

Submission to the Senate Inquiry into Matters Relating to Credit Card Interest Rates

Senate Economics References Committee

August 2015

Introduction

Credit cards offer two separate – albeit interrelated – functions, a payments function and a credit function. The Reserve Bank's primary responsibilities with respect to credit cards relate to the payments function of such cards. In particular, the Reserve Bank's Payments System Board (PSB) has an obligation to promote the efficiency of the payments system and promote competition in the market for payment services, consistent with the overall stability of the financial system. Accordingly, the Bank's work on credit cards over the past decade and a half has focused on the role of credit cards in the payments system. As part of its work, the Bank collects and publishes data on credit and debit cards as well as other payment methods. This submission focuses on various aspects of the payments function of credit cards and the data on credit cards collected to support this work.

The Bank has also addressed issues with respect to the ATM system as part of its mandate for competition and efficiency in the payments system. Accordingly, the submission also provides some information on the ATM system, including data from a survey conducted in recent weeks for the benefit of the Inquiry.

The major points include:

- There are a wide range of card products and issuers in the Australian credit card market, and while 'standard' interest rates on credit cards tend to be very high, lower-rate cards are widely available, as are balance-transfer arrangements where issuers offer zero or low interest rates for a defined period of time.
- In addition, many credit card holders take advantage of interest-free periods such that they do not pay interest on their card balances.
- While the Bank's payments system reforms have reduced the incentive for consumers to use credit cards over debit cards, the existence of interest-free periods and rewards programs on credit cards still provide an incentive for credit card use for many consumers.
- The proportion of the stock of credit card debt that accrues interest has been falling in recent years. In addition, credit card debt has fallen as a share of all household debt over the past decade.
- The limited data available suggest that loss rates on the credit card portfolios of major banks are currently around 2½ per cent.

- Advertised rates on standard and lower-rate cards have been quite sticky in recent years, despite significant falls in funding costs. Spreads on advertised credit card interest rates over funding costs increased during the global financial crisis and have remained at that level or drifted modestly higher since then. Available estimates suggest that the spread on the full credit card portfolios of the major banks was around 9 per cent in early 2015, implying a spread on the interest-bearing component of about 14¾ per cent.
- The 2009 ATM reforms have seen non-transparent fee arrangements replaced by arrangements that are transparent to the cardholder and which have enabled ATMs to be installed in a range of locations where previously cardholders did not have access to cash. The vast majority of Australians have access to a wide network of fee-free ATMs and around 80 per cent of cash withdrawals (including eftpos cash-outs) do not attract a fee.
- Data from a new survey by the Reserve Bank indicate that ATM direct charges have increased at a similar rate to consumer prices since the reforms were introduced, with charges at independently owned ATMs increasing by more than those at ATMs owned by financial institutions. However, both the proportion and absolute number of ATM transactions on which a fee is paid have declined in recent years, with cardholders in total paying around \$60 million less in withdrawal fees in 2014/15 than in 2010.

The Credit Card Market

Credit card issuing

Credit cards (and charge cards) are cards offering payments functionality and linked to a line of credit. They are typically issued by banks and other financial institutions, linking to the cardholder's credit account, and provide access to a particular payment network, the two largest being Visa and MasterCard. Cards accessing the American Express or Diners Club networks can be issued either by those networks or banks.

There are few regulatory barriers to entry in this market. In the early 2000s, the Reserve Bank identified some restrictions on participation imposed by the credit card systems that unnecessarily inhibited competition and could not be justified as protecting the safety of the system. The PSB therefore established Access Regimes for the systems which required that a new class of financial institutions, specialist credit card institutions (SCCIs), were eligible to apply for membership in the schemes on the same basis as other authorised deposit-taking institutions (ADIs; banks, credit unions and others). More recently, however, the Bank judged that the Access Regimes for the MasterCard and Visa systems were no longer necessary, given the change in the ownership structures of the schemes (from member associations to listed companies) and the interest shown by some niche players, which might not warrant full prudential regulation, in seeking access to the card systems. Accordingly, the Access Regimes applying to the MasterCard and Visa systems were varied effective January 2015, along with corresponding changes to the Banking Regulations. The changes are deregulatory in nature, giving the card systems greater flexibility to expand membership beyond existing participants. Following changes to Access Regimes, MasterCard and Visa have published assessment criteria on their websites for potential applicants seeking access to their respective systems, as required under the varied regimes. They are also required to report annually to the Bank on applications to participate, new participants accepted and the reasons for any rejections. Although the revised Access Regimes have only been operating for just over half a year, the indications are that

the expanded scope for new participants in the schemes appears to be working, with a number of new participants admitted or progressing applications.

Issuers compete strongly for cardholders in many respects. There is a wide range of cards, issued by a broad range of financial institutions. The Bank's Retail Payments Statistics collection gathers data on credit card accounts and transactions from 25 issuers. As in many aspects of the financial system, the four largest banks are the major players in the market; cards issued by the four majors accounted for around three-quarters of credit card transactions in 2014/15. Alongside the major banks, there are a range of regional and foreign banks providing card products, as well as issuers serving the credit union and building society sector, and some specialist issuers. The product mixes of the small issuers contain a higher proportion of lower-rate and low-fee cards than those of the major banks.

There are few formal impediments for cardholders contemplating switching between institutions. Indeed, there are numerous websites which allow cardholders to compare product features, introductory offers, interest rates and annual fees across a range of credit cards available on the market. Customers must, however, undergo credit approval from a new issuer, which may be a barrier for some to switching between banks. In addition, cardholders may sometimes experience difficulties in cancelling or modifying some types of periodic or recurring payments that are debited from their credit card account. These difficulties can arise when a merchant does not act on a cardholder's instruction to cancel a recurring payment, or when the cardholder closes their account but does not take steps to cancel such payments.¹

The strong competition for customers is shown in the existence of a range of offers that waive annual fees for the first year or give sign-on bonuses in the form of frequent flyer points. Most notably, many credit card issuers offer a zero per cent interest rate (or a significantly reduced interest rate) for balance transfers from other institutions; these apply for a defined period of time, after which outstanding amounts attract the higher, ongoing rate. The Bank monitors advertised features of around 95 consumer credit cards. As of January, around 70 of these credit cards had some form of active balance transfer offer, with periods ranging from 4 to 24 months.²

Credit card issuers earn revenue on their credit card portfolios from three major sources:

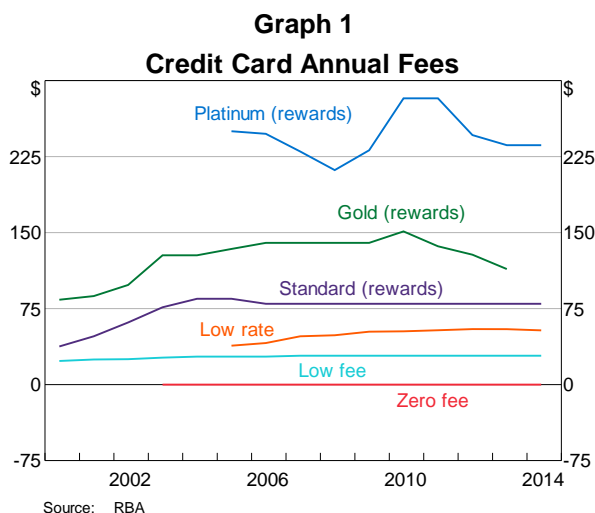
- Fees: including annual fees, over-limit fees, cash-advance fees, foreign currency conversion fees and late payment fees. Data collected by the Bank for 2014 estimate these at around \$1.4 billion, or about \$90 per account.
- Interchange revenues from transactions on MasterCard and Visa credit cards (and issuer fees from American Express 'companion' card transactions): based on incomplete data, the Bank estimates these at around \$1½–1¾ billion in 2014. These are discussed below in Box B.
- Interest payments: Data reported to APRA put these at around \$5.4 billion in 2014 for banks. These are discussed further below (see page 17).

The Bank undertakes an annual survey of advertised (ongoing) annual fees for a selection of credit cards (Graph 1). Advertised annual fees appear to have risen somewhat around the time of the Bank's initial payments reforms (see Box A below), but in recent years have been reasonably stable in

1 See, for example, Consumer Action Law Centre and Financial Rights Legal Centre Inc (2015).

2 The interest-free transfer offer typically applies only to the balance transferred from another bank; any new purchases immediately attract interest. Although the Bank monitors features of card products, it does not receive data on the actual value of balances transferred.

nominal terms (and have thus tended to decline in real terms). Care should be taken with these data however as there are no data on annual fees actually paid by cardholders. Some cardholders will not pay an annual fee if they have chosen to hold a zero-fee card, if they have an initial no-annual-fee offer, or if they have had their fees waived as part of broader banking package they hold with their bank. In addition, the benefits associated with particular types of cards may have changed, so the time-series of fees may not be entirely comparable across different periods. Individual financial institutions would be able to provide more detailed information on the actual average annual fees paid by cardholders.



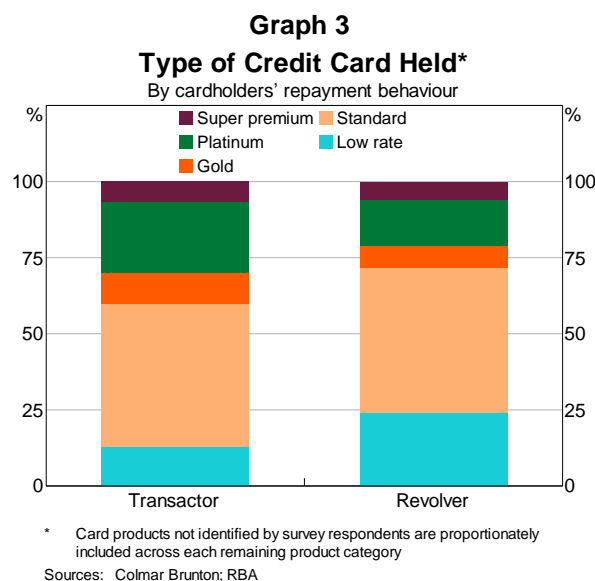
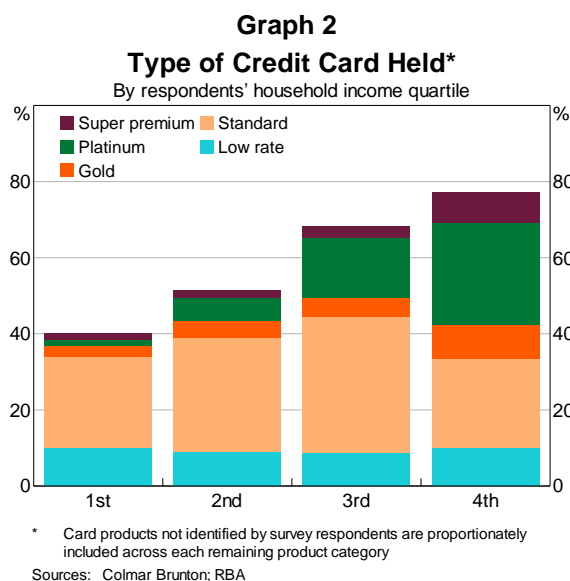
Credit card holders

There are around 16 million credit and charge accounts in Australia. While almost all Australian adults have transaction accounts that can be accessed with a debit card, the proportion with credit cards is somewhat smaller. Of the 1 167 consumers that participated in the Bank's 2013 Consumer Use Survey (see Ossolinski, Lam and Emery (2014)), 97 per cent held a debit card while 59 per cent held a credit card.

Over the past decade and a half, a broader range of credit card products has become available. At the broadest level, cardholders can choose between holding credit cards that offer no rewards (now including 'lower-rate' and 'low-fee' cards) and cards with programs offering varying levels of rewards (cards offering more substantial rewards generally command higher annual fees). Consumers who use their credit card relatively frequently may be attracted to cards offering rewards points and other benefits such as travel insurance and enhanced warranties for goods purchased on the card. Low-fee cards may be more attractive to cardholders who use their credit card relatively infrequently and typically pay their credit card balance in full within the interest-free period. For cardholders who carry outstanding balances outside of the interest-free period, lower-rate cards tend to be more attractive as the average interest rate on these cards is around 6½ percentage points lower than the interest rate on rewards cards.

The Bank's 2013 Consumer Use Survey provides some evidence as to the card choices that individuals make. Whereas there is little variation in holdings of debit cards by income level, the survey shows that credit cards are more widely held by higher-income individuals (Graph 2). Furthermore, those in the highest income quartile are far more likely to hold a premium-status card than those in the lowest

quartile.³ Cardholders that identify as ‘revolvers’ (i.e. who pay interest on balances) are more likely to hold a lower-rate card than ‘transactors’ (who typically pay off their balance in full), while transactors are more likely to hold rewards cards (Graph 3).



Credit cards as payment instruments

Use of credit cards

In recent decades there have been significant changes in the way that individuals, businesses and government agencies make and receive retail payments. The use of non-cash payment methods has increased strongly, with debit and credit cards playing an increasingly important role in the payments system. They are now the most frequently used non-cash payment method, accounting for around two-thirds of the number of non-cash payments in Australia in 2014/15 (though only around 3 per cent of the value, given the small size of card transactions compared with some other payment methods such as electronic funds transfers). Over the past financial year, Australian personal and business cardholders made around 6.2 billion card payments, with a total value of \$503 billion. Credit card payments accounted for 2.2 billion payments with a total value of \$285 billion.⁴

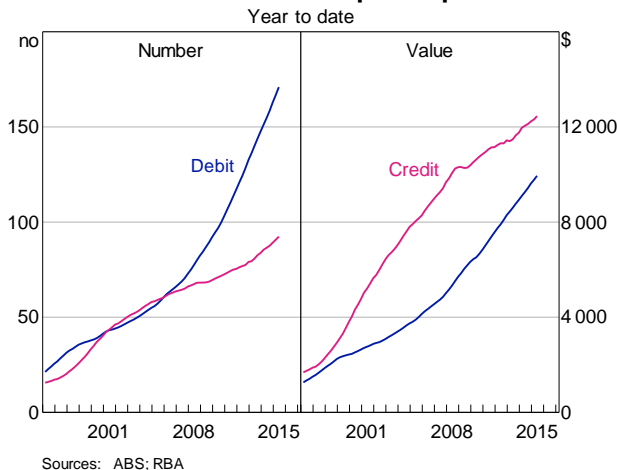
The growth of credit card use was especially strong in the 1990s and early 2000s (Graph 4 and Graph 5). However, since 2004/05, spending on debit cards has grown more strongly than spending on credit cards. While this reflects many factors, possibly including the reforms implemented by the Bank around that time (see Box A), it is likely mostly a reflection of broader macroeconomic trends, as the period to the mid 2000s was one where the ratio of household debt (especially for housing) to income grew significantly and where the household saving rate was falling. By contrast, the period

3 If ‘gold’ cards are treated as having premium status, the fourth quartile (that is, the highest-income quartile) is six times more likely to hold a ‘premium’ card than the first quartile; including only ‘platinum’ and ‘super-premium’ products, holdings of the fourth quartile are 10 times larger.

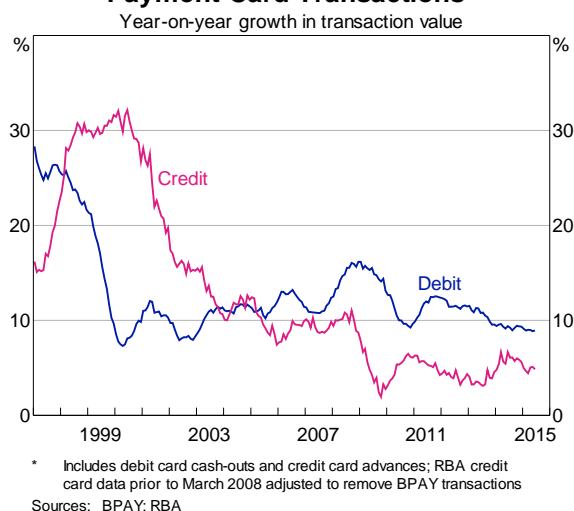
4 While credit cards can also provide cash withdrawals, their use for this has been falling since 2007/08; cash withdrawals are around 25 per cent lower than in 2007/08 and now account for 3% per cent of all credit card transactions. Most of the data cited in this submission are for transactions, excluding cash withdrawals.

since the mid 2000s has seen a broad stabilisation in the household debt ratio, a recovery in the saving rate and more conservative trends in card use and debt (as discussed below).

Graph 4
Card Transactions per Capita

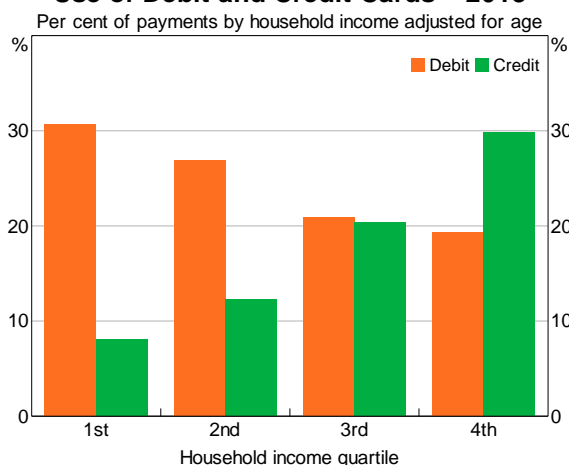


Graph 5
Payment Card Transactions*

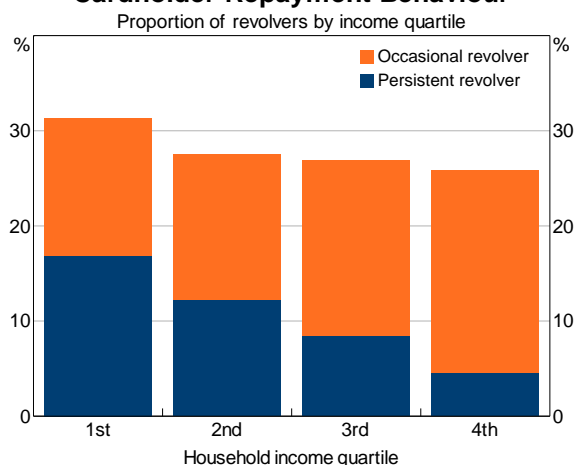


The Bank's 2013 Consumer Use Survey shows that higher-income households use credit cards much more frequently for transactions compared with debit cards; conversely, debit card use is more common for lower-income households (Graph 6). Seventy-three per cent of credit card holders participating in the survey reported that they typically paid off their account in full by the due date each month (within the interest-free period). While this implies that only 27 per cent of cardholders pay interest charges, some industry estimates suggest that a slightly higher proportion (between 30 and 40 per cent) of cardholders pay interest; it is possible that survey responses reflect hoped-for rather than actual behaviour. Subject to this caveat, the survey suggests that the proportion of revolvers is somewhat higher for lower-income households than higher-income ones (Graph 7).

Graph 6
Use of Debit and Credit Cards – 2013



Graph 7
Cardholder Repayment Behaviour



Box A The Reserve Bank's Reforms relating to Payment Cards

Following the 1996–97 Wallis Inquiry, the Reserve Bank was given new powers with respect to the payments system and a new Board, the Payments System Board (PSB), to oversee the exercise of those powers. The Inquiry recommended that the Bank and the Australian Competition and Consumer Commission (ACCC) undertake a review of interchange fee arrangements for credit and debit cards and other aspects of Australia's payments system.

The resulting Joint Study (RBA and ACCC 2000) found that there was very little transparency in the arrangements underlying card payment systems. It found that the card systems, exercising market power, tended to have arrangements that detracted from the efficiency and competitiveness of Australia's payments system:

- Relative prices to cardholders for card payments in Australia did not generally reflect relative costs. In particular, the resource costs (the cost of 'producing' a payment) of a \$100 credit card transaction were around 201 cents, but the cardholder usually faced a negative price for this transaction – an interest-free period and reward points to the value of around 90 cents. Meanwhile, the resource costs of a transaction in the domestic debit (i.e. eftpos) system were around 41 cents for that same transaction, but the cardholder faced a positive price of up to 60 cents. The effect of these relative prices was that it was likely that consumers were using credit cards more frequently, and eftpos less frequently, than they would if prices more closely reflected costs. Consequently, the overall cost of making payments was higher than it might otherwise have been.
- Restrictions on merchants impeded competition and efficiency. Specifically, card schemes had rules that: prohibited merchants from charging more for accepting their cards than for other payment instruments – 'no-surcharge' rules; and required merchants to take all cards associated with a particular scheme's brand – 'honour-all-cards' rules.
- Access arrangements for a number of payment systems were more restrictive than necessary to ensure the stability of those systems. In the Bankcard, MasterCard and Visa systems, participation was restricted to authorised deposit-taking institutions (ADIs), and rules discouraged 'specialist acquirers' (i.e. firms specialising in providing card acceptance to merchants and not issuing cards to cardholders). In addition, access to the eftpos system was complicated by the bilateral infrastructure and institutional arrangements that applied in the system, meaning that new entrants were required to separately negotiate and establish connections with multiple entities in order to gain effective access.
- Information on pricing and access in the card systems was not always available. In particular, there was no transparency of interchange fee rates, nor were there publicly available criteria for access for prospective system participants.

Over the early 2000s, the Bank undertook further work and extensive consultation, culminating in a series of reforms. These reforms included measures that changed the prices cardholders faced when using debit and credit cards, reducing the incentives to use higher-cost payment methods. The Bank's reforms also required changes to certain rules in card systems, including enabling merchants to apply surcharges on card transactions so that cardholders were more likely to face prices that reflected the cost of the card they were using. It also took steps that reduced the barriers to entry for entities wishing to issue cards or provide card payment services to merchants.

In 2007–08, the PSB conducted a review of the Bank’s reforms. The review concluded that the reforms had improved access, increased transparency and had led to more appropriate price signals to consumers. This review also explored a number of options for possible changes to the regulatory framework, including stepping back from formal regulation and relying on industry undertakings. However, the industry was unable to arrive at suitable undertakings so in August 2009 the PSB decided against stepping back from interchange regulation and noted that the regulatory framework would remain under review.

In March 2015, the Bank commenced a review of the regulatory framework for card payments with the release of an Issues Paper, *Review of Card Payments Regulation* (RBA 2015a). The review is covering a number of issues including:

- The decline in transparency for some end users of the card systems, in part due to the increased complexity and the wider range of interchange fee categories.
- Whether there is scope for interchange fees to fall further, consistent with falls in overall resource costs and as was contemplated in the conclusions to the 2007–08 Review.
- Widespread perceptions that card surcharges remain excessive in certain industries.
- Perceptions that the growth of ‘companion card’ arrangements may indicate that the current regulatory system is not fully competitively neutral.

The Bank has received 44 written submissions on the review and has been consulting extensively with stakeholders, via separate meetings and in an industry roundtable that included representatives from 33 organisations including card schemes, card issuers and acquirers, merchants, consumer groups, the ACCC, the Treasury, and staff from Ministers offices. The review is ongoing.

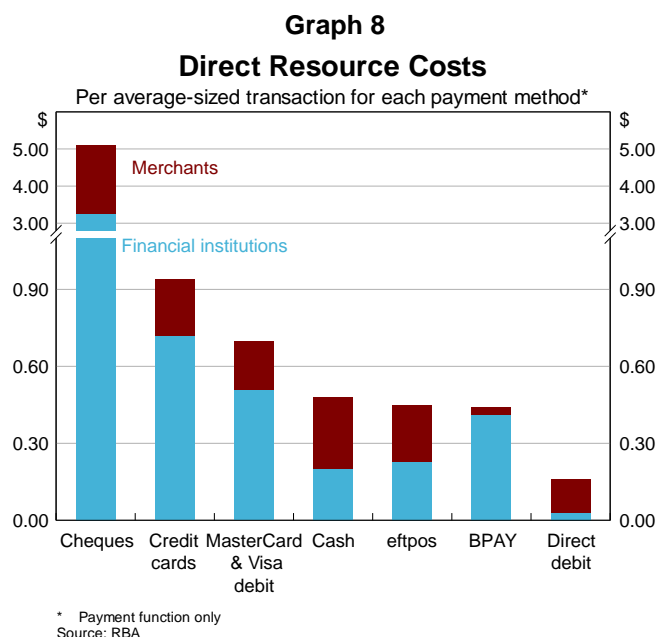
The resource costs of credit cards

In 2013–2014, the Reserve Bank conducted a comprehensive review of the costs borne by merchants, financial institutions and individuals in the use of different payment methods (Stewart *et al* 2014). Drawing on data for 2013, the Payment Costs Study focused on the ‘resource costs’ of the payments system – the economic costs incurred by participants to ‘produce’ payments.

The study found that direct debit payments had the lowest resource costs, while cheques were the most expensive payment instrument (Graph 8).⁵ The difference in resource costs across the various payment instruments reflect factors such as processing and authorisation costs, product features, tender time, economies of scale and the average value of transactions. For example, direct debit payments incur fewer resources, reflecting automatic debiting of funds and few manual processing tasks.

Credit card transactions were the most resource-intensive card payment method, with costs of their payment function around 1½ to 2 times the equivalent level for eftpos (and cash) at their typical transaction values. This reflected higher costs borne by both card issuers and acquirers, and a range of costs associated with authorisation and processing of transactions, fraud prevention and payments to card schemes. In addition to the resource cost of providing payment functions, issuers incur significant costs in providing credit and reward functions.

5 All costs from the study are at the average transaction value for each payment instrument.



The cost of credit card transactions to cardholders

The Payment Costs Study also provides data on the cost of credit cards and other payment methods to end-users. In the case of consumers, it is useful to distinguish between the average cost of a payment method and the marginal cost for a particular transaction. In addition, it is important to consider the net cost to consumers – that is the costs they pay less any financial benefits they receive in the transaction.⁶

Estimates from the Payment Costs Study suggest that the average net cost to consumers of MasterCard and Visa credit cards was around 19 cents per transaction, where this includes the costs and financial benefits associated with the payments function but not any subsequent interest payments. This compares with costs of around 21 cents for debit card transactions and 13 cents for cash transactions. That is, the net cost to consumers of credit card transactions was around the same as for debit cards and only a little above that for cash, despite the considerably higher overall resource cost of credit cards compared to these other methods. To hold a credit card, consumers typically pay annual and other fees; on average, these fees are equal to around \$0.84 per transaction. At the time of the transaction, consumers receive a sizeable inward transfer from financial institutions equivalent to around \$0.77 to use the credit card due to the interest-free period and reward points available on credit card transactions. Consumers may also pay a merchant surcharge at the point of sale (of around \$0.12 per transaction on average). In terms of incentives at the time of a transaction, the existence of the interest-free period and reward programs means that consumers face a significant incentive to use credit cards over other payment methods.

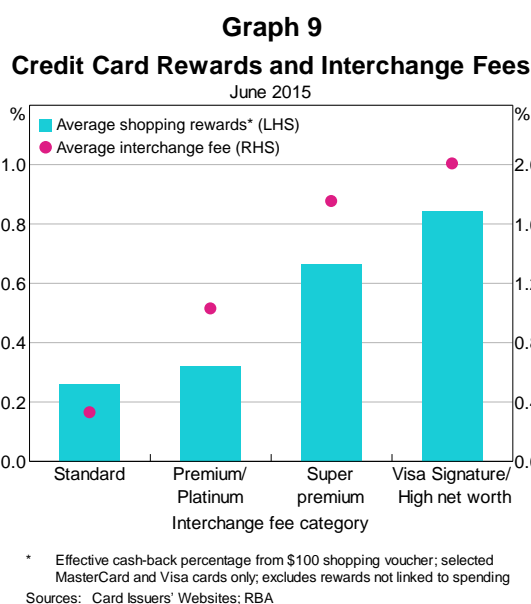
The rewards programs offered by credit card issuers are due in large part to the existence of interchange fees that are paid by the card acquirer (the merchant's financial institution) to the issuer (the cardholder's bank) in each transaction in four-party card schemes (see Box B). These are then

⁶ The incentives discussed here ignore some of the potential benefits for credit card holders and consumers of different payment methods. For example, card payments may provide consumers with the benefit of a greater feeling of security as they reduce the need to carry large cash holdings; on the other hand, some consumers report in surveys that they prefer the budgeting discipline that cash or debit cards bring relative to credit cards.

passed on to merchants by acquirers in the form of a higher merchant service fees. In the case of three-party card schemes (such as American Express or Diners Club) there is no direct equivalent to interchange fees, with rewards programs funded directly from merchant service fees charged by the card scheme.

The interchange fee payable on a four-party card transaction depends on the category of that transaction within a schedule of interchange rates set by the scheme. The average level of interchange rates is subject to a Reserve Bank standard that requires that the weighted average of the schedule of rates does not exceed 50 basis points, with compliance required once every three years (or at the time of any reset of the schedule). The specific rate applying to a transaction will depend on the type of merchant ('strategic', service station, etc), the type of card (various types of premium cards, corporate, etc) and the nature of the authentication (contactless, SecureCode, etc) or the value of the transaction. There is a hierarchy of categories, which determines how the merchant, card and transaction categories interact. Typically, the relatively low 'strategic' interchange rates for large merchants have precedence over the interchange category for the type of card, so that the same relatively low rate for strategic merchants applies for all their transactions, including for those transactions using premium cards with high interchange rates. However, merchants that do not have access to strategic or merchant-specific rates will face different rates based on the type of card presented.

In recent years, there has been significant growth in the premium segment of the credit card market, with the emergence of 'super-premium' and, more recently 'elite'/'high net worth' credit cards in addition to 'gold' and 'platinum' cards. Issuing banks can earn higher interchange fee revenue on these products than from standard credit cards, and may use this revenue to fund more generous rewards programs in terms of frequent flyer points, spending vouchers at retailers, travel insurance, etc. One objective measure of the generosity of rewards to consumers is in terms of the card spending required to generate a \$100 voucher, which can be translated into an effective cash-back percentage. Data on the interchange rates and rewards on offer in a sample of around 80 cards monitored by the Bank, show a positive correlation between the interchange rate on cards and the generosity of rewards by issuers (Graph 9).

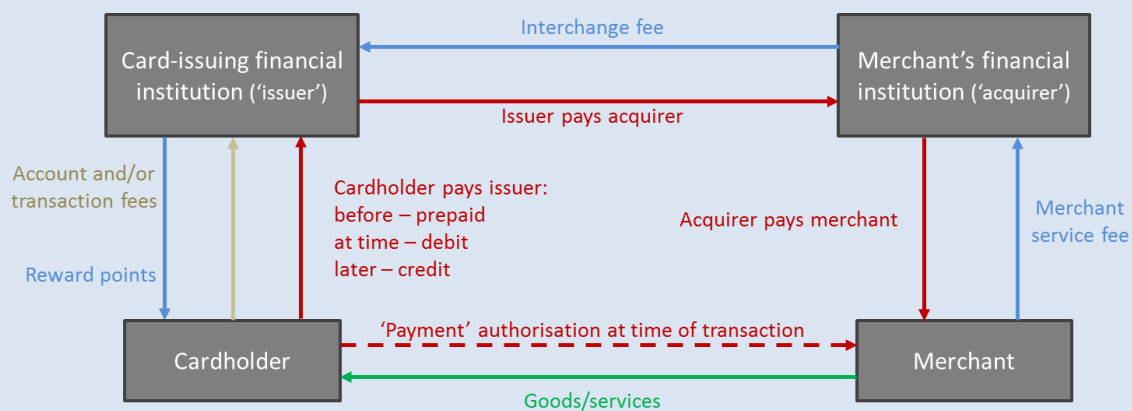


Box B Interchange Fees

An interchange fee is a fee charged by the financial institution on one side of a payment transaction to the financial institution on the other side of the transaction. They are most commonly seen in card transactions, although can arise in other payment methods.⁷

A typical card transaction (Figure 1) involves four parties – the cardholder, the cardholder’s financial institution (the issuer), the merchant and the merchant’s financial institution (the acquirer). For most card transactions, the interchange fee is paid by the acquirer to the issuer. Interchange fees can have important implications for the prevalence and acceptance of different cards as well as the relative costs faced by consumers and merchants. In contrast to normal markets for goods and services, competition in payment card networks can actually drive fees higher.

Figure 1: Stylised Flows in a Card Transaction



Financial institutions typically charge fees to their customers for payment services. Cardholders are charged by their financial institution in a variety of ways. In the case of payments from a deposit account such as debit cards, financial institutions typically charge a monthly account-keeping fee and, sometimes, a fee per transaction (or for transactions above a certain number). In the case of payments using a credit card, financial institutions usually charge an annual fee rather than a per transaction fee, and interest is charged on borrowings that are not repaid by a specified due date.

Merchants receiving payments are also typically charged by their financial institutions. The fees paid by merchants usually depend on the payment method. For credit and debit cards, merchants are usually charged a 'merchant service fee' for every card payment they accept. Some merchants are also charged a fee by their financial institution to rent a terminal to accept cards.

In contrast, interchange fees are paid between financial institutions and are present in many, but not all, card systems.⁸ Interchange fees are often not transparent; cardholders and merchants do not typically see them. But they have an impact on the fees that cardholders and merchants pay.

⁷ There is now a substantial theoretical literature on the role of interchange fees in card systems; see Verdier (2011) for a recent survey.

⁸ For example, the European Commission (2013) notes (p 53) that 'in Norway, the absence of IFs [interchange fees] for debit cards is accompanied by very high level of card acceptance by merchants and usage. Denmark also has one of the highest card usage rates in the EU at 216 transactions per capita with a zero-MIF [multilateral interchange fee] debit scheme. This is also true of international schemes: in Switzerland Maestro has no MIF and is the main debit card system. It is also worth noting that all European card schemes were originally created without MIFs. MIFs have been introduced by banks and card schemes only later.'

In the MasterCard and Visa credit card schemes, interchange fees are paid by the merchant's financial institution to the cardholder's financial institution every time a payment is made using a MasterCard or Visa card. This has two effects. First, the merchant's financial institution will charge the merchant for the cost of providing it with the acceptance service plus the fee that it must pay to the card issuer (the interchange fee). The higher the interchange fee that the merchant's financial institution must pay, the more the merchant will have to pay to accept a card payment. Second, since the card issuer is receiving a fee from the merchant's financial institution every time its card is used, it does not need to charge its customer – the cardholder – as much. The higher the interchange fee, therefore, the less the cardholder has to pay. In effect, the merchant is meeting some of the card issuer's costs which can then be used to subsidise the cardholder. Indeed, with rewards programs, the cardholder may actually be paid to use his/her card for transactions.

Where the market structure is such that there are two payment networks whose cards are accepted very widely (i.e. merchants accept cards from both networks), and where consumers may hold one network's card but not necessarily both, competition tends to involve offering incentives for a consumer to hold and use a particular network's cards (loyalty or rewards programs, typically). A network that increases the interchange fee paid by the merchant's bank to the cardholder's bank enables the cardholder's bank to pay more generous incentives, and can increase use of its cards. However, the competitive response from the other network is to increase the interchange rates applicable to its cards.

In the early 2000s, the Reserve Bank became concerned that credit card holders were effectively being subsidised to use their credit cards through arrangements that added to merchants' costs. Interchange fee revenue allowed card issuers to support generous credit card rewards programs and, as a result, many credit card holders were facing a negative effective price for credit card transactions, even though those cards had positive costs for the system as a whole. This distorted price signals to cardholders about the relative costs of using different payment instruments.

The Reserve Bank therefore introduced a number of reforms to the credit card market from 2003, with the aim of improving efficiency and competition in the Australian card payments system. Among other things, the reforms reduced interchange fees, which had been used by card issuers to support attractive rewards programs on credit card products. Overall, reward points and other benefits earned from spending on credit cards have become less generous, although card schemes have found ways, within the bounds of the Reserve Bank's regulation, to increase incentives for card issuers to promote particular products within their suite of offerings. Over time, MasterCard and Visa have progressively introduced new, higher fee categories for consumer and business cardholders, based on the type of card held (e.g. premium/platinum, super premium, 'elite'/'high net worth'). This enables issuers to pay more generous incentives to holders of these cards; card issuers have responded, particularly through new strategies focusing on the premium segment of the market.

The cost of credit cards to merchants

As recognised by the Terms of Reference, interchange payments (and the loyalty programs they finance) increase the costs of payments for merchants and accordingly drive up the final prices of goods and services for all consumers, including for consumers who do not use credit cards.

The interchange schedules for the MasterCard and Visa credit card systems include a wide range of interchange rates from 0.20 per cent or 0.23 per cent for some 'strategic' large merchants to 2 per cent for the highest level of premium cards (Table 1). Based on the hierarchy of interchange rates, the cost of the high interchange rates on premium or commercial cards falls entirely on small merchants and other merchants that do not benefit from special rates.

Table 1: Credit Card Interchange Fees^(a)

Excluding GST; as at February 2015

Category	Interchange Fee Per cent	
	MasterCard	Visa
Consumer electronic	0.30	0.30
Consumer standard	0.30	0.30
Consumer premium/platinum	0.95	0.93
Super premium	1.59	—
Visa Rewards	—	1.50 or 1.70 ^(b)
Visa Signature	—	1.80
Consumer elite/High net worth	2.00	1.80 or 2.00 ^(b)
Commercial	1.00	0.97 or 1.20 ^(c)
Commercial premium	1.30 or 1.35 ^(d)	1.30 or 1.80 ^(e)
Strategic merchant	0.23 or 0.29	0.20 to 0.40
Government/utility	0.29	0.30
Charity	0.00	0.00
Petrol/service station	0.29	0.30
Education	0.29	0.30
Supermarket	—	0.30
Insurance	—	0.30
Transit	—	0.30
Recurring payment	0.29	0.30
Contactless ^(f)	0.29	—
Quick Payment Service	0.40	—
SecureCode merchant	0.30	—
SecureCode full	0.30	—

(a) Fees are paid by the acquirer to the issuer

(b) The higher rate applies if an account is deemed qualified (if spending on that account exceeds a card-specific threshold)

(c) Visa has three types of non-premium commercial rates; the 'business' category attracts a fee of 0.97 per cent while the 'corporate' and 'purchasing' categories attract a fee of 1.20 per cent

(d) 1.30 per cent for the 'commercial corporate executive' category and 1.35 per cent for the 'commercial business executive' category

(e) 1.30 per cent for the 'commercial premium' category and 1.80 per cent for the 'business signature' category

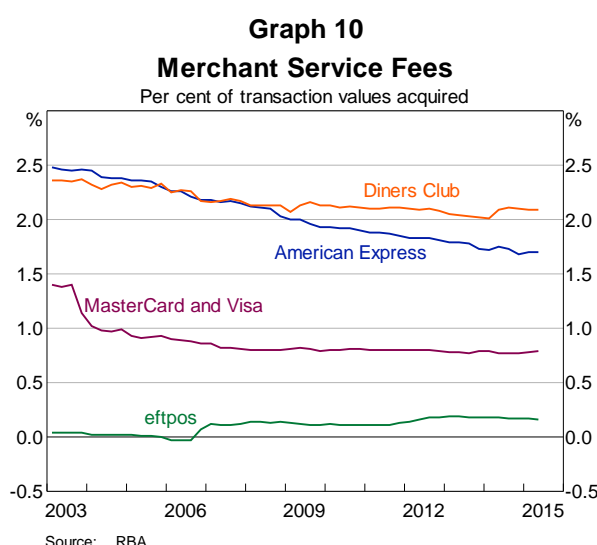
(f) MasterCard *PayPass* transactions equal to or less than \$60, excluding commercial credit cards

Sources: MasterCard; Visa

There are two significant consequences of the current structure of interchange schedules. First, there are now large differences in the average interchange rates paid on the transactions of strategic or qualifying merchants compared with other merchants. The Bank estimates that the average credit card interchange rate for non-preferred merchants (i.e. those not benefiting from strategic or other preferential rates) was more than 50 basis points higher than the interchange rate applying to preferred merchants in the December quarter of 2014. These differences in interchange rates have a corresponding effect on the merchant service fees faced by the two groups which is in addition to the

higher margin that acquiring banks would normally apply to small merchants relative to large merchants. The second consequence of the complex interchange fee schedules is that the non-preferred merchants have little transparency over the cost of particular transactions. In the case of a MasterCard or Visa credit card transaction, the interchange rate will be 30 basis points on a standard card but will be 200 basis points if the transaction involves the highest level of premium card. In contrast, for strategic merchants the cost of all cards issued in Australia, from standard non-rewards cards to the highest level of premium cards, will be constant (and as low as 0.20 per cent).

The Bank collects data on average merchant service fees for the different payment schemes (Graph 10). For the June quarter 2015, merchant service fees were around 2.1 per cent for Diners Club, 1.7 per cent for American Express, and 0.79 per cent for MasterCard and Visa, though the latter also includes debit card merchant service fees. The Bank estimates that merchant service fees for MasterCard and Visa credit cards were around 0.87 per cent in the June quarter.



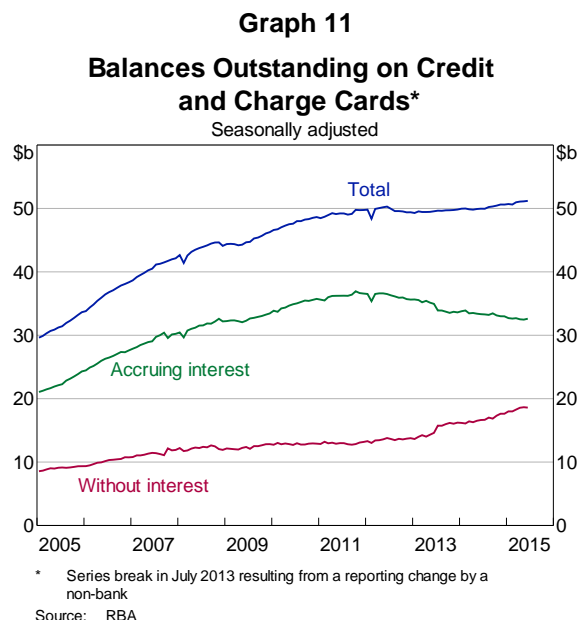
Merchants have some ability to recoup the costs of more expensive payment methods via the use of surcharging for such payments. While the majority of merchants do not surcharge for particular payment methods, the right to surcharge is important to promote efficiency in the payments system and is also a means by which merchants can exert some downward pressure on the cost of payments. There are, however, some instances of firms in particular industries which may be surcharging excessively for some customers; the Bank is currently consulting on this issue as part of its review of the regulatory framework for cards payments.

Credit cards as sources of credit

Credit card debt

Each month, cardholders receive statements of their use of credit for transactions over the previous month. For a cardholder who has paid off their previous balance in full, credit cards typically offer an interest-free period of up to 55 days on new transactions, given that the cardholder typically has about 25 days following the end of the statement period to repay the statement balance. If the balance is not paid off in full, interest becomes due from the date of each transaction (and the cardholder will not benefit from an interest-free period the following month).

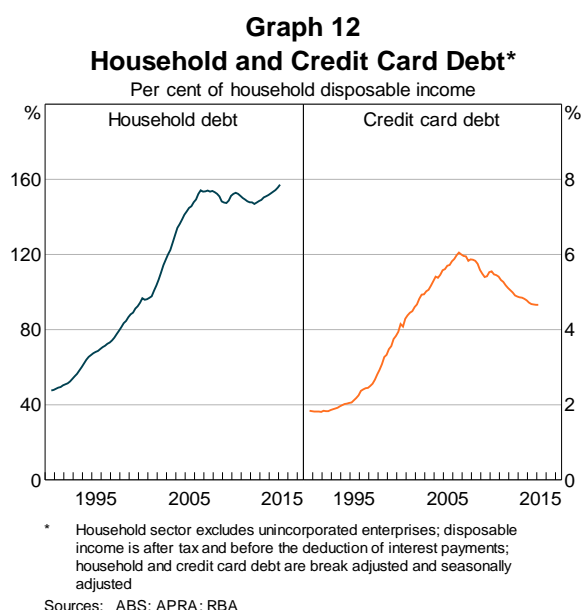
In the June quarter of 2015, new credit card transactions averaged around \$24 billion per month. At the end of June, the total level of credit card debt was \$51.5 billion (Graph 11). Of this amount, \$33.1 billion, or around 65 per cent was bearing interest. A simple calculation would suggest that around 75-80 per cent of transactions on credit cards do not accrue interest. That is, interest-paying 'revolvers' account for about 30-40 per cent of accounts, about 20-25 per cent of transactions, but close to two-thirds of the outstanding stock of debt.⁹



The proportion of the stock of debt that accrues interest has fallen from around three-quarters of balances in 2012. Balances accruing interest have also fallen in absolute terms after peaking in late 2011 (Graph 11). This decline possibly reflects a range of factors such as changes in consumers' financial behaviour, government reforms in 2012 relating to repayments and limit increase arrangements, and possibly also the effect of competition for balance-transfer offers.

9 The Bank does not have data on the distribution of account balances. However, the average balance across all 16 million accounts is around \$3 200. On the assumption that around 30 to 40 per cent of all accounts accrue interest, the average balance outstanding on those accounts would be around \$5 000 to \$7 000, and the implied average balance for those accounts that do not accrue interest would be around \$1 600 to \$1 900.

More broadly, credit card debt has represented a declining share of household borrowing over the past decade. Credit card debt peaked as a share of household debt at around 4½ per cent in 2001 but now represents a little below 3 per cent of household debt. While the ratio of overall household debt to income has been relatively steady over the past decade, the ratio of credit card debt to household income has declined (Graph 12). The decreased share of credit card debt may partly reflect the high cost of credit cards relative to mortgage interest rates and the increasing ability of households to use mortgage offset and redraw facilities as a source of low-cost funds. These products have become increasingly common over the past decade or two, with most loans now including such a facility (see RBA (2015b)). The amount available under these facilities has grown from less than 10 per cent of household income in early 2008 to over 20 per cent of household income (or around \$220 billion) in mid 2015.

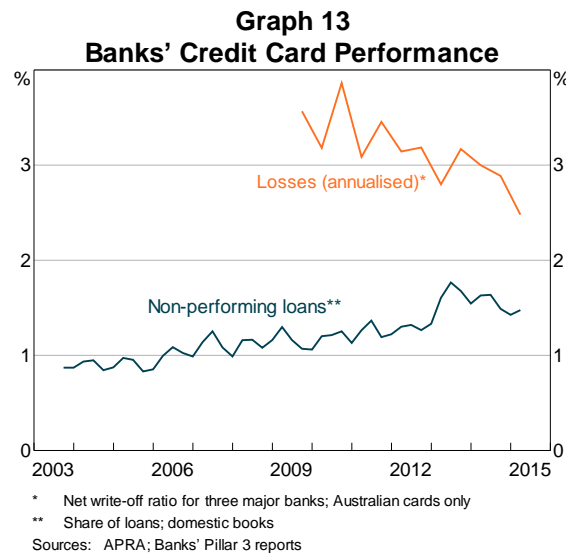


Credit risk to banks

There is relatively limited information available on the risk of credit card lending. Data reported to APRA indicate that the non-performing loan (NPL) rate on banks' credit card debt (defined as where repayment is more than 90 days past due or otherwise doubtful) has increased gradually during the past decade, although it has declined slightly over the past couple of years. The credit card NPL rate stood at 1.5 per cent as of early 2015, which is lower than the comparable ratio for other personal loans.

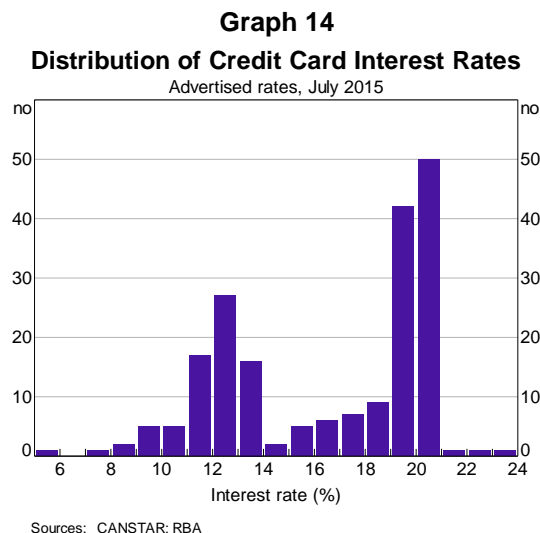
However, the overall loss rate for credit card issuers is probably higher than suggested by the NPL rate. Unlike some other types of household loans such as residential mortgages, credit card loans are unsecured, with little prospect, in some cases, of recovering a significant portion of the debt if the borrower defaults. As a consequence, some credit card debt may be written-off directly to an issuing institution's profit and loss account, without first being recorded as a non-performing loan.

Data from the financial statements of three major banks suggest that the overall loss rate on their credit cards has been falling over the relatively short five-year period for which the data are available, and stood at 2.5 per cent as of early 2015 (Graph 13).¹⁰ This loss rate represents an average calculated over all users of credit cards; it is reasonable to assume that banks' risk models expect lower loss rates for some account holders and higher rates for others, for example borrowers who have tended to be revolvers.



Interest rates on credit card debt

There is significant variation in the advertised rates on credit card debt, reflecting the wide range of products offered, but some bunching of standard cards around 20 per cent and around 13 per cent for lower-rate cards (Graph 14).

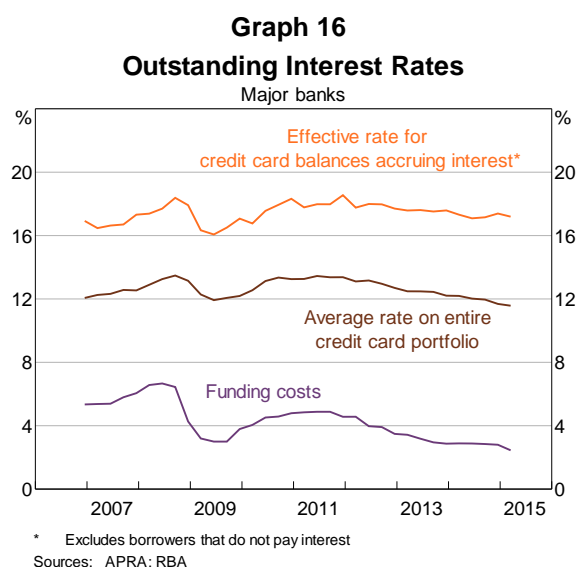
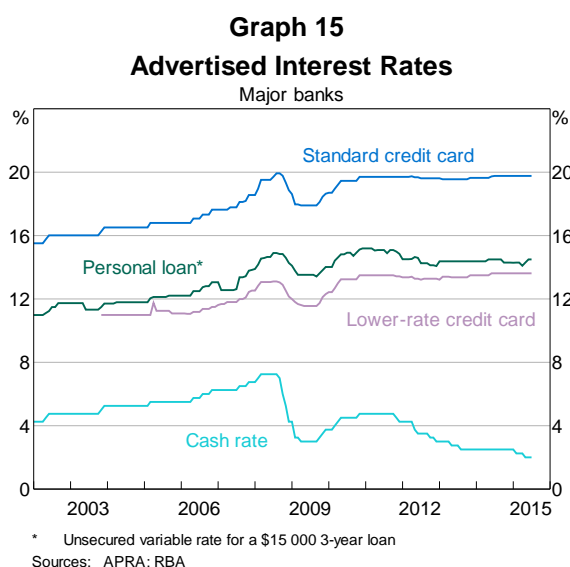


The Bank publishes data on average advertised credit card interest rates for 'standard' and 'low-rate' cards. Since around 2010 the average interest rate for standard cards has been fairly steady at just under 20 per cent, while for lower-rate cards the average interest rate has been

¹⁰ For a broader discussion of credit losses at Australian banks, see Rodgers (2015).

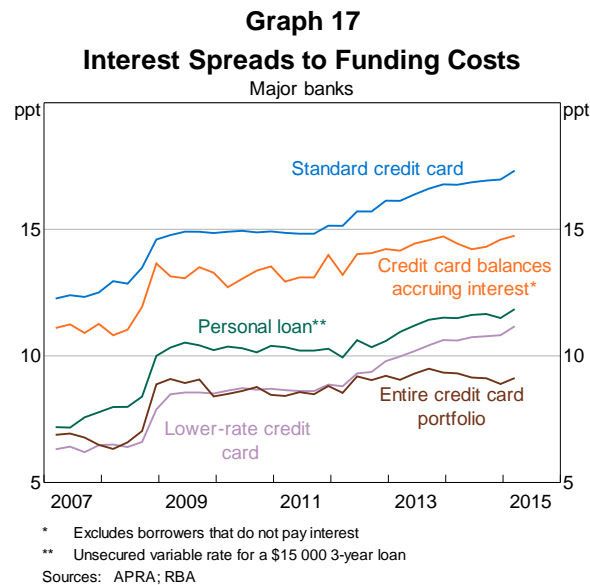
about 13 per cent (Graph 15). These data are average advertised (ongoing) interest rates rather than the average interest rate actually paid by all holders of standard or lower-rate cards. For instance, the relatively stable advertised rates in recent years do not take into account low- or zero-rate balance transfer offers that cardholders may receive for switching their outstanding credit card debt to another bank.

Consequently, average interest rates paid may be lower than the advertised ongoing rates, to the extent that cardholders have been switching banks to take advantage of these deals. More generally, the advertised interest rate on a card is only relevant to those cardholders who do not pay off their monthly statement in full and have a stock of outstanding debt.



Data collected by APRA from the major banks provide some further information on actual interest rates on their credit card portfolios (Graph 16). These data indicate that the actual average interest rate on the entire book of credit card loans (including debt that does not yield interest) was 11.6 per cent in the March quarter. While advertised credit card rates have been little changed in the recent period, the effective interest rate received by banks on their entire credit card portfolio has fallen by close to 2 percentage points since mid 2011. The effective interest rate on the entire credit card portfolio does not, however, provide a guide to the experience of those cardholders who pay interest on their credit card debt. Based on data reported to the Bank showing that around 35 per cent of outstanding credit card debt did not bear interest, the effective average interest rate for those borrowers that pay interest is estimated at about 17 per cent, down about 1 percentage point from 2011. Taken together, the recent changes in these two series are consistent with the observed decline in the proportion of the stock of debt that is accruing interest (either reflecting more consumers paying down debt ahead of being charged interest, or reflecting an increase in the take up of zero- and lower-rate balance transfers) and also some switching by consumers from high- to lower-rate cards. The major card-issuing banks would be able to shed further light on these estimates.

Based on estimates of the overall cost of funds for banks, it is possible to calculate the spreads on different lending rates (Graph 17).¹¹ The data indicate that the interest rate on bank credit card portfolios is around 9 percentage points above the cost of funds, while the spread for those borrowers who are paying interest is about 14½ percentage points. These spreads rose significantly in the global financial crisis (when funding rates fell significantly but credit card rates fell by much less) and have remained at that level or drifted modestly higher since.



The observation that issuers compete actively for customers yet credit card interest rates are high and do not closely follow changes in funding costs is consistent with international experience and has been studied by academics. The most well-known paper addressing this issue is a study by Ausubel (1991) for the United States. The study notes the apparent paradox that a market with few barriers to entry and the presence of 4 000 competitors could be characterised by very sticky interest rates and card issuers making much higher rates of return on their credit card lending than on other lines of business. Based on the work of Ausubel and others, it seems reasonable to explain the apparent paradox as resulting to a large extent from the existence of a significant number of consumers who are either not well informed or (for various behavioural reasons) are reluctant to switch banks or seek a lower rate. At the same time, banks may have little incentive to lower interest rates, given that rates are not a determining factor for many individuals who may (possibly mistakenly) not expect to build up significant balances, while in the case of other individuals, banks may worry that lower rates may attract lower-quality borrowers.

11 The Reserve Bank constructs aggregate estimates of banks' funding costs using measures of the cost of various deposit and wholesale funding sources and weighting them by their share of total bank funding. While these are the Reserve Bank's best estimates, there remains a degree of imprecision around them. For more details, see Tellez (2015).

ATM Fees

Background

The ATM system is made up of two types of ATM owners. Financial institutions maintain networks of ATMs largely as a service to their own customers, who can transact on those ATMs without paying an explicit fee. A larger network is likely to attract more depositors, therefore it may not be critical that financial institution ATM fees cover the cost of installing and running ATMs, given that the institution can profit from the broader customer relationship. Independent ATM owners, however, operate their networks as a stand-alone business and rely solely on the fees generated to be viable. Independently owned ATMs make up a little over half of all ATMs currently deployed in Australia.

As noted, no ATM fees are typically paid when a cardholder makes a transaction (withdrawal or balance enquiry) on an ATM owned by their own financial institution ('own ATM'). However, fees are often paid when a cardholder uses an ATM owned by another financial institution or an independent owner ('foreign ATM'). The nature of these fees changed in 2009 when a set of reforms was introduced by the Australian payments industry, with support from the Reserve Bank.

Prior to the 2009 reforms, two types of fees were generated on a 'foreign' ATM transaction. An interchange fee was paid by the cardholder's bank to the ATM owner to remunerate the ATM owner for the service provided. These fees were bilaterally negotiated but were generally around \$1.00 per transaction. The cardholder's bank recovered this cost by charging a 'foreign fee' to the cardholder. By 2009, a foreign fee of \$2.00 was common, double the typical interchange fee.

Interchange fees had proved to be extremely inflexible. With the cost of ATM provision rising, there was concern that the \$1.00 interchange fee might make deployment of ATMs by independent owners uneconomic, resulting in a decline in the availability of ATMs. This would be likely to affect regional and remote areas more severely, due to the higher cost of maintaining ATMs in those areas. At the same time, the Bank had concerns about the transparency of the foreign fees charged by financial institutions to their own cardholders. The fees were not disclosed at the time of the transaction; the cardholder would typically see them for the first time when they checked their bank statement at the end of the month. It is likely that many cardholders were unaware that they were paying these fees, particularly for balance enquiries.

The 2009 reforms removed interchange fees in the ATM system and allowed ATM owners to charge cardholders directly for making an ATM withdrawal. This 'direct charge' had to be disclosed clearly to the cardholder before they completed the transaction, providing an opportunity for the cardholder to cancel the transaction if they did not wish to pay the fee. At the same time, financial institutions were encouraged to remove the foreign ATM fees charged to their own customers as these could no longer be justified where no payment was being made by the institution to the ATM owner. Some additional changes were made in an effort to remove barriers to entry to the ATM system.

Effects of the reforms

The reforms had a number of effects:

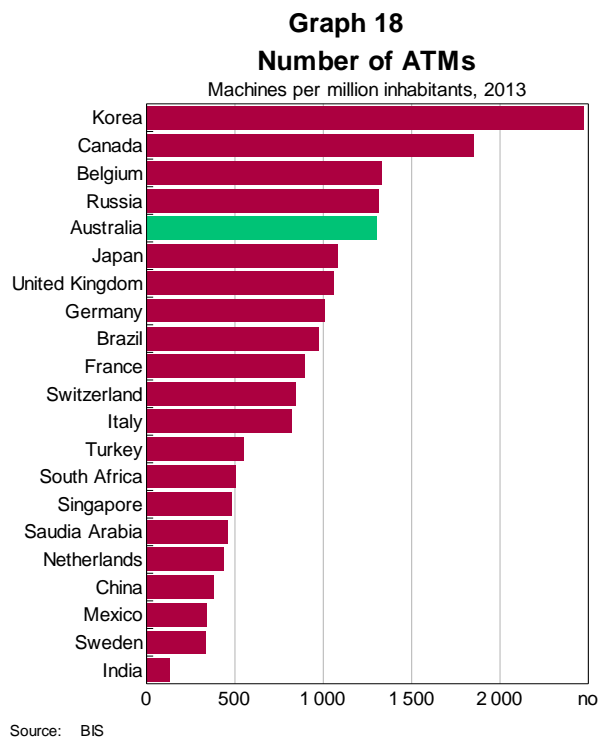
- Financial institutions ceased charging their own cardholders a foreign fee. The new direct charges imposed by ATM owners in most cases were initially set at around \$2.00. In other words, for a foreign ATM transaction, a \$2.00 foreign fee was simply replaced by a \$2.00 direct charge.

- The increased transparency of these arrangements resulted in a marked change in cardholder behaviour; there was a significant shift by cardholders to use ATMs provided free of charge by their own financial institution, saving an estimated \$270 million in fees in the first two years of operation.
- Cardholders also started to make greater use of eftpos cash-out at retailers, where there is generally no charge.
- ATM numbers increased as independent deployers took advantage of the ability to set their own fees rather than relying on the \$1.00 interchange fee. In addition to increasing the number of ATMs in 'convenience locations' such as small stores or clubs, it became possible to locate ATMs in low-traffic locations and provide temporary ATMs at festivals and events. There was strong competition between deployers for suitable ATM locations, which had the effect of bidding up rents or 'rebates' at those locations. Overall, ATM numbers increased by around 14 per cent between 2009 and 2012.
- Financial institutions sought to provide their cardholders with a wide network of fee-free ATMs. In addition to their own ATMs, smaller institutions have been able to provide fee-free access to another large network – most often Cashcard, RediATM or Westpac/St. George.

Current state of play

Networks

According to the Australian Payments Clearing Association (APCA) there were 31 829 ATMs in Australia in June 2015. This represents around 1 300 ATMs per million inhabitants, which is relatively high by international standards (Graph 18). Looking ahead, it is likely that ATM numbers will begin to fall, given the observed decline in cash use and ATM withdrawals discussed further below.



Currently, around 45 per cent of the national ATM fleet is owned by financial institutions and the remaining 55 per cent by independent deployers. As noted earlier, most financial institutions provide customers with free access to one of the major networks, meaning most Australian cardholders have access to a fee-free network of several thousand ATMs (Table 2).

Table 2: Number of ATMs – Major Networks^(a)

As at June/July 2015

Network	Number
DC Payments	7 251
Cashcard	4 691
Commonwealth Bank & Bankwest	3 822
RediATM (including NAB)	3 089
Westpac & St. George	3 055
ANZ	2 606
CashConnect	1 857
Next Payments	1 080
Bendigo Bank	868
Suncorp	681

(a) Some figures include ATMs carrying financial institutions' branding, but owned/operated by an independent deployer. These may be recorded against both the owner and the branding institution

Source: ATM Deployers; Banks

Fees

There is no regular, comprehensive source of information on ATM direct charges. The Reserve Bank has from time to time conducted a survey of the major players in the industry to gain more information and has completed such an exercise in recent weeks for the benefit of the Inquiry. The Bank estimates that the survey covers around 97 per cent of ATMs in Australia (Table 3).¹²

Table 3: Survey of ATM Owners/Operators^(a)

July 2015

	Number of ATMs	Number of Withdrawals 2014/15 (millions)	Number of Balance Enquiries 2014/15 (millions)	Average Direct Charge			
				Withdrawals		Balance Enquiries	
				2010 ^(b)	2015 ^(c)	2010 ^(b)	2015 ^(c)
Financial institutions	13 876	514.4	139.1	1.94	2.02	1.68	2.01
<i>Per cent of total</i>	<i>45</i>	<i>76</i>	<i>90</i>				
Independent deployers	17 295	164.7	15.3	2.15	2.57	1.96	2.26
<i>Per cent of total</i>	<i>55</i>	<i>24</i>	<i>10</i>				
Total	31 171	679.1	154.4	2.04	2.33	1.82	2.15

(a) Some figures include ATMs that carry financial institutions' branding, but are owned/operated by an independent deployer. A small number of ATMs from financial institutions operating under these arrangements are recorded in data for independent deployers

(b) Average direct charges for 2010 are from data collected in December for the 2010 ATM Taskforce Report on Transparency and Competition

(c) Average direct charges for 2015 as at July, collected as part of the RBA's most recent survey

Sources: ATM Deployers; Banks

The survey reveals that the average direct charge for a 'foreign' withdrawal in July 2015 was \$2.33, up from \$2.04 in 2010.¹³ This represents an increase of 14 per cent. Overall, direct charges on withdrawals have risen by 17 per cent from the typical \$2.00 foreign fee prior to the reforms. This increase is similar to CPI inflation over this period and has occurred in an environment where, as discussed below, there has been a shift away from the use of cash for payments and a decline in ATM withdrawals, which has increased unit costs. The average direct charge for a balance enquiry was \$2.15, up from \$1.82 in 2010.

The increase in average direct charges for withdrawals since 2010 has been driven primarily by independently owned ATMs. Direct charges on these ATMs now average \$2.57, up from \$2.15 in 2010, an increase of around 20 per cent. Among financial institution ATMs, the average foreign withdrawal fee is \$2.02. This is consistent with pre-reform foreign fees, but higher than the \$1.94 average in 2010, reflecting NAB's decision to increase fees by 50c in 2013 to match the \$2.00 charged by the other major banks.

12 The Bank appreciates the extensive assistance provided by the respondents to the survey, enabling it to cover around 97 per cent of the industry. The small proportion of the industry not covered is likely to reflect a mix of small financial institutions and independent deployers who each own relatively few ATMs.

13 The averages quoted here, unless specified otherwise, are in terms of averages across ATMs, not across ATM transactions.

These changes are reflected in the distribution of ATM fees (Table 4). In 2010, three-quarters of ATMs charged \$2.00 for a withdrawal, with only 17 per cent above that level. While in 2015 \$2.00 remains the most common withdrawal charge, close to one-third of ATMs now charge either \$2.20 or \$2.50, and close to one-fifth charge from \$2.75 to \$2.90.

The range of independent ATM withdrawal fees recorded in the survey is zero to \$5.00. Only a small number of ATMs are at the very high or very low end of the range. For instance, 102 ATMs (0.3 per cent of an overall sample of 31 000 ATMs) charge more than \$3.00. 25 ATMs charge the highest fee recorded of \$5.00; deployers report that these tend to be located in adult entertainment venues. On the other hand, around 90 ATMs do not levy a direct charge on either withdrawals or balance enquiries.

Table 4: Direct Charges

Per cent of ATMs

	Withdrawals		Balance Enquiries	
	December 2010	July 2015	December 2010	July 2015
\$1.00 or less	0.3	0.3	14.5	3.2
\$1.01 to \$1.50	6.0	<0.1	0.4	0.1
\$1.51 to \$2.00	77.1	47.3	83.5	64.2
\$2.01 to \$2.50	16.3	32.9	1.5	26.0
\$2.51 to \$3.00	0.3	19.1	0.1	6.5
More than \$3.00	<0.1	0.3	0	0.1

Sources: ATM Deployers; Banks

Average direct charges on balance enquiries are lower than withdrawals, at \$2.15, but they have risen at a somewhat faster rate – 33 cents or 18 per cent since 2010. In this case, financial institutions and independent owners have contributed equally to the increase. Two-thirds of balance enquiry fees remain at \$2.00 or less, compared with close to 100 per cent in 2010.

While the model for provision of ATMs differs from country to country, withdrawal fees in Australia appear comparable with those charged in a number of other countries where fees apply (Table 5). Charges in India are significantly lower as a result of a regulated cap at the equivalent of A\$0.42 (plus taxes), while in Brazil they are also relatively low at A\$0.70. However in both cases those fees may apply to all transactions (including on the cardholder's 'own' network) once a threshold of transactions is reached. In jurisdictions with income levels closer to Australia's, fees start at around A\$1.50 and can be as high as A\$7.00. Notably, in Canada and the United States, both foreign fees and direct charges can be applied to the same transaction, potentially resulting in quite high costs to cardholders.

Table 5: International Comparison

	Typical foreign fee per withdrawal	Typical direct charge	Comment
Brazil	Average USD0.52 (A\$0.70)	NA	Financial institutions are required to offer a number of charge-free services (e.g. four free cash withdrawals) to their customers every month. Once this threshold is reached, a financial institution may charge its customers for ATM withdrawals, whether they are made on its own network or on that of another financial institution.
Canada	CAD0.55–CAD2.00 (A\$0.57–A\$2.09)	CAD1–CAD5 (A\$1.04–A\$5.22)	Some financial institutions may charge for 'own' withdrawals after a relatively high transaction threshold is reached (around 25 per month). For 'foreign' withdrawals, both a foreign fee and a direct charge may be applied. Some personal banking account packages offer fee-free transactions when using a 'foreign' ATM.
France	Typically 1€ (A\$1.51)	NA	Some banks charge their customers a fee after a threshold of 'foreign' ATM withdrawals in the month is reached. The level of the fee may also depend on the type of card being used (e.g. premium card).
Hong Kong	NA	HKD15–HKD25 (A\$2.62–A\$4.37)	There are two main ATM networks in Hong Kong (ETC and JETCO). Customers of one network are charged a fee if they withdraw money from an ATM belonging to the other network.
India	Maximum INR20 (A\$0.42)	NA	Financial institutions must offer customers a number of fee-free cash withdrawals every month. Once this threshold is reached, banks can charge for both 'own' and 'foreign' ATM withdrawals, up to a regulated price cap.
Italy	Average 2€ (A\$3.02)	NA	Fees depend on the customer's account package.
Mexico	NA	Average USD1.50 (A\$2.03)	A direct charge levied by an ATM owner is the only permitted fee.
United States	Average USD1.42 (A\$1.92)	Average USD2.10 (A\$2.84)	In 2012, around 96 per cent of financial institutions imposed a direct charge on their ATMs. In addition, around 55 per cent of financial institutions charged a fee to their customers for making 'foreign' ATM withdrawals.

Sources: Central Banks; RBA

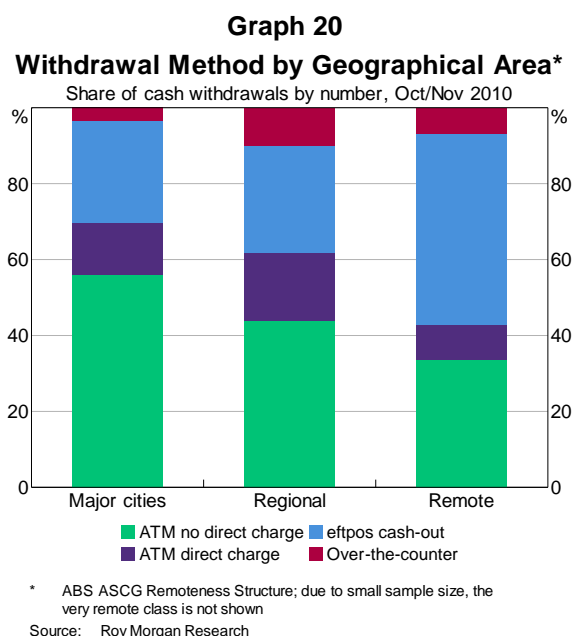
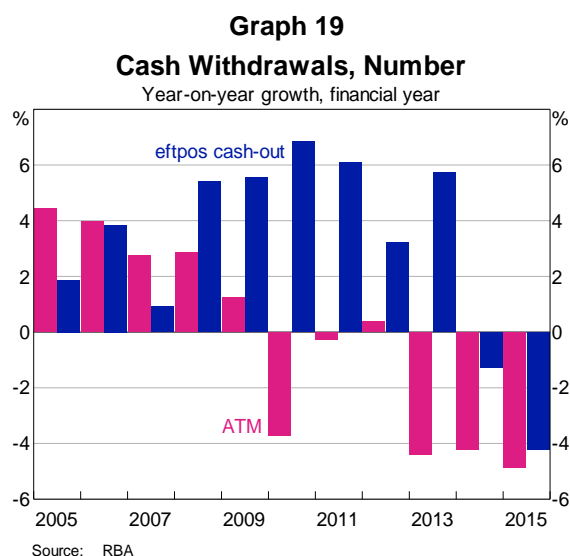
Transactions

While there has been a modest rise in average direct charges on foreign ATM transactions, the number of ATM transactions on which a fee is charged has been declining. Estimates from the latest survey indicate that a direct charge was paid on around 28 per cent of all withdrawals in 2014/15, down from around 33 per cent in early 2010.¹⁴ In absolute terms, the number of charged withdrawals declined by around 20 per cent between 2010 and 2014/15, suggesting that in total cardholders paid around \$60 million less for withdrawals than in 2010.

The decrease in charged transactions is likely to have been even more marked for balance enquiries, where cardholders now have ready access to account information via internet and mobile banking. In 2014/15, less than 20 per cent of all ATM transactions were balance enquiries, but most of these were on ATMs provided by the cardholder's own financial institution. Overall, a direct charge was paid on 10 per cent of balance enquiries.

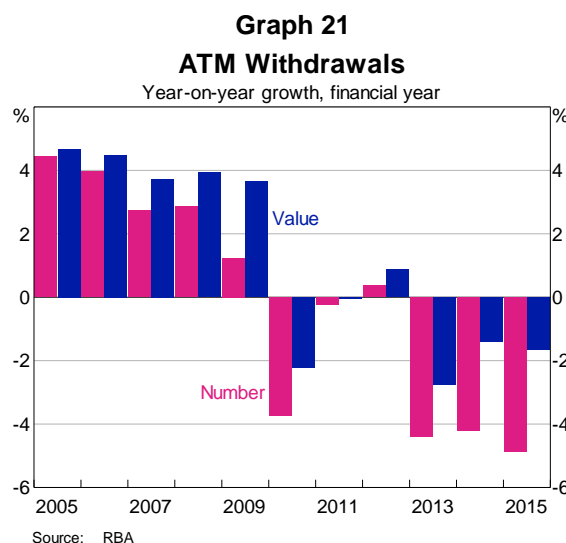
¹⁴ This is broadly consistent with the findings of the Bank's recent Consumer Use Survey, which found a decrease of around 8 percentage points between 2010 and 2013.

ATM withdrawals compete directly with eftpos cash-out. Use of eftpos cash-out increased significantly in the years following the reforms, as cardholders became more conscious of ATM fees and sought to avoid them (though the use of cash-out has also begun to decline recently, reflecting declining cash use) (Graph 19). Cash-outs have increased from around 20 per cent of cash withdrawals prior to the reforms to 27 per cent currently. If ATM withdrawals and eftpos cash-outs are combined, around 80 per cent of withdrawals overall do not attract a fee.



The Bank's 2010 Consumer Use Survey indicated that cash-out was used disproportionately in regional and remote areas where cardholders might have had less access to their own financial institution's ATMs. This indicates that those cardholders motivated to do so were mostly able to make withdrawals free of charge using cash-out facilities (Graph 20).

More generally, ATM providers are being affected by a decline in the use of cash as consumers switch to greater use of payment cards. The Bank's 2013 Consumer Use Survey indicated that consumer cash payments have fallen from 69 per cent of payments in 2007 to 47 per cent in 2013. As a consequence, the number of ATM withdrawals has been falling by around 4 per cent per annum since 2013, although the decline in the value of withdrawals has been somewhat less as the average withdrawal size has increased (Graph 21).



Costs

Information on the costs of ATM provision is available from the 2010 ATM Taskforce Report on Transparency and Competition, the Bank's Payment Costs Study and market studies produced by Edgar, Dunn and Company and the Payments Consulting Network.¹⁵

These sources highlight that cost structures and business models differ markedly between financial institution ATM fleets and those operated independently. Financial institution ATMs tend to have relatively high transaction volumes compared with independently owned ATMs (based on the Bank's survey, around 100 per machine per day at financial institutions, compared with 25 per day at independently owned machines), meaning that the per-transaction costs of financial institution ATMs are much lower. However, given that their networks are primarily for the benefit of their own cardholders, relatively few of those transactions attract a fee.

The Bank's Payment Costs Study suggests that ATM owners on average face a per-transaction cost of \$0.77 for providing an ATM withdrawal (based on a survey mostly focused on financial institutions).¹⁶ Therefore, cardholders who pay \$2.00 to make foreign withdrawals at financial institutions' ATMs are in effect subsidising the free transactions provided to those institutions' own cardholders. However, as direct charges are paid only on around 11 per cent of withdrawals and around 6 per cent of balance enquiries, it is unlikely that ATM fees are covering the cost of financial institutions' ATM networks.

In contrast, independent ATM owners receive a fee on all transactions, but their per-transaction costs are high compared with financial institutions and can vary significantly from provider to provider. Some contributors to the Bank's Payment Costs Study pointed to costs as high as \$2.50 per transaction. While comprehensive current data are not available, Edgar, Dunn and Company in 2010 estimated that independent ATM costs averaged more than twice those of the major banks. This is partly because independent owners' transaction volumes per machine are significantly lower than those of financial institutions, so fixed costs are allocated over fewer transactions. In addition, site costs are higher because most machines are in rented convenience locations, rather than on premises

¹⁵ See Commonwealth Treasury and RBA (2011b), Stewart *et al* (2014), Edgar, Dunn and Company (2010), and Payments Consulting Network (2014).

¹⁶ The card issuer also faces a cost on average of 8 cents per transaction.

owned by the ATM owner, as is frequently the case for financial institutions.¹⁷ Based solely on financial institution data, the Payments Consulting Network report estimated that off-site costs in 2013 were around 50 per cent higher than owned sites. Further, the cost of site rental had increased by 47 per cent in the preceding three years.

Fee-free ATM arrangement for very remote Indigenous communities

The 2011 ATM Taskforce found that residents of very remote Indigenous communities were paying more in ATM charges than other Australians due to a combination of cultural factors and the fact that only independent ATMs (which charge all cardholders a fee) were viable in those locations.¹⁸ With support from the Bank and the Treasury, a group of fifteen financial institutions and the two largest independent ATM deployers agreed on a scheme to voluntarily provide up to 85 fee-free ATMs in very remote Indigenous communities in the Northern Territory, Queensland, South Australia and Western Australia. The scheme commenced in December 2012.

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17 The Edgar, Dunn and Company data include financial institutions' estimates of imputed site costs for branch ATMs; these were significantly lower than estimates for off-site locations.

18 See Commonwealth Treasury and RBA (2011a).

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