and, although below its late 2008 peak, remains at a high level. This increased liquidity has allowed payments to be made earlier in the day. On average, half of each day's payments by value were completed by 1.45pm during 2009/10, an hour earlier than in 2006/07.

RTGS payments account for around 90 per cent of the value of interbank settlements. The remaining 10 per cent occur on a deferred net basis and are related to retail payment systems. Interbank obligations arising from retail payment systems are settled across ES accounts in the daily 9am batch. In 2009/10, the daily average of total participants' obligations in the 9am batch was approximately \$1.8 billion, unchanged from the previous year.

RITS Self-assessment

The Board has responsibility for the safety and stability of the payments system in Australia. An important part of this is ensuring that Australia's systemically important payment system – RITS – meets the *Core Principles for Systemically Important Payment Systems* (Core Principles) developed by the Bank for International Settlements' Committee on Payment and Settlement Systems (CPSS). The Bank therefore periodically conducts self-assessments of RITS. The latest self-assessment was conducted in 2009; this updated an assessment undertaken in 2005.

The Core Principles include 10 principles relating to the minimisation and management of financial and operational risks in payment systems, the efficiency of payment systems and the effectiveness of their governance arrangements. The Core Principles also outline the responsibilities of central banks in applying the principles (Box A).

Since the previous self-assessment of RITS was undertaken in 2005, a number of changes to RITS had been implemented in response to market and technological developments, and the evolution of international best practice. These changes included upgrades to the RITS operating system and hardware, and enhancements to business continuity and security arrangements, as well as the implementation of targeted bilateral offset functionality, a tool that assists participants in managing credit exposures to clients while minimising liquidity needs. The 2009 self-assessment concluded that RITS met all of the Core Principles and that the Reserve Bank met the responsibilities of central banks in applying the Core Principles. Nevertheless, it was noted that work at the Reserve Bank was ongoing to ensure that RITS continues to meet the Core Principles and international best practice. In late 2009, regular rotation of RITS production operations between the primary and backup sites commenced – strengthening the operational reliability of the system. Work is underway, in conjunction with APCA, to allow direct credit and debit transactions, which are currently settled on a net deferred basis, to be settled on a same-day basis, thus reducing credit and operational risks.

Box A

The Core Principles and Central Bank Responsibilities

Core Principles for Systemically Important Payment Systems

- I. The system should have a well-founded legal basis under all relevant jurisdictions.
- II. The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.
- III. The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.
- IV.* The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.
- V.* A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.
- VI. Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.
- VII. The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.
- VIII. The system should provide a means of making payments which is practical for its users and efficient for the economy.
- IX. The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.
- X. The system's governance arrangements should be effective, accountable and transparent.

* Systems should seek to exceed the minima included in these two Core Principles.

Responsibilities of the Central Bank in Applying the Core Principles

- A. The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.
- B. The central bank should ensure that the systems it operates comply with the Core Principles.
- C. The central bank should oversee compliance with the Core Principles by systems it does not operate and it should have the ability to carry out this oversight.
- D. The central bank, in promoting payment system safety and efficiency through the Core Principles, should co-operate with other central banks and with any other relevant domestic or foreign authorities.

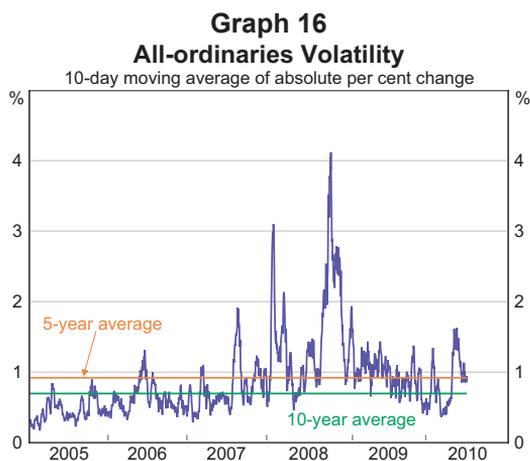
Oversight of Clearing and Settlement Facilities

The Reserve Bank Act assigns responsibility to the Payments System Board for ensuring that the powers and functions of the Reserve Bank relating to the oversight of clearing and settlement (CS) facilities under the Corporations Act are exercised in a way that ‘will best contribute to the overall stability of the financial system’.

Under the Corporations Act, CS facilities licensed to operate in Australia are required to comply with financial stability standards set by the Reserve Bank.⁷ Four licensed CS facilities, all owned by the Australian Securities Exchange (ASX), are currently required to meet the Reserve Bank’s *Financial Stability Standards*.⁸

- ASX Clear (formerly Australian Clearing House) – the central counterparty (CCP) for cash equities, pooled investment products, warrants, certain interest rate products and equity- and commodity-related derivatives traded on the ASX market;
- ASX Clear (Futures) (formerly SFE Clearing Corporation) – the CCP for derivatives traded on the ASX 24 market (formerly the SFE market);
- ASX Settlement (formerly ASX Settlement and Transfer Corporation) – the settlement facility for cash equities and warrants traded on the ASX market; and
- Austraclear – the settlement facility for fixed-income securities traded in OTC markets.

While assessment is ongoing throughout the year, the Board conducts a formal assessment of each facility’s compliance with the Financial Stability Standards once a year. The assessments covering the 2008/09 financial year were published in September 2009.



Source: Bloomberg

Developments in Clearing and Settlement over 2009/10

Volatility in financial markets declined over most of 2009/10 as the global financial system recovered from the severe dislocation experienced in late 2008 and early 2009. Average volatility, as measured by the absolute per cent change in the S&P ASX All-ordinaries index, almost halved from 1.5 per cent in 2008/09 to 0.8 per cent in 2009/10, although there was an increase in volatility towards the middle of 2010 associated with concerns about sovereign credit risk in Europe (Graph 16). Concomitant with the reduction in volatility, both the value and volume of trades in

⁷ These standards, along with minimum measures relevant to meeting the standards and guidance on their interpretation, are available at: <http://www.rba.gov.au/payments-system/clearing-settlement/standards/index.html>.

⁸ An additional licensed facility, IMB Limited, falls outside the scope of the Financial Stability Standard for Securities Settlement Facilities due to its small size and the limited nature of its operations. The licensed ASX entities (other than Austraclear) were renamed with effect from August 2010.

the cash equity market increased significantly in 2009/10. The average daily value of turnover in the cash equities market increased by 21 per cent in the year – although part of this increase reflected higher share prices.

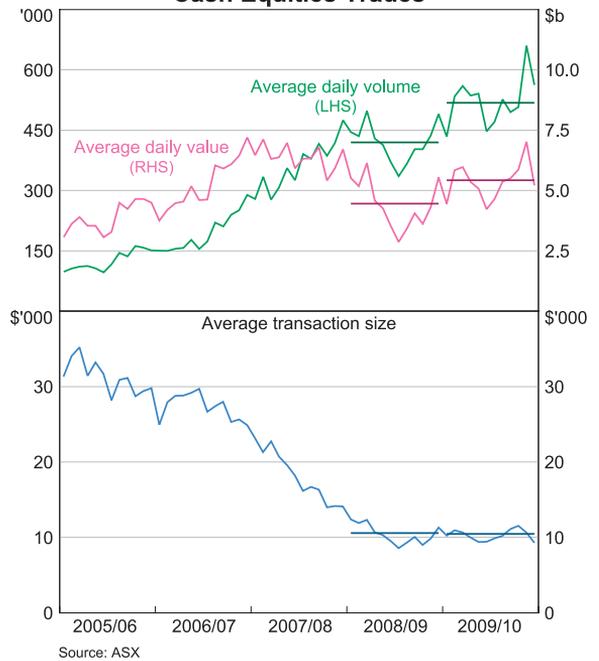
In the main, however, the strong growth in trading activity in 2009/10 reflected the reduction in perceived risk as the recovery in global financial markets progressed. Growth in the average daily number of trades was slightly stronger than in the value of trades, at 24 per cent in 2009/10, so that the average trade size fell slightly (Graph 17). The average trade size fell by only 3 per cent in 2009/10, compared with substantial falls in earlier years reflecting the long-term trend towards breaking up large orders for gradual release into the market and the share price falls over 2007 and 2008. Higher share prices since early 2009 have helped contribute to the stabilisation in average trade size over that period.

Activity in the ASX and ASX 24 derivatives markets also increased in 2009/10 in line with the recovery in global financial markets. Volumes traded on the ASX 24 market grew by 19 per cent. Volumes traded on the smaller ASX derivatives market grew by 14 per cent.

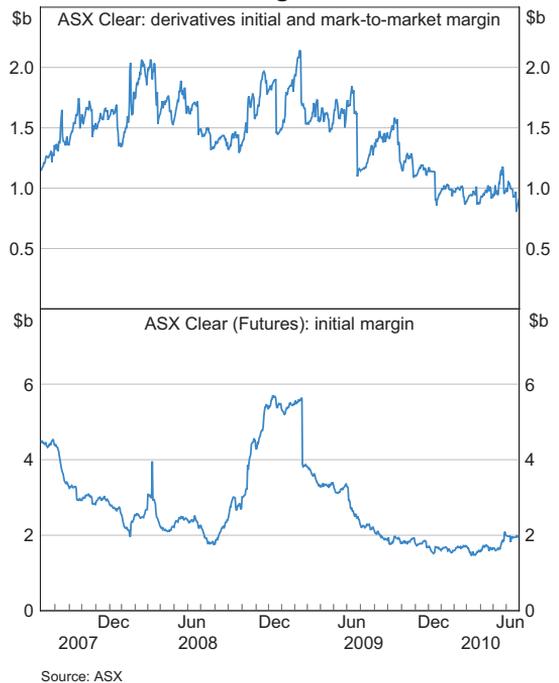
The net effect of the offsetting influences of reduced volatility and increased volume was that the risks faced by the CCPs decreased during 2009/10. ASX Clear’s average daily exposure to participants’ settlement obligations arising from cash equities trades on the ASX market decreased by 10 per cent to \$889 million.⁹ Risks faced by the CCPs in the derivatives market also fell in 2009/10. Both ASX Clear and ASX Clear (Futures) generally reduced initial margin rates for derivatives over 2009/10. As a result the daily average initial and mark-to-market margin collected by ASX Clear fell by 31 per cent to \$1.1 billion (Graph 18). Initial margin collected in respect of trades on the ASX 24 market fell by 51 per cent to \$1.8 billion.

The value of securities transactions settled by ASX Settlement increased by 6 per cent in 2009/10 to an average daily value of \$8.5 billion. (The growth in the

Graph 17
Cash Equities Trades



Graph 18
Margins



⁹ The daily exposure faced by ASX Clear arises from unsettled trades through the three-day settlement cycle. ASX Clear’s average total settlement exposure from a single day’s trades was \$421 million in 2009/10, down by 10 per cent from the previous year.

value of transactions settled differs from the growth in the value of securities traded because it includes settlement of non-market transactions and multilateral netting of clearing participants' obligations.) In contrast, the average daily value of debt securities settled through Austraclear edged downwards by 1 per cent to \$41.8 billion. (This includes outright purchases and sales of securities, and securities transferred to effect a repurchase agreement.)

Another major development this year was the prospect of competition between operators of equity market trading platforms. In response to the prospect of approved market operators (AMOs) entering the Australian market, ASX has announced the creation of a Trade Acceptance Service (TAS), which will allow trades executed on AMOs' platforms to be cleared and settled through ASX Clear and ASX Settlement respectively.¹⁰ In late March 2010, the Minister for Financial Services, Superannuation and Corporate Law gave in-principle approval to an application for a market licence by Chi-X, which plans to offer a platform to conduct secondary trading in ASX-listed shares. Final approval of Chi-X's licence is dependent on Chi-X meeting all of the necessary legislative requirements and the finalisation of the regulatory framework for competition in trading services. The Reserve Bank cannot see any reason why the TAS, as currently proposed, would affect the compliance of ASX Clear and ASX Settlement with the relevant Financial Stability Standards.

2008/09 Assessment

In September 2009, the Reserve Bank published its Assessment of the four licensed CS facilities against the relevant Financial Stability Standards, covering the year to end June 2009. The Reserve Bank concluded that all four facilities met the relevant standards over this period.

The assessment period was characterised by heightened volatility in financial markets in late 2008, following the failure of the US investment bank, Lehman Brothers. In light of these events, the Reserve Bank closely examined the facilities' response to the challenges posed by this volatility. Both ASX Clear and ASX Clear (Futures) responded to the changing risk environment by intensifying their participant monitoring, increasing margin requirements, and pro-actively adjusting other risk-control parameters as necessary. All four licensed CS facilities were resilient to the turbulent market conditions during the period.

The Assessment also included a detailed assessment of the licensed CS facilities against the measure of the standards relating to operational risk management. The Reserve Bank concluded that ASX's arrangements are consistent with these measures. Nevertheless, the Reserve Bank noted that best practice in respect of operational risk continues to evolve and the licensed CS facilities should respond both to this evolution and to specific issues identified by unfolding events.

Other developments examined included:

- *Increase in participation requirements:* In January 2009, ASX Clear increased minimum capital requirements for its clearing participants to \$2 million. ASX Clear also announced its intention to further increase participation requirements to \$10 million with effect from 1 January 2010. Following a joint review of this policy by the Reserve Bank and the Australian Securities and Investments Commission (ASIC), at the request of the Minister for Financial Services, Superannuation and Corporate Law, the time-line for implementation of this further increase was revised, with requirements to increase to \$5 million, effective 1 July 2010 and then to \$10 million at a later date, subject to sufficient depth and competition in the third-party clearing market.

¹⁰ Details of ASX's TAS are available at: http://www.asx.com.au/professionals/trade_acceptance_service/index.htm.

- *Exit from default-insurance arrangements:* Late in the assessment period, both CCPs announced their intention to exit from the default-insurance arrangements that formed part of their risk resources available to meet losses arising in the event of a participant default. This followed ratings downgrades of their insurer. These insurance arrangements were replaced with a commercial bank loan facility in June 2009 for ASX Clear, while ASX Clear (Futures) reduced its reliance on the insurance component of risk resources from July 2009. In late 2009, these arrangements were replaced for both CCPs with intragroup subordinated loans from ASX Clearing Corporation, which are in turn funded by a commercial bank loan facility.
- *Enhancements to equities settlement arrangements:* Following the Reserve Bank's *Review of Settlement Practices for Australian Equities* (published in May 2008), ASX took steps to enhance its settlement arrangements. The planned enhancements included the removal of ASX Clear derivatives margins from the CHESS (Clearing House Electronic Sub-register System) settlement batch to ensure that ASX Clear's risk-management arrangements are not dependent on the completion of settlement in the cash equity market (this subsequently occurred in February 2010), and the implementation of an earlier deadline for the back out of settlement obligations, which would mitigate uncertainty and any spill-over to the market at large if a settlement participant failed to meet its payment obligations.

ASX also initiated two reviews concerning risk management and operational processes during the assessment period:

- *Review of participant-monitoring arrangements:* ASX Compliance (ASX Markets Supervision prior to August 2010) undertook a review of participant-monitoring activities and launched a range of projects to enhance capital- and liquidity-monitoring arrangements.
- *Review of default-management processes:* Again, in light of some issues raised by the broker failures of early 2008, ASX embarked on a thorough review of default-management processes. In the first stage of this work, ASX drew up a comprehensive list of 'default intentions', setting out the factors to be taken into consideration at each key decision point, and reviewing capabilities.

ASX continued work in these areas throughout 2009/10. Progress on these matters will be considered in the 2009/10 Assessment.

The Reserve Bank also identified a number of areas where further consideration by ASX was encouraged. These included:

- *Routine margining of cash equities:* Notwithstanding that the size and duration of replacement-cost risk associated with cash equities is low relative to that in derivatives contracts, high volatility in the cash equity market during 2008/09 argued in favour of ASX Clear routinely collecting initial and variation margins over the three-day pre-settlement period. ASX subsequently consulted on this issue (as part of a broader consultation on ASX Clear's risk management controls) in late 2009 and engaged both ASIC and the Reserve Bank of Australia on the issue. In June 2010, ASX released a further consultation document setting out a proposed margining model.
- *Account segregation:* During the assessment period, ASX Clear consulted on a proposal to require that clearing participants maintain house and client accounts for cash equities. While acknowledging the cost of such a move, the Reserve Bank noted that segregation would be consistent with international best practice in this area and particularly relevant in the context of routine margining of cash equities. Account segregation was accordingly included in the consultation on margining of cash equities discussed above, but based on participant feedback was not considered further.

- *Triggers for an increase in fixed risk resources:* ASX was encouraged to develop clear guidance on the circumstances in which it would consider increasing the CCPs' fixed risk resources, rather than relying on additional collateral. As noted in the 2007/08 Assessment, there are shortcomings to relying too heavily on variable calls for additional collateral, particularly given lags in the calculation and settlement of such calls.
- *Intraday margining capabilities:* Due to changes in project priorities, ASX Clear had delayed the implementation of system enhancements to improve intraday margining capabilities. While accepting the reasons for the delay, in the Assessment the Reserve Bank reiterated its interest in delivery of these capabilities.
- *Treasury investment policy:* The Reserve Bank had previously observed that the CCPs' treasury investment policy could give rise to sizeable, concentrated exposures with the large domestic banks. While the Reserve Bank acknowledged that it would be difficult for the CCPs to reduce the concentration of investments among the largest domestic banks without compromising credit quality or liquidity, it encouraged ASX to keep under review the various options for reducing concentration in the treasury investment portfolio.
- *Participant-monitoring arrangements:* In light of the government announcement of reforms to market supervision in Australia, ASX was encouraged to consider any implications for the CCPs' arrangements for monitoring clearing participants.

Dialogue with ASX on several of these matters continued throughout 2009/10, with further developments to be addressed in the Bank's 2009/10 Assessment.

International Regulatory Developments

Following the financial market turbulence of recent years, policy makers and regulators around the world have sought to increase the resilience of the financial system. At the international level, the Financial Stability Board and G-20 have recommended actions to strengthen financial markets, and the financial institutions and financial market infrastructures that underpin them. The various aspects of these recommendations are being pursued by a range of bodies, including the Basel Committee on Banking Supervision, the CPSS, the International Organization of Securities Commissions (IOSCO), and national governments, central banks and regulators.

Two key developments in the payments area, in which the Reserve Bank has been involved, are the CPSS-IOSCO review of international standards for payment, clearing and securities settlement systems, and the international regulatory efforts to ensure a robust legal and operational infrastructure for the OTC derivatives market. During 2009/10, the Reserve Bank became a member of CPSS and the international OTC Derivatives Regulators' Forum (see 'Liaison Activity'), facilitating our involvement in this work, as discussed below.

CPSS-IOSCO Review of Standards

The CPSS, together with the Technical Committee of IOSCO, has produced three major sets of standards related to the stability and efficiency of payment, clearing and settlement systems:

- *Core Principles for Systemically Important Payment Systems* (CPSS, 2001);
- *Recommendations for Securities Settlement Systems* (CPSS and IOSCO, 2001); and
- *Recommendations for Central Counterparties (RCCP)* (CPSS and IOSCO, 2004).

The standards set out principles for the design and operation of these systems, and are used by many central banks and other regulators as a basis for their oversight activities. The standards also underpin the Financial Sector Assessment Program of the International Monetary Fund and the World Bank.

In February 2010, CPSS and IOSCO announced a comprehensive review of the three sets of standards. The review will look to assess and, where appropriate, strengthen the standards in light of the financial crisis and developments in the industry since the standards were originally introduced. The review is considered to be a key step towards the Financial Stability Board's objective of strengthening financial market infrastructure. The Reserve Bank is represented on a number of committees and working groups as part of the review. It is intended that a draft of the revised standards will be released for public consultation by early 2011.

Strengthening OTC Derivatives Markets

Efforts to improve risk management and transparency in OTC derivatives markets, which have been underway for a number of years, have gained increased attention following the global financial crisis. Statements of the Financial Stability Board and the G-20 have been directed towards encouraging a co-ordinated international approach to enhancing the financial infrastructure for these markets and increasing use of that infrastructure.

CPSS and IOSCO have undertaken two pieces of work aimed at strengthening OTC derivatives markets. The first is a review of the RCCP to ensure they remain appropriate for CCPs clearing OTC derivatives. This will ultimately result in additional guidance to the RCCP, specifically regarding their application to CCPs clearing OTC derivatives. The second piece of work considers the role of trade repositories for OTC derivatives, and establishes a set of considerations for such facilities and their overseers. A consultation process on both pieces of work has been undertaken. It is intended that this work will be folded into the general review of standards, outlined above.

Over the past year, major industry participants have made commitments to US and European regulators to increase transparency and risk management relating to their activities in OTC derivatives markets. These include commitments to increase use of market infrastructures, such as electronic processing platforms, CCPs and trade repositories, and additional infrastructures have commenced operation to service the OTC derivatives market. In the United States and Europe, legislation is being developed to increase the use of such infrastructures and effect other improvements to risk management and transparency in the OTC derivatives market.

At this stage, the Australian financial authorities – APRA, ASIC and the Reserve Bank – are seeking to achieve the desired improvements to market transparency and legal, counterparty and operational risk management in the OTC derivatives market through encouragement of industry participants rather than formal rule setting.¹¹ Domestically, the Reserve Bank and the other authorities are engaging with industry participants and industry bodies to facilitate improvements to practices in the OTC derivatives market. The authorities have also been engaging with the (typically international) market infrastructures regarding Australian market participants' access to their services. In addition, the Reserve Bank finalised its regime for oversight of overseas CCPs in 2008/09. The regime places reliance on infrastructure providers' home regulators, thus facilitating cross-border provision of clearing services. This is an important issue for Australia, as the existing market infrastructures have not typically catered to the needs of participants in smaller markets, such as Australia. The Australian Financial Markets Association (AFMA) has been actively involved in these efforts, playing an important role of facilitating dialogue and information flow between the Australian regulators, Australian market participants and market infrastructures.

Internationally, the three authorities are also engaging with other regulators regarding OTC derivatives market issues. In late 2009, the OTC Derivatives Regulators' Forum was established to provide regulators around the world with a means to co-operate, exchange views and share information related to OTC derivatives CCPs and trade repositories. The Forum comprises international financial regulators (including central banks, banking supervisors and market regulators) and other governmental authorities with an interest in OTC derivatives markets. All three Australian financial authorities are members of the Forum and have been actively engaged in its work. Key aspects of the Forum's work are to promote consistent public policy objectives and oversight

¹¹ See the 2009 Survey of the OTC Derivatives Market in Australia, conducted by APRA, ASIC and the Reserve Bank and available at: <http://www.rba.gov.au/payments-system/clearing-settlement/survey-otc-deriv-mkts/index.html>, for detail on the actions that have been identified to effect these improvements.

approaches for OTC derivatives CCPs and trade repositories (including the development of international co-operative oversight arrangements for these infrastructures where appropriate) and to co-ordinate the sharing of information routinely made available to regulators or to the public by OTC derivatives CCPs and trade repositories. Through the Forum, the Australian regulators have brought to the attention of the international regulatory community the importance of smaller market participants' access to international market infrastructures, on terms appropriate to the scale and scope of their business.

Other Regulatory Responsibilities

Oversight of Continuous Linked Settlement (CLS) Bank

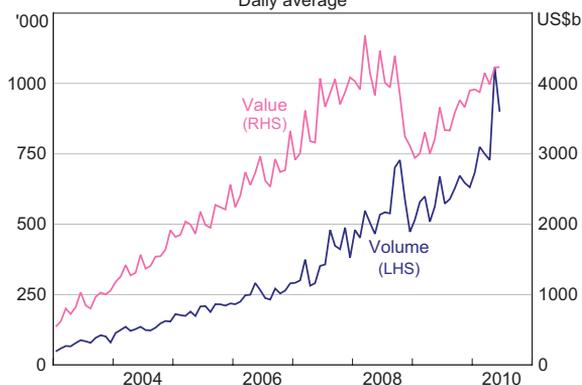
CLS Bank was developed to provide a mechanism for settling foreign exchange transactions on a payment-versus-payment basis, thereby eliminating foreign exchange settlement risk. The Australian dollar was one of seven initial currencies settled when CLS commenced operation in 2002. CLS now settles 17 currencies. During 2007/08, CLS expanded its operations to settle one-sided payments, including non-deliverable forwards and credit derivatives. In March 2009, CLS began settling one-sided Australian dollar payments.

CLS is chartered in the United States and regulated and supervised by the Federal Reserve System. Co-operative oversight by the central banks of the currencies that settle in CLS is, however, conducted through the CLS Oversight Committee, which is co-ordinated by the Federal Reserve. As CLS settles transactions involving the Australian dollar, the Reserve Bank is represented on the CLS Oversight Committee.

In January 2010, a joint venture between CLS and Traiana (a post-trade services provider for OTC foreign exchange, equities and derivatives) launched an aggregation service for foreign exchange trades. The service compresses multiple trades on the same side (that is, all buys or all sells) in a single currency with a single counterparty down to a single aggregate trade, which is then settled in CLS. The service is intended to reduce the operational risk associated with processing increasingly higher volumes of low-value trades as participation in the foreign exchange market broadens.

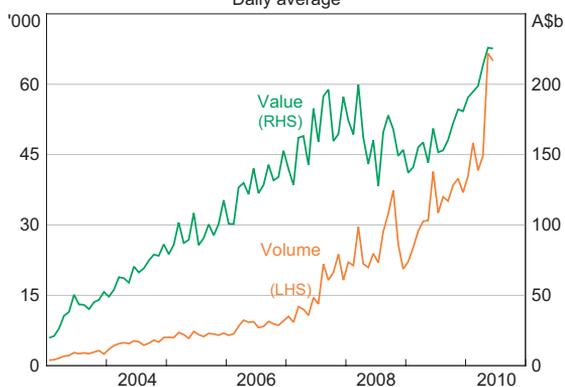
The number of foreign exchange sides settled in CLS reached a record high of over one million per day on average in May 2010, before subsiding in June (Graph 19). In line with the market-wide movement, the number of transactions involving the Australian dollar also increased substantially during May (Graph 20). CLS attributed the high volumes to

Graph 19
Total CLS Settlement
Daily average



Source: CLS Bank

Graph 20
AUD CLS Settlement
Daily average



Source: CLS Bank

sustained volatility in the market. This volatility was possibly driven by sovereign debt concerns in Europe, which heightened during the month. Notably, there was no commensurate increase in the average daily value of sides settled in May, indicating a fall in the average transaction size. CLS noted that this highlighted the impact of algorithmic trading in the market.

Exchange Settlement Accounts

The Payments System Board has ongoing responsibility for the Bank's policy on access to ES accounts. These accounts provide a means for ultimate settlement of interbank obligations via the exchange of a settlement asset that carries no credit risk – a deposit held with the Reserve Bank.

Under current policy, to be eligible to hold an ES account an institution must be a provider of third-party (customer) payment services with a need to settle clearing obligations with other providers, and able to demonstrate that they have the liquidity to meet settlement obligations under routine conditions, during seasonal peaks and under periods of stress. In general, applicants must be current or prospective members of a payments clearing arrangement or operate a clearing house which acts as a CCP. ES accounts are provided only for settlement of obligations from the clearing process. Depending on whether an institution is subject to supervision by APRA, the nature of its operations and the extent of its payments experience, it may be subject to collateral requirements as a condition of holding an ES account. Authorised Deposit-taking Institutions that account for at least 0.25 per cent of all RTGS payments are required to settle on their own behalf. Smaller institutions may elect to settle using another ES account holder as an agent.

A full list of ES account holders is available on the Bank's website.

Approvals under the Payment Systems and Netting Act 1998

Under the Payment Systems and Netting Act, the Reserve Bank has the power to approve multilateral netting arrangements in order to protect the netting undertaken in these arrangements from legal challenge in the event that a party to such arrangements enters external administration.¹² In the absence of approval, such arrangements entail a risk that surviving participants may be forced to pay their gross obligations to the defaulting institution with the prospect of receiving nothing in return.

BPAY operates a payment system for bill payments which involves a multilateral netting arrangement. The settlement of BPAY obligations is currently achieved through an APCA clearing stream that has been approved under the Payment Systems and Netting Act. (The Reserve Bank has previously approved the multilateral netting arrangements applying to the clearing systems operated by APCA, the equity settlement system operated by ASX Settlement (formerly ASX Settlement and Transfer Corporation), and the fallback arrangements for Austraclear settlement if RITS is not available.) Nevertheless, without approval under the Payment Systems and Netting Act, BPAY's multilateral netting arrangement is subject to some uncertainty in the event of a participant default.

Accordingly, BPAY applied to the Bank for approval of its netting arrangements under the Payment Systems and Netting Act. As BPAY is a widely used payment system, the legal robustness of its netting arrangements

¹² The Payment Systems and Netting Act also gives the Reserve Bank the power to approve an RTGS system (which includes securities settlement systems), thereby granting protection to transactions in that system from a possible 'zero hour' ruling. Under this rule, a court may date the bankruptcy of an institution from the midnight before the bankruptcy order was made; transactions settled between midnight and the time of the bankruptcy order would be void. The application of this rule would threaten the irrevocable nature of RTGS transactions. The Board has previously approved the RTGS systems, RITS, Austraclear and CHESS RTGS, for this purpose.

is important to the smooth functioning of the financial system. Given this, and having regard to the criteria for approvals set out in the Payment Systems and Netting Act, the Payments System Board approved BPAY's application at its November 2009 meeting, subject to a number of rule changes being made by BPAY. Once these changes are made, the Reserve Bank will issue a formal approval.

Liaison Activity

Liaison with Industry

Over 2009/10, the Reserve Bank consulted with industry participants on a number of issues. It also continued to liaise closely with the Treasury, the Australian Competition and Consumer Commission (ACCC), APRA and ASIC on matters including the retail payments system, clearing and settlement facilities, and policy issues arising from the global financial crisis.

As mentioned above, the Bank has consulted extensively with the finance industry over the past year on matters related to cross-border infrastructure, improving risk management and transparency in the OTC derivatives market, transparency of securities lending activity and its oversight of the ASX CCPs.

In line with its liaison agreement with APCA, the Reserve Bank met with the APCA management after each APCA Board meeting – a total of eight times in 2009/10 – as well as with the APCA Board on one occasion. The Bank and APCA also reviewed their liaison arrangements to ensure that they continued to be effective. Changes to the arrangements will be made as required once that review is finalised.

Reserve Bank staff have made a number of presentations on payments system issues over 2009/10. The Deputy Chairman of the Board addressed participants at the Cards and Payments Australasia conference in March 2010 on ‘Competition and Regulation in the Card Payments Market’, which was also attended by the Head of Payments Policy. The Head of Payments Policy gave presentations to APCA and the International Swaps and Derivatives Association. Other staff made presentations at or attended industry conferences on card fraud, securities lending and financial regulation.

International Engagement

The Reserve Bank was represented at a number of international groups in 2009/10: the CPSS, the CLS Oversight Committee, the Executives’ Meeting of East Asia-Pacific Central Banks (EMEAP) Working Group on Payment and Settlement Systems, and the OTC Derivatives Regulators’ Forum. In July 2009, the Reserve Bank was invited to join the CPSS, a permanent committee of the Bank for International Settlements (BIS). The CPSS, established in 1990, acts as a forum for central banks to monitor and analyse developments in domestic and multi-currency payment, clearing and settlement systems, with a particular focus on efficiency and stability-related issues. The CPSS also plays a significant role in setting standards for payment, clearing and securities settlement systems.

Until the recent expansion, CPSS membership comprised the central banks of the G-10 countries plus the European Central Bank, the Monetary Authority of Singapore and the Hong Kong Monetary Authority.¹³

¹³ The G-10 comprises 11 industrial countries: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

In addition to Australia, other new members include the central banks of Brazil, China, India, Mexico, Russia, Saudi Arabia, South Africa, South Korea and Turkey. The widened membership of the CPSS reflects the increasing weight attached to cross-border co-operation and information sharing, as well as stronger interdependencies between components of the global financial market infrastructure. It is also consistent with a call from the G-20 leaders for standard-setting bodies to review their memberships.

Over 2009/10, the Reserve Bank provided technical assistance on payments issues to a number of other central banks including Brazil, Indonesia and Iraq.

The Board's Announcements and Reserve Bank Reports

This section lists developments since mid 2009. The Payments System Board's 2006 Annual Report contained a list of the Board's announcements and related Bank reports up to that time. Subsequent Reports have contained an annual update.

2009

Media Release 2009-20, 'Payments System Issues' (announcing the release of a consultation paper on proposed changes to the EFTPOS Interchange Fee Standard; the results of the Bank's 2008/09 assessment of Australia's licensed clearing and settlement facilities against the *Financial Stability Standards*; and a self-assessment of the Reserve Bank Information and Transfer System against the *Core Principles for Systemically Important Payment Systems*), 22 September 2009.

2008/09 Assessment of Clearing and Settlement Facilities in Australia, Reserve Bank of Australia, Sydney, September 2009.

2009 Self-Assessment of the Reserve Bank Information and Transfer System, Reserve Bank of Australia, Sydney, September 2009.

Media Release 2009-27, 'Payments System Issues' (announcing the Board's decisions to amend the EFTPOS Interchange Fee Standard to make the regulation of EFTPOS interchange fees more consistent with that for scheme debit interchange fees; and to give in principle approval to BPAY's application for approval of the multilateral netting arrangement administered by it under section 12 of the *Payment Systems and Netting Act 1998*), 27 November 2009.

A Revised Interchange Standard for the EFTPOS System, Reserve Bank of Australia, Sydney, November 2009.

2010

Media Release 2010-10, 'Payments System Issues' (announcing the Board's decision to undertake a strategic review of innovation in the Australian payments system), 28 May 2010.

Reform of the ATM System – One Year On, Reserve Bank of Australia *Bulletin*, Sydney, June 2010.

Media Release 2010-14, 'Strategic Review of Innovation in Australia's Payments System' (announcing the Bank's invitation to interested parties to share with it their views on relevant issues for its strategic review of innovation in the Australian payments system), 22 July 2010.



RESERVE BANK OF AUSTRALIA