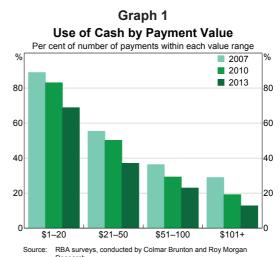
### Trends in Retail Payments

The Payments System Board monitors trends in the use of retail payment methods in line with its responsibilities to promote efficiency and competition in the Australian payments system. Developments during 2013/14 were largely consistent with the trends observed in recent years. Use of electronic payment methods, including debit cards, credit cards and BPAY, continues to increase. In contrast, 'paper-based' methods such as cash and cheques are being relied on less by consumers and businesses for transactional purposes. Overall use of cheques continues to decline, though they remain important for certain large-value transactions. The results of the Bank's third survey of the use of payment methods by Australian consumers indicate that while cash use remains significant – accounting for almost half of all household payments by number – its relative importance is declining over time, with card payments and other electronic methods increasingly being used as substitutes for cash.

### **Cash Payments**

In November 2013, the Reserve Bank conducted its third major study into how individuals make payments, following similar studies in 2007 and 2010 (see 'Box A: The 2013 Survey of Consumers' Use of Payments'). Supplementing the Bank's regular collection of retail payments data from financial institutions, the study provides transaction-level data from a survey of over 1 000 consumers and enables greater insight into Australians' payments behaviour. The survey is a particularly valuable source of information on cash payments, for which little comprehensive information is otherwise available.

The study found that, while cash remained the most frequently used means of payment in 2013, its use had declined noticeably over the previous three years. It accounted for 47 per cent of the number and 18 per cent of the value of all payments in 2013, down from 62 per cent and 29 per cent respectively in 2010. Despite this fall, the use of cash as a payment method remains widespread, particularly for low-value transactions, with consumers using cash for around two-thirds of payments under \$20 (Graph 1). The study found that debit and credit cards were increasingly being used as substitutes for cash, reflecting a range of factors including a rise in the importance of remote transactions (for instance the growth of online commerce) and the adoption of contactless card technology which reduces the tender time at the point of sale.



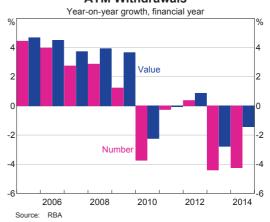
Consistent with the results of the 2013 study, monthly data reported by financial institutions show a contraction in cash withdrawal activity over the past couple of years. For instance, after growing at around 4 per cent per annum in the mid-2000s, the value of debit card cash withdrawals from ATMs (the main method individuals use to obtain cash) has been declining since 2009/10, falling by around 2 per cent per annum for the past two financial years (Graph 2). This trend likely reflects a reduced need to obtain cash for transaction purposes because of the changes in technology and preferences described above, as well as increased use of cash-outs at the point of sale.

### Non-cash Payments

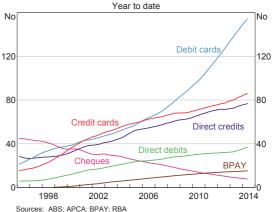
The use of non-cash payment methods continues to rise strongly. The total *number* of non-cash payments increased by around 9 per cent in 2013/2014, slightly stronger than the average growth rate for past five years. Similarly, the *value* of non-cash payments grew by almost 6 per cent, more than double the recent average (Table 1). Use of all the main electronic forms of payment increased, with debit card transactions and the number of direct debits growing particularly strongly in 2013/14. In contrast, consumers and businesses continue to reduce their reliance on cheques, with the number of cheque payments falling by a further 14 per cent in 2013/14.

Overall, Australians on average made almost 380 non-cash transactions per person in 2013/14, up from 210 transactions a decade ago (Graph 3). Developments in the use of individual payment methods are discussed below.

## Graph 2 ATM Withdrawals



Graph 3
Non-cash Transactions per Capita



**Table 1: Australian Non-cash Retail Payments** 

		Average annual growth 2008/09 – 2013/14					
	Per cent c	Per cent of total		Growth, per cent		Per cent	
	Number	Value	\$	Number	Value	Number	Value
Debit cards	40.8	1.2	55	11.9	9.8	14.0	11.2
Credit cards	22.7	1.7	136	8.3	6.4	6.7	5.3
Cheques	2.1	7.8	6 806	-13.5	2.9	-12.4	-3.9
BPAY	4.1	1.8	824	5.5	10.6	7.2	10.3
Direct debits	9.8	37.6	6 928	13.3	4.3	6.8	3.7
Direct credits	20.5	49.9	4 417	6.7	7.4	6.0	2.9
Total	100.0	100.0	1 817	9.2	5.9	8.3	2.8

Sources: BPAY; RBA

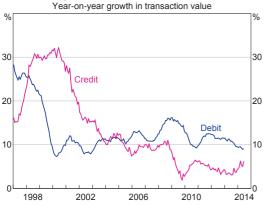
### Debit and credit card payments

Debit and credit cards play an important role in the payments system. They are the most frequently used non-cash payment method, accounting for over 60 per cent of the number of non-cash payments (though only around 3 per cent of the value, given the small size of card transactions compared with some other payment methods). In 2013/14, Australian personal and business cardholders made around 5.6 billion card payments, with a total value of \$468 billion. Taken together, debit card and credit/charge card payments grew strongly, with the number of transactions increasing by 11 per cent and the value by 8 per cent, mainly reflecting sustained growth in the use of debit cards as a means of payment. The value of debit card transactions grew by 10 per cent in 2013/14, while growth in credit card transactions picked up slightly, to around 6 per cent (Graph 4).

More generally, cards, and in particular debit cards, are increasingly being used for lower-value payments, with the average value of a debit card payment falling from \$62 in 2008/09 to \$55 in 2013/14. The average value of credit/charge card transactions fell from \$145 to \$136 over the same period. The continued decline in the average value of card payments suggests a trend towards the use and acceptance of cards for a wider range of lower-value transactions. This has likely been driven in part by the growing adoption of contactless technology; the 2013 consumer use study found that growth in card use was particularly strong for point-of-sale transactions.

Within credit/charge cards, the combined shares of the four-party schemes (MasterCard and Visa) and three-party card schemes (American Express and Diners Club) were largely unchanged in 2013/14. The combined market share of the three-party schemes has remained around 19-20 per cent of the value of credit and charge card spending since 2010 (Graph 5). Within debit cards, the MasterCard and Visa debit systems continued to increase market share relative to eftpos.

Graph 4
Payment Card Transactions\*

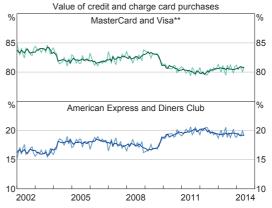


\* Includes debit card cash-outs and credit card advances; RBA credit card data prior to March 2008 adjusted to remove BPAY transactions Sources: BPAY: RBA

### Cheque, BPAY and direct entry payments

The use of cheques continued to decline in 2013/14, with the number of cheque payments falling by around 14 per cent to be almost 70 per cent lower than a decade ago. In 2013/14 around eight cheques were written per person in Australia, down from 28 cheques per person 10 years earlier (Graph 6). A considerable proportion of cheque use is related to commercial payments and the value of financial institution ('bank') cheques used for certain types of transactions has continued to grow as personal cheque use has contracted. The average value of cheque payments reflects these trends, rising by 19 per cent in 2013/14, to around \$6 800. As is discussed in 'Property settlements' in the chapter

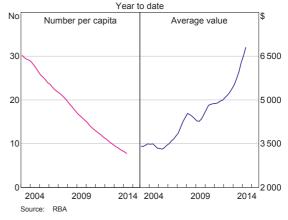
Graph 5
Market Shares of Card Schemes\*



- Excludes scheme debit from March 2008; back data adjusted for break; darker lines are seasonally adjusted estimates
- \*\* Includes Bankcard before 2007

Source: RBA

# Graph 6 Cheque Payments



on 'Oversight of High-value Payment Systems', the introduction of an electronic conveyancing platform by Property Exchange Australia Ltd scheduled for late 2014 is expected to result in a decline in the use of cheques in property-related purposes.

Consumers and businesses have continued to adopt BPAY as a method of making bill payments, with the number of BPAY transactions increasing by 5 per cent and the value by 11 per cent in 2013/14. The average value of bill payments is relatively high (around \$800), reflecting their use for payments such as utilities, education fees and investments. As a consequence, the value of payments processed through BPAY has slightly exceeded the value of credit/charge card payments in the past two financial years.

Use of the direct entry (DE) system also continued to grow in 2013/14, with the number of direct debits increasing by around 13 per cent, a substantially faster pace of growth than has occurred over the past five years. The number and value of direct credits grew by around 7 per cent, a little faster than the recent average. DE payments are an important part of the payments landscape, used extensively by consumers for internet 'pay-anyone' transactions as well as by small businesses, corporations and governments for payments such

as wages and bill collection. Because of the range of payment types facilitated, the average transaction size processed in the DE system does not correspond to levels typically associated with 'consumer' payments. For example in 2013/14, the average values of direct debit and direct credit payments were \$6 900 and \$4 400 respectively. As a consequence, DE payments continued to account for the bulk of the value of non-cash payments (87 per cent in 2013/14). With the move to same-day settlement of DE payments in November 2013, financial institutions are now in a position to make funds available to recipients on a more timely basis without the introduction of credit risk for the receiving financial institution (see 'Same-day Settlement of Direct Entry' in the chapter on 'Strategic Review of Innovation').

### Online payments

The Bank's 2013 Study of Consumers' Use of Payment Methods found that the growth in remote payments (e.g. due to the rise of online commerce) was one factor influencing changes in consumers' choice of payment methods. Australian individuals and businesses have a number of payment options for making payments via the internet. Firstly, they can use credit cards and certain debit cards to purchase goods and services online by entering card details directly into merchants' websites. Secondly, through internet banking, they can initiate credit transfers (commonly referred to as 'pay-anyone transfers') to purchase goods and services (by transferring funds directly into the seller's bank account) or, in the case of some businesses, to pay their staff and suppliers.<sup>2</sup> Thirdly, the BPAY system facilitates bill payments with the customer initiating the transaction through the internet banking service provided by their financial institution. Finally, in more recent years a number of specialised online payment providers (such as PayPal) have emerged which facilitate online purchases by a variety of methods. These include membership-based systems that fund transactions either from stored value, or directly through established payment systems such as card schemes or DE, and systems that allow a DE credit transfer to be initiated from a merchant's website

The number and value of domestic online payments made by Australians (using the various methods described above) increased by around 11 per cent and 16 per cent, respectively, in 2013/14, to account for around 18 per cent of total non-cash payments. The 2013 survey data suggest that online retail payment methods are used most frequently at certain types of merchants, including electrical and furniture retailers, leisure, sport and entertainment providers and for holiday or travel payments.

Online payments made using credit cards, debit cards and specialised payment providers have experienced faster growth than BPAY and internet banking in recent years, increasing by around 16 per cent in number and 14 per cent in value in 2013/14 (Table 2). These transactions accounted for over 30 per cent of the total number of online payments but only 2 per cent of the value, with the average value of such transactions being significantly smaller than the average value of 'pay-anyone' transactions to make purchases, pay bills and transfer funds.

<sup>2</sup> Pay-anyone transactions can also be used to transfer funds (as opposed to purchase goods and services), for instance transferring funds to another person to provide or repay a loan.

**Table 2: Online Payment Methods** 

Australians' domestic payments

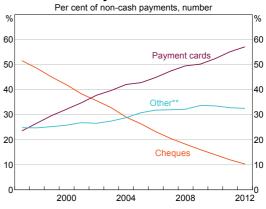
	<b>2013/14</b> Per cent of total		<b>2013/14</b> Growth, per cent		Average annual growth, 2010/11–2013/14 Per cent	
	Number	Value	Number	Value	Number Value	
Internet banking- initiated						400
credit transfers	47.6	88.4	10.2	16.8	10.4	13.0
BPAY	21.0	9.6	6.4	11.0	7.5	11.9
Credit cards, debit cards, and specialised						
payments providers	31.4	2.0	16.5	13.9	21.6	15.3
Total online payments	100.0	100.0	11.3	16.2	12.8	13.0

Sources: BPAY; RBA; specialised payments providers

### **International Payment Trends**

According to data published by the Bank for International Settlements, the international payment trends observed in 2012 (the latest year for which comprehensive data are available) are largely consistent with those experienced in Australia (Table 3). The use of card payments continued to grow, most notably debit cards, while cheque use continued to decline as a proportion of the total number of non-cash payments (Graph 7). In 2012, for a subset of nations for which comprehensive data are available, card payments accounted for 57 per cent of the total number of non-cash payments (slightly less than the proportion in Australia), while cheque payments declined to account for around 10 per cent of the total number of non-cash payments (noticeably higher than their share of payments

Graph 7 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
  Sources: ABS: BIS: RBA

in Australia). The share of other electronic payments (direct debits and direct credits) remained at just over 30 per cent.

Despite broadly similar trends in non-cash payment use across countries, there are marked differences in the size and composition of these payments. The number of non-cash payments in higher-income countries (such as the United States, Sweden, Netherlands and Australia) is greater than countries such as India and Mexico by more than a factor of ten. Cheque use remains low in most countries, with Canada, France and the United States being notable exceptions; though use of cheques is also declining in these countries. Australia is a middle-ranking country in terms of cheque use, above some northern European countries where cheque use is very low or non-existent.

Table 3: Non-cash Retail Payments in Selected CPSS Countries
Number per capita, 2012

	Cheques	Direct debits	Direct credits	Debit card	Credit card <sup>(a)</sup>	Total <sup>(b)</sup>
United States	58	42	28	165	84	377
Sweden	<1	31	90	190	40	351
Netherlands	O(c)	82	101	151	7	341
Australia	10	32	72 <sup>(d)</sup>	132	78	324
Korea	9	33	63	50	147	302
United Kingdom	13	54	58	129	35	289
Canada	22	20	28	126	90	286
France	43	54	47	13	30 <sup>(e)</sup>	274
Belgium	<1	26	85	98	13	222
Germany	<1	108	75	31	7	221
Switzerland	<1	6	97	57	27	187
Brazil	7	22	46	20	24	119
Italy	5	10	21	18	10	64
Saudi Arabia	<1	<1	<1	54	2	56
South Africa	1	14	13	2	26 <sup>(e)</sup>	54
Russia	<1	1	19	18	2	40
Mexico	3	1	9	8	5	26
India	1	<1	<1	5	<1	6

<sup>(</sup>a) Includes charge debit cards

Sources: ABS; BIS; RBA

<sup>(</sup>b) Excludes e-money

<sup>(</sup>c) Cheques were abolished in the Netherlands in 2001

<sup>(</sup>d) Includes BPAY

<sup>(</sup>e) Split between debit and credit cards not available

### Box A

## The 2013 Survey of Consumers' Use of Payments

In 2013, the Reserve Bank undertook its third survey of the use of payment methods by Australian consumers ('the 2013 survey'), following previous studies in 2007 and 2010. The 2013 survey results show that the use of 'paper-based' payment methods such as cash and cheques continued to decline, while card use increased significantly (Table A1). PayPal use also increased, while the relative use of other payment types remained broadly stable.

While the use of cash is declining, it remains the most used payment method, accounting for around half the number of all payments. Cash is used extensively for lower-value payments and payments at small food retailers and bars (Table A2), where the quick tender time of cash may favour its use. It is also more commonly used by older individuals whereas younger individuals are relatively more willing to use newer technologies for payments.

Nonetheless, the 2013 survey indicates that the key trends – the declining use of cash and the increased use of cards – are widespread across demographic characteristics such as age, household income and location of residence. Further, the decline in cash use has occurred across most types of purchases, payment values and merchant categories. The only exception in the recent survey was for the payment of services (which covers a wide range of merchant types, including e.g. music tuition, plumbing and accountancy services), where cash use appears to have remained steady at above 50 per cent of the number of payments in all three surveys.

Table A1: Use of Payment Methods over Time
Per cent of all payments

Payment method	Number of payments			Value of payments(a)			
	2007	2010	2013	2007	2010	2013	
Cash	69	62	47	38	29	18	
Cards	26	31	43	43	43	53	
Debit cards	15	22	24	21	27	22	
Credit and charge							
cards	11	9	19	23	16	31	
BPAY	2	3	3	10	10	11	
PayPal <sup>(b)</sup>	na	1	3	na	1	2	
Internet or phone banking <sup>(b)</sup>	na	2	2	na	12	10	
Cheque	1	1	0	6	3	2	
Other	1	1	2	3	3	5	

Notes: Excludes entries with missing payment method information

Sources: RBA surveys, conducted by Colmar Brunton and Roy Morgan Research

<sup>(</sup>a) Payments of \$9 999 or more are excluded for comparability across surveys because payment value was truncated at \$9 999 in the 2007 survey; further, the small number of such payments that occur during any week generates significant volatility in shares over time (b) Not collected in 2007

<sup>1</sup> See Ossolinski C, T Lam and D Emery (2014), 'The Changing Way We Pay: Trends in Consumer Payments', RBA Research Discussion Paper No 2014-05.

Table A2: Use of Cash and Card Payments for Different Types of Purchases Per cent of number of payments within each category

Broad merchant categories	2007		2010		2013	
	Cash	Card	Cash	Card	Cash	Card
Food retailers	90	10	85	14	72	27
Services	51	27	56	33	50	38
Other	68	17	61	18	46	28
Holiday/leisure	78	19	67	25	43	40
Petrol/transport	60	36	53	43	41	54
Goods retailers	62	35	56	40	40	48
Supermarket	60	39	54	46	38	59
Bills/medical	44	33	25	32	18	42

Notes: Shares for each group do not add to 100 as the shares of other payment types such as personal cheques or PayPal are not shown Sources: RBA surveys, conducted by Colmar Brunton and Roy Morgan Research

The decline in the use of cash reflects not only the growth in online shopping, which has increased the share of payments made remotely (i.e. not at the physical point of sale), but also a change in the preferences of consumers at the point of sale, with increased use of cards replacing the use of cash. This change in consumer preference for point-of-sale transactions was the largest factor underlying the rise in the use of cards in the most recent survey; the increasing share of payments being made online, and the rise in the use of cards for such payments, contributed to a lesser degree.

The drivers of higher card use at the point of sale include the increasing number of merchants offering the option to pay by card, as indicated by the growth of card terminals over the period, and the introduction of new card technologies making it easier to pay by card. Technological innovations include the introduction of contactless cards and PIN authentication (both reduce transaction time relative to using a signature) and the introduction of card-only terminals (often self-checkout machines) in supermarkets. Comparison of the 2010 and 2013 surveys shows growth was strongest for lower-value payments where cash has been (and remains) the most widely used method.

The survey confirms the ongoing decline in the use of personal cheques; respondents reported the equivalent of three cheque payments per person per year in 2013, down from eight in 2007.<sup>2</sup> This decline is in part associated with an increasing proportion of the population that is likely to never have used cheques; only 7 per cent of personal cheques are written by those aged less than 40 years. However, personal cheque use by those aged over 65 years has also declined.

In contrast, the survey indicated growth (from a low base) in the use of PayPal, driven both by the growing share of Australians shopping online and the use of PayPal for online retailing beyond eBay (its original source of transaction growth). PayPal payments were used more frequently by those aged less than 40 years, in line with expectations that younger individuals may more readily adopt new technology. However, older age groups have also increasingly made use of PayPal for transactions.

The 2013 survey also provides some information on the effect of certain aspects of the Bank's retail payments system reforms. In 2003, contractual restrictions preventing merchants from surcharging card payments were

<sup>2</sup> Personal cheques refer to cheques written using a personal cheque book and drawing on a chequing account.

removed to allow merchants to recoup the cost of card acceptance and provide more efficient price signals to customers. The 2013 survey indicates that a surcharge was paid on around 4 per cent of card payments. This is a similar level to the 2010 survey, despite increasing card use over the intervening period; consumers appear to be typically able to switch to other payment methods if they are unwilling to pay a surcharge. The survey also indicates that consumers who are part of a reward program are more likely to pay surcharges than those who are not. The majority of surcharge levels reported appeared broadly consistent with the cost of acceptance of surcharged cards, although a wide range of surcharge levels were reported.

The 2009 ATM reforms replaced 'foreign fees' applied by a customer's own bank when a transaction was made at a foreign ATM with more transparent 'direct charges' applied by the ATM owner and disclosed before the transaction is authorised.<sup>3</sup> This increased transparency has encouraged consumers to seek out ATMs provided free of charge by their own financial institution. The 2013 survey indicates that consumers have become more adept at avoiding ATM fees over time, with only 15 per cent of transactions attracting a direct charge, compared with 23 per cent in 2010. The relatively low proportion of transactions attracting a fee also reflects that most Australian cardholders have access to a fee-free network of at least 2 000 ATMs.

3 A 'foreign' ATM is an ATM not owned by the cardholder's financial institution.