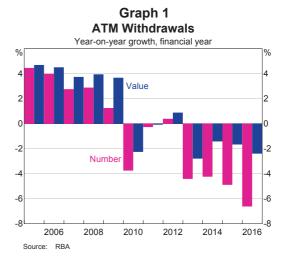
Retail Payments Trends

The Payments System Board monitors trends in retail payments. Developments in 2015/16 were consistent with the longer-term shift towards electronic non-cash payment methods; the Bank's 2016 Consumer Use Survey will offer additional insights into these trends.

Cash Payments

The use of cash has gradually declined over a number of years, as consumers shift to electronic payment methods, including for low-value transactions. For example, the most recent Consumer Use Survey found that cash accounted for 78 per cent of payments of \$10 or less in 2013, down from 95 per cent in 2007. This decline has been reflected in reductions in the number and value of ATM cash withdrawals (the main method used to obtain cash), which fell by 6.6 per cent and 2.4 per cent, respectively, in 2015/16 (Graph 1). The continuing decline in ATM withdrawals reflects a number of factors, including the adoption of new technologies such as contactless card payments and mobile payments. Consistent with the effect of reduced cash use, eftpos cash-outs have also been declining since 2013.

While the use of cash in transactions has been declining, the demand to hold cash has continued to grow. This is the case for low-denomination as well as high-denomination banknotes. At the end of June there were 1.4 billion banknotes, worth \$70.2 billion, in circulation. The value of banknotes in circulation increased by 7 per cent in 2015/16, slightly above the long-term growth rate of 6 per cent. The



growing demand for holdings of cash suggests that it continues to have an important role as a store of value and there is some evidence – from demand for larger denomination banknotes – that this increased following the global financial crisis. So, despite the decline in use in transactions, cash is likely to remain an important part of both the payments system and the economy more broadly for the foreseeable future. In particular, significant parts of the population appear to remain more comfortable with cash than with other payment methods in terms of ease of use for transactions or transfers, as a backup when electronic payment methods

may not be available or as an aide for household budgeting.

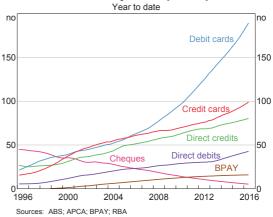
Given the important ongoing role of cash in the payments system, the Bank is currently undertaking a major project to upgrade the existing stock of notes. Counterfeiting rates of the current series of banknotes remain low by international standards but have risen over the past decade as advances in technology have made it easier and cheaper to produce and distribute counterfeit banknotes. Accordingly, the program for the next generation of banknotes includes major security upgrades that should ensure that Australia's banknotes remain some of the world's most secure. The first release of the new banknotes occurred on 1 September 2016, with the release of the new five dollar note.

The Bank's previous Consumer Use Surveys have provided valuable information on the use of cash for payments and on holdings of cash by Australian households. The upcoming 2016 Survey will provide further insights in these areas, including the extent to which mobile, contactless and other innovative technologies extend the use of electronic payments into lower-value transactions, where cash has traditionally been the dominant means of payment.

Non-cash Payments

The use of most non-cash payment methods continues to increase – with the exception of cheque payments. In particular, debit card use continues to grow rapidly (Table 2). Australians made on average 435 non-cash transactions per person in 2015/16, up from around 400 transactions per person in the previous year. Direct entry payments account for the majority of non-cash payments by value, while card payments make up around two-thirds of the number of non-cash payments; this share has increased steadily over the past five years (Graph 2; Table 2).

Graph 2 Non-cash Payments per Capita



Debit and credit card payments

Debit and credit cards are the most frequently used non-cash payment methods. In 2015/16, Australian personal and business cardholders made around 6.9 billion card payments worth \$538 billion; an increase relative to the previous year of around 12 per cent and 7 per cent, respectively. While the number and value of card payments continues to grow, the average value of these transactions has fallen over time, reflecting the increased use of cards for low-value payments. This trend is likely to reflect the increasing convenience of making card payments, given the prevalence of contactless technology in Australia. Since 2010/11, the average value of a debit card transaction has fallen from around \$59 to \$53, while the average value of a credit card transaction has fallen from \$145 to \$126. Growth in the number and value of debit card transactions continues to outpace growth in credit card transactions (Graph 3).

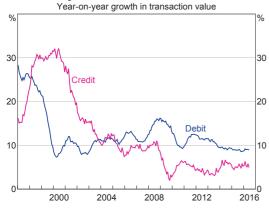
Within credit and charge cards, the combined market share of American Express and Diners Club was largely unchanged in 2015/16, at around 19 per cent of the value of spending (Graph 4). The combined market share of these schemes has increased from around 15 per cent in the early 2000s, with the change largely occurring in

Table 2: Non-cash Payments

	2015/16				Average annual growth 2010/11–2015/16		
	Per cent of total		Average value	Growth, per cent		Per cent	
	Number	Value	\$	Number	Value	Number	Value
Debit cards	43.8	1.5	53	13.4	9.8	13.4	10.6
Credit cards	22.9	1.8	126	9.8	4.9	7.9	4.9
Cheques	1.2	7.4	9 483	-17.1	-1.8	-14.4	-2.3
BPAY	3.7	2.2	923	3.5	8.1	4.9	10.4
Direct debits ^(a)	9.9	36.2	5 709	10.8	3.1	9.2	0.6
Direct credits(a)	18.6	50.9	4 275	6.0	2.0	5.4	4.9
Total	100.0	100.0	1 559	10.0	2.4	8.9	2.8

(a) In March 2014 reporting changes by two institutions resulted in series breaks for direct credit and direct debit payments; the series have been backcast to account for the break Sources: BPAY; RBA

Graph 3 **Payment Card Transactions***

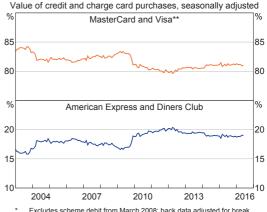


Includes debit card cash-outs and credit card advances: RBA credit card data prior to March 2008 adjusted to remove BPAY transactions Sources: BPAY: RBA

two steps that coincided with the introduction of bank-issued companion American Express cards.

Within debit cards, there has been a steady decline in the market share of the domestic eftpos system, and an increase in the share of the MasterCard and Visa debit systems. Increased issuance of international scheme debit cards by banks, partly driven by interchange fee differentials, plus the online and contactless functionality of scheme cards, are likely to have contributed to the shift in market shares

Graph 4 Market Shares of Card Schemes*

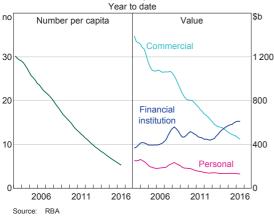


- Excludes scheme debit from March 2008; back data adjusted for break
- Includes Bankcard before 2007 Source: RBA

Cheque, BPAY and Direct Entry payments

The decline in cheque usage has accelerated in recent years, with the total number of cheque payments falling by 17 per cent in 2015/16 (Graph 5). The number of cheque payments in Australia has declined by over 80 per cent over the past two decades. The fall in cheque use has been most significant for commercial and personal cheques, as many lower-value payments have migrated from cheques

Graph 5 Cheque Payments



to electronic methods. Some of the major Commonwealth government departments (including the Australian Taxation Office and Department of Human Services) and some large corporates have largely moved away from the use of cheques. Cheque use in the superannuation industry has also fallen very significantly as part of the SuperStream reforms. However, the decline in cheque usage has been much slower for certain high-value transactions such as commercial payments and property settlements. The Australian Payments Council is considering options for the cheque system as part of its work on the Australian Payments Plan.

Over the year, the number and value of BPAY transactions increased by 3.5 per cent and 8.1 per cent, respectively. Consumers and businesses use BPAY to make a range of higher-value bill payments, including payments for utilities, education fees and investments. Although BPAY payments are much less common than card payments, the high value of these payments means that they account for a greater share of the value of non-cash retail payments than credit and charge cards.

Direct Entry (DE) payments account for the bulk of the value of non-cash retail payments. The high

average value of these payments reflects their use by businesses, corporations and governments for a range of bulk payments, for example, salary and welfare payments. However, there is also evidence of consumers increasingly establishing direct debit arrangements for lower-value bill payments, with the average value of direct debits falling from around \$8,604 in 2010/11 to \$5,709 in 2015/16.

Online payments

Online payments account for an increasing share of non-cash payments in Australia. Users' needs are serviced by a mix of well-established payment methods and some newer, more specialised providers, such as PayPal. DE payments account for the bulk of domestic online payments by number and value.

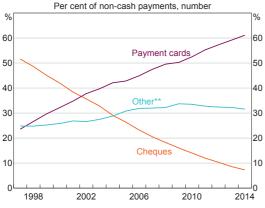
Within domestic online retail payments, credit cards remain the dominant payment method by value. However, in recent years there has been rapid growth in the use of MasterCard and Visa debit cards as well as specialised providers. As a result, the share of credit cards in the number of domestic online retail payments has declined from 62 per cent in 2010/11 to 38 per cent in 2015/16.

The 2013 Consumer Use Survey observed a notable increase in PayPal's share of consumer purchases between 2010 and 2013; the survey indicated that these payments tended to be for lower-value payments, with their use concentrated at certain types of merchants. The Bank will continue to monitor developments and trends in the use of specialised payments providers in the 2016 Survey.

International Payment Trends

The long-term trend observed in Australia – a shift away from cheque payments towards the use of cards – is also apparent in other jurisdictions (Graph 6). Cross-country data published by the CPMI show that Australians

Graph 6 Non-cash Payments – International*



 Selected CPMI countries; data prior to 2009 have been adjusted for changes in reporting and membership

** Includes direct credit and direct debit transactions

are among the most

are among the most frequent users of payment cards (Table 3). Cheque use in other countries has fallen significantly, including in countries where cheques have traditionally been a common payment method. There are a number of continental European countries where the use of cheques is now negligible, or where the cheque system no longer exists.

Merchant Service Fees

The average fee paid by merchants to their financial institution for transactions on MasterCard and Visa credit and debit cards declined markedly over 2015/16, particularly when compared to the previous few years. These fees fell by 6 basis points to 0.72 per cent of the value of transactions at end June, after having been largely unchanged over the past five years (Graph 7). The relatively large fall in average merchant service fees coincided with the reset of interchange fees in November 2015. Fees on MasterCard and Visa credit and debit cards had previously fallen following the Bank's reforms to the payment cards system in the early 2000s. Fees for American Express and Diners Club cards have also declined since the early 2000s, with the average fee for American Express transactions falling by a further 4 basis points in 2015/16 to 1.66 per cent of the value of transactions. Since the September quarter 2003, merchant service fees for MasterCard and Visa have fallen by 68 basis points, while American Express and

Table 3: Non-cash Retail Payments in Selected CPMI Countries

Number per capita, 2014

	Cheques	Direct debits	Direct credits	Debit card	Credit card ^(a)	Total ^(b)
United States	45	45	30	187	96	403
Sweden	<1	33	99	224	46	402
Netherlands	O ^(c)	69	121	180	8	378
Australia	7	37	75 ^(d)	163	89	371
Korea	6	34	73	87	174	374
United Kingdom	10	57	61	158	43	329
Canada	20	21	36	138	110	325
France	38	54	52	75	22	241
Germany	<1	105	72	31	9	217
Brazil	6	28	53	28	27	142

(a) Includes charge cards

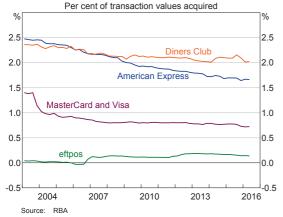
(b) Excludes e-money

(c) Cheques have been abolished since 2001

(d) Includes BPAY

Sources: ABS; BIS; RBA

Graph 7 Merchant Service Fees



Diners Club fees have fallen by 79 basis points and 33 basis points, respectively.

The average merchant service fee for eftpos transactions declined in 2015/16 by 1 cent to be around 9 cents per transaction. This corresponds to a rate of 0.14 per cent for the average eftpos transaction, which remains well below the rate for transactions over the international schemes' networks. However, as eftpos fees are generally charged on a flat basis per transaction, for some low-value transactions these fees can be higher than the *ad valorem* rates applying to transactions over the international schemes.

Interchange Fees

Interchange fees are wholesale fees paid between a merchant's financial institution and a cardholder's financial institution when a cardholder undertakes a card payment. Under the Bank's current standards, the weighted average of multilateral interchange fees in the MasterCard and Visa credit card systems, the Visa debit card system and the eftpos debit card system must not exceed certain benchmarks on specified compliance dates – 1 November of every third year after 2006, and on any date a card scheme makes a change to its schedule of

interchange fee rates. In 2015/16, the schemes were required to ensure that the weighted-average interchange fees applying in the systems they operate were at or below the relevant benchmarks on 1 November 2015. As discussed in 'Retail Payments Policy and Research', the Bank recently completed a review of its card payments regulations, including its standards relating to interchange fees. Accordingly, the 1 November reset was the final mandatory reset under the current regime, with new interchange-setting arrangements to apply from 1 July 2017.⁷

The multilateral interchange fee benchmarks were unchanged in 2015/16, at 0.50 per cent of the value of transactions for the credit card systems and 12 cents per transaction for the debit card systems. Under the Bank's standards, the card schemes have the flexibility to set different multilateral interchange fees for different types of transactions, provided that the weighted average of these fees for each system does not exceed the relevant benchmark on the compliance dates. Table 4 shows the interchange fees applying in the credit card and debit card systems as at end June.

Both MasterCard and Visa made changes to their credit card interchange fee schedules ahead of the November compliance date to ensure they complied with the Bank's standards. MasterCard also made an additional change to its schedule in May 2016. The schemes took a similar approach to previous resets by introducing and removing certain fee categories, and lowering rates for some existing categories while increasing others. Both MasterCard and Visa lowered interchange rates across a significant number of categories. MasterCard also removed several categories

⁷ Schemes are able to make changes to their interchange schedules at any time outside of the required compliance date; when doing so, they need to ensure that they comply with the benchmarks.

⁸ All interchange fee benchmarks and rates quoted in this section are exclusive of GST.

Table 4: Interchange Fees(a) Excluding GST; as at 30 June 2016

	Credit card Per cent		Debit card Cents (unless otherwise specified)			
	MasterCard	Visa	MasterCard	Visa	eftpos ^{(b}	
Consumer electronic	_	0.25	12.7	8.0	4.5	
Consumer standard	0.29	0.25	0.27%	0.42%	_	
Consumer premium/platinum	0.64	0.84	0.91%	5 1.05%	_	
Consumer super premium	1.11	1.20 or 1.25 ^(c)	_	_	_	
Consumer elite/high net worth	1.82	2.00	_	_	_	
Business/commercial	0.85	0.84 or 1.15 ^(d)	0.91%	5 1.05% ^(e)) _	
Business/commercial premium	1.04 or 1.05 ^(f)	1.30	0.91%	, –	_	
Business elite/super premium	1.80	1.80	_	_	_	
Commercial large ticket ^(g)	1.04	_	_	_	_	
Strategic merchant	0.23 or 0.29	0.20 to 0.30	2.8 or 3.6	2.0 to 8.0	0.0 to 4.5	
Government/utility	0.29	0.25	7.0	6.0	_	
Charity	0.00	0.00	0.0	0.0	0.0	
Petrol/service station	0.29	0.25	7.0	6.0	_	
Education/learning	0.29	0.25	-	6.0	-	
Supermarket	_	0.25	_	6.0	_	
Insurance	0.29	0.25	7.0	6.0	_	
Transit	_	0.25	_	6.0	_	
Recurring payments	0.29	0.25	10.0	6.0	_	
Micropayment ^(h)	-	_	0.4	=	0.0	
Contactless and MasterPass ⁽ⁱ⁾	0.29	_	5.9	_	_	
SecureCode (merchant)	0.29	_	8.0	_	_	
SecureCode (full)	0.29	_	8.0	_	_	
Digital secure remote payment (online)	0.29	_	8.0	_	_	
MasterPass Advanced Checkout (online)	0.29	_	8.0	_	_	
Digital Enablement Service	0.64	_	0.64%	, –	_	
Medicare Easyclaim Refund	_	_	_	_	0.0	
Benchmark	0.50	0.50	12.0	12.0	12.0	

⁽a) Fees are paid by the acquirer to the issuer, except for transactions involving a cash-out component

⁽b) eftpos interchange fees have not changed since October 2012

⁽c) 1.20% for the 'Visa Rewards' category and 1.25% for the 'Visa Signature' category

⁽d) Visa has three types of non-premium commercial rates: the 'Business' category attracts a fee of 0.84% while the 'Corporate' and 'Purchasing' categories attract a fee of 1.15%

⁽e) 1.05% for the 'Business' and 'Corporate' categories

⁽f) 1.04% for the 'Commercial Corporate Executive' category and 1.05% for the 'Commercial Business Executive' category

⁽g) Transactions equal to or above \$10 000. MasterCard increased this rate from 0.68% to 1.04% in May 2016

⁽h) Transactions less than \$15

⁽i) Contactless and MasterPass transactions equal to or less than \$60, excluding some commercial cards Sources: ePAL website; MasterCard website; RBA; Visa website

including 'Consumer Electronic' and 'Quick Payment Service'. Offsetting the reductions in some rates, MasterCard introduced some new categories including 'Business Elite', 'Commercial Large Ticket' and a fee for tokenised transactions.

In the debit card systems, MasterCard and Visa also made a number of changes to their interchange fee schedules in November 2015. The reset saw the two schemes increasing some *ad valorem* interchange fees applying to non-preferred merchants, while keeping most of their strategic merchant and preferential rates unchanged (though Visa did reduce its highest strategic merchant rate). MasterCard also introduced several new online payment categories and one for tokenised transactions. eftpos Payments Australia Ltd (ePAL) left interchange fees for eftpos transactions unchanged in 2015/16, after most recently making changes in October 2012.

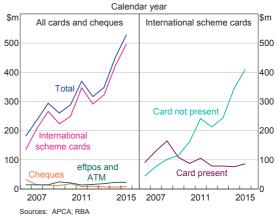
In 2015/16, interchange rates applying to prepaid card transactions were not formally regulated. However, the Board has previously noted its expectation that the prepaid card interchange fees would be set broadly in conformity with the Standard on interchange fees in the Visa Debit system. The international schemes made a small number of changes to their prepaid interchange rates at the same time as amending their debit card schedules. Visa increased its prepaid consumer standard and business rates to match its new debit card interchange fees while MasterCard did not change any prepaid card fees.

Payments Fraud

Total losses relating to fraudulent cheque and debit, credit and charge card transactions (where the card was issued and/or acquired in Australia) increased by 17 per cent to \$529 million in 2015, according to data collected by APCA. The fraud

rate (the value of fraudulent transactions as a share of overall transactions) on Australian-issued cards increased from \$0.59 per \$1 000 in 2014 to \$0.67 per \$1 000 in 2015. The increase reflected a rise of 18 per cent in fraud on debit, credit and charge cards from the international schemes to \$497 million in 2015 (Graph 8; Table 5). Losses relating to fraudulent eftpos and ATM transactions were unchanged in 2015 at \$23 million. Cheque fraud rose by \$2 million to \$8 million.

Graph 8
Fraud on Card and Cheque Transactions



The increase in losses continues to be driven by fraudulent use of scheme cards in the card-not-present (CNP) environment (i.e. online, via telephone or mail), which increased by 19 per cent in 2015 to \$411 million. CNP fraud perpetrated overseas on cards issued in Australia accounted for 45 per cent of all fraud on scheme cards, increasing by 13 per cent to \$226 million. The fraud rate across all CNP transactions is estimated to be around ten times the rate for card-present transactions. Following an industry initiative to reduce card-present fraud, the

⁹ Fraud statistics for 'scheme' debit, credit and charge cards include transactions through the international card schemes – MasterCard, Visa, American Express and Diners Club.

Table 5: Fraud Losses by Transaction Type \$ million

	2014	2015
All instruments	450	529
Cheques	6	8
All cards	444	520
eftpos and ATM transactions	23	23
Scheme debit, credit and charge cards	421	497
Australian cards used in Australia	133	169
Card present	33	32
Card not present	99	137
Australian cards used overseas	231	269
Card present	30	43
Card not present	201	226
Foreign cards used in Australia	57	60
Card present	13	12
Card not present	45	48

Sources: APCA, RBA

industry has been actively considering ways to address the rapid growth of CNP fraud.

Card-present fraud losses for transactions acquired in Australia declined by around 5 per cent in 2015, in part likely reflecting the industry's 2014 initiative that phased out signature authorisation for most types of card-present

transactions. By contrast, losses on domestic cards acquired overseas increased by 42 per cent to \$43 million, reflecting an increase in counterfeit Australian cards being used in jurisdictions where there has been less progress in upgrading terminals to chip technology.