The Changing Australian Retail Payments Landscape

Introduction

Over the past decade, major shifts have occurred in the Australian retail payments landscape. Paper instruments such as cheques have been replaced to a significant extent by more efficient electronic alternatives. The Internet has begun to have an impact on how Australians conduct their banking and payments activities. This article focuses on recent trends in retail payments – those payment instruments used predominantly by consumers, businesses and governments for non-financial transactions.[1] In addition, the article describes and analyses a new, wider set of monthly statistics on retail payments, which the Reserve Bank is introducing in this month's *Bulletin*.

Overview of Recent Trends

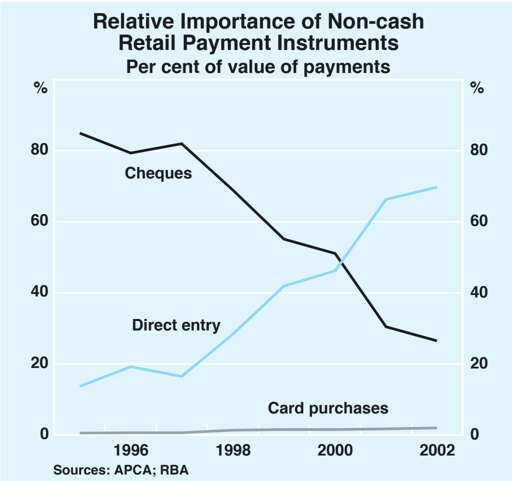
A well-functioning economy depends on effective methods for businesses to pay employees, suppliers and investors, for households to purchase goods and services, and for governments to collect taxes and make payments, such as social security and interest on bonds. Generally considered 'retail' payments, these transactions involve higher-volume, lower-value payment instruments, namely cash, cheques, credit and debit cards and electronic direct entry payments. High-value or 'wholesale' payment systems, such as the Reserve Bank's real-time gross settlement system, are predominantly used to settle financial market transactions between institutions as well as very large corporate payments, and are not addressed in this article.

Notwithstanding the ongoing industry and regulatory focus on card-based payment products such as credit and debit cards, the most important payment systems for consumers and businesses in Australia in terms of their total expenditures are the electronic direct entry system and the familiar paper cheque. These two payment methods accounted for more than 95 per cent of the total *value* of retail payments in Australia in 2002, excluding cash. However, the direct entry system and cheques have experienced radically differing fortunes in recent years – in fact, the most striking trend within the retail payments sector over the last decade is the rapid decline in the use of cheques in the Australian economy, from more than 80 per cent of the dollar value of non-cash

1. For a previous discussion of this topic, see 'Some Features of the Australian Payments System', Reserve Bank of Australia *Bulletin*, December 1998.

retail payments in 1995 to less than 30 per cent in 2002 (Graph 1). At the same time, the electronic direct entry system, particularly the direct crediting of salaries and direct debits to pay recurring bills, has expanded rapidly.

Graph 1



In terms of the *number* of transactions, Australian experience mirrors the worldwide trend of declining usage of paper-based payment instruments, as is illustrated in Table 1. In international terms, Australia has traditionally been one of a small number of countries with high cheque use (together with the United States, the United Kingdom, Canada, New Zealand and France); all of these countries have shown consistent declines in per capita cheque usage, averaging around 6 per cent per year overall since 1997. Other trends in Australia in recent years have also been consistent with international trends. Across a number of industrialised countries, use of debit and credit cards as a proportion of all non-cash retail payments has increased significantly. Unlike most countries, however, credit card growth in Australia has significantly outstripped debit card growth over this period.

A large portion of consumer payments in Australia and most other countries continue to be made using currency. Cash remains a convenient payment method for small-value transactions where speed is critical and payment records less important. General-purpose electronic alternatives to cash, such as stored-value cards, have to date not been particularly successful in Australia, nor in most other countries. In fact, despite publicity about new payment mechanisms, the actual uptake of innovative payment instruments has been slow, and as a result the major payment instruments in Australia today are largely the same ones used 10 or 20 years ago. In contrast, payment system users have been quick to adopt new electronic channels such as the Internet that provide improved access to existing payment methods, such as credit cards and direct entry payments, as discussed further below.

Users of the Payments System

Choices by users of the various payment instruments and systems reflect the inherent trade-offs between cost, convenience, speed and risks. Recent trends suggest that users respond quickly to changes in these features, and particularly to changes in relative prices. Three broad categories of payment system users are consumers, businesses and governments. While comprehensive data are generally not available on the payment habits of these groups, some general observations can be made based on available information.

Graph 2

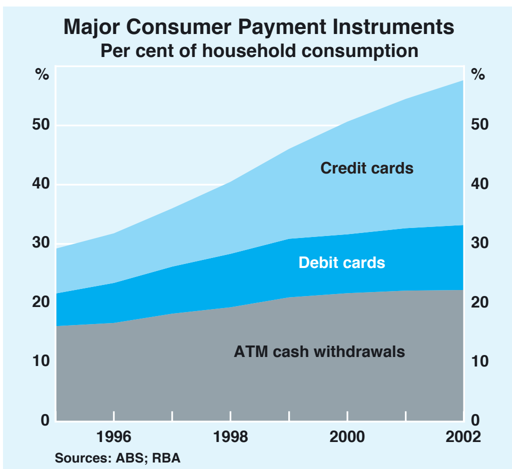


Table 1: Non-cash Retail Payments in Selected Countries

	Cheques	Debit cards[a]	Credit cards	Direct credits[b]	Direct debits	Total
	Transactions per person, 2001					
New Zealand[c]	65	126	51	79	19	341
United States	145	44	60	13	8	270
France	71	60	..	36	34	201
Canada	51	72	42	19	16	199
Netherlands	0	61	3	73	55	193
United Kingdom	43	46	29	32	36	186
Australia	**38**	**36**	**43**	**40**	**16**	**172**
Germany	4	15	5	84	62	169
Sweden	0	37	8	78	11	135
Switzerland	1	31	11	47	7	96
Singapore	22	46	..	4	5	76
	Average annual growth per person, 1997–2001, per cent					
New Zealand[c]	–10	16	26	2	17	6
United States	–4	32	6	10	14	2
France	–3	12	..	4	9	3
Canada	–3	20	7	10	10	8
Netherlands	–48	19	5	2	7	7
United Kingdom	–5	15	8	3	8	5
Australia	**–8**	**8**	**24**	**12**	**27**	**7**
Germany	–16	51	5	7	1	5
Sweden	–44	28	11	1	11	7
Switzerland	–6	22	7	–3	17	4
Singapore	–1	36	..	0	–7	13

(a) Debit card transactions also include stored-value cards for some countries.

(b) Credit transfers exclude transfers made using real-time gross settlement systems.

(c) Data are for 2000.

Sources: Bank for International Settlements, *Statistics on Payment and Settlement Systems in Selected Countries*, April 2003; EMEAP Working Group on Payment and Settlement Systems, *Payment Systems in EMEAP Economies*, July 2002; RBA

Consumers

Consumer payments consist mainly of retail purchases and payment of household expenses, such as rent and utility bills. At the point of sale, the most popular payment mechanisms are cash and credit and debit cards. The value of these payment types relative to overall household expenditures has been rising in recent years, particularly for credit cards, as usage broadens into other areas of spending (Graph 2).

Although no data are available on cash transactions, they most likely account for the largest *number* of payments made. Cash withdrawals at ATMs, a rough proxy for the *value* of cash payments, has been a relatively constant share of household spending, reaching about $115 billion in 2002.[2] There were more than 16 000 ATMs as at June 2002, up from less than 9 000 in 1997, nearly triple

2. Cash withdrawals at ATMs probably significantly understate total cash payments, as the measure excludes cash obtained at branches, point-of-sale terminals, and by cashing cheques. Reserve Bank figures show over-the-counter cash withdrawals at branches of about $45 billion in 2002; however, this amount only includes those withdrawals at institutions requiring a debit card and PIN for account access.

Table 2: Transaction Charges of Major Banks[(a)]
A$ per transaction

	1995	1998	2002
Counter withdrawals	1.00	2.00	2.50
Cheques	0.70	0.65	1.00
Own bank's ATM	0.40	0.55	0.60
Other ATM	0.40	1.05	1.40
EFTPOS	0.40	0.45	0.45
Telephone banking	na	0.30	0.45
Internet banking	na	0.20	0.25

(a) Average for the four largest banks. Fees shown are charges on transactions in excess of a fee-free threshold.
Sources: Cannex; RBA

the number of branches of deposit-taking institutions.[3]

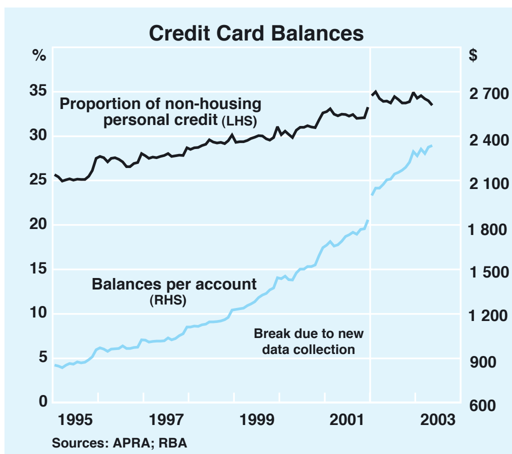
The growth in ATM usage has coincided with a sharp increase in the average cost of a counter withdrawal at a financial institution branch, which has nearly tripled since 1995 (Table 2). Although ATM fees have risen somewhat, cardholders increasingly can avoid ATM fees altogether by obtaining 'cash-out' along with their purchases on debit cards (EFTPOS), a service which may also reduce cash-handling costs for some high-cash retailers, such as supermarkets. New Reserve Bank data show that around one-fifth of all debit card transactions at the point of sale involve cash-out, with an average value of about $60 per transaction.

Australia is somewhat unique in having experienced extremely rapid growth (around 20 per cent annually since 1997) in EFTPOS terminals installed at retail outlets, but significantly less rapid growth in overall debit card usage (about 10 per cent per year). In fact, Australia now has the highest rate of EFTPOS terminal penetration of all industrialised nations except New Zealand. Credit cards, which can also be used at EFTPOS terminals, may have fuelled this growth to some extent.

The use of credit cards both as a payment instrument and a means of borrowing has received much attention in recent years. Growth in credit card transactions rose strongly in the late 1990s, encouraged by promotion of frequent flier and similar loyalty programs. The ability to use credit cards for non-face-to-face transactions may also have spurred their growth. Preliminary data suggest that 'card-not-present' credit card transactions (including both Internet and traditional mail-order or telephone transactions) made up around 20 per cent of total purchases on credit cards in 2002, with Internet-initiated transactions around 5 per cent of the total. This share can be expected to continue to climb in coming years as long as there are no viable payment alternatives for use in purchases over the Internet.

Balances on credit cards also rose significantly during the mid 1990s, but have since been stable as a share of total non-housing personal credit provided by banks (Graph 3). Reserve Bank data show that about

Graph 3



3. Sources: APCA; APRA

70–75 per cent of these balances accrue interest in any month, the remainder being purchases made within the interest-free period that were subsequently settled before the billing due date. Credit cardholders in aggregate are repaying about 96 per cent of monthly purchases and 45 per cent of their overall outstanding balances each month.

These aggregate data mask differences in repayment behaviour across consumers, however. Some cardholders (sometimes known as 'transactors') generally pay off their balances in full, while others ('revolvers') make use of the revolving line of credit and pay only a fraction of their balances each month. Survey data from Roy Morgan Research indicate that 'transactors' account for around 60–65 per cent of credit cardholders and that these cardholders spend around 30 per cent more each month, on average, than 'revolvers'.[4] These figures would suggest that the 'revolvers' are paying off less than 20 per cent of their outstanding interest-bearing balances each month.[5]

As well as increasing their use of cards, consumers are also increasingly relying on the electronic direct entry system to initiate payments of household bills and expenses. As discussed below, a rapidly growing number of utilities, insurance companies, and other service businesses are promoting direct debiting arrangements to their customers for payment of recurring bills. Moreover, consumers now have wide access to Internet banking and bill payment services that allow electronic direct credit payments to be made at significantly lower cost than mailing a cheque. Based on preliminary data for 2002, these Internet-banking-initiated credit transfers made up 5 per cent of the value and 16 per cent of the number of all credit transfers.

Businesses

While consumer payments dominate the absolute *number* of payments, trends in the *value* of retail payments tend to reflect usage by businesses, which make relatively larger payments. Businesses tend to use cheques and direct entry payments predominantly, rather than cards or cash. Preliminary data from the Reserve Bank's expanded retail payments collection confirm that cheques written by businesses in Australia accounted for around 70 per cent of cheques written by financial institutions' customers during 2002, and an even larger share of the dollar value (Table 3). Business cheque usage is declining,

Table 3: Cheque Payments, 2002

	Share of number Per cent	**Share of value** Per cent	**Average value** $
Customer cheques	97	82	2 900
of which:			
Personal	26	12	1 580
Commercial	65	69	3 640
Agency[(a)]	6	1	650
Financial institution cheques	3	18	19 600
Total cheques	**100**	**100**	**3 410**

(a) Agency cheques are drawn on a financial institution other than the one holding the customer account. Most agency cheques are personal cheques written by customers of building societies and credit unions.

Source: RBA

4. Source: Roy Morgan Research, 12 months to December 2002.
5. Transactors account for an estimated 70 per cent of the $11 billion per month in credit card transactions. If it is assumed that 'transactors' fully repay their transactions each month, the remaining amount of repayments – around $3 billion – is equivalent to nearly 20 per cent of the $17 billion in total revolving balances on credit cards.

however, as many financial institutions have increased their fees for writing and clearing cheques in recent years. The relatively high average value of both personal and commercial cheques reflects the fact that cheques continue to be used for infrequent but high-value transactions, such as property settlements.

Moreover, the introduction of the Reserve Bank's real-time gross settlement system in 1998 resulted in a substantial fall in financial institutions' use of cheques for high-value interbank purposes.

Direct entry payments, both direct debits and direct credits, are increasingly taking the place of cheques for businesses. Over the past five years, the number of businesses using direct credits (for example, for salary payments to employees) has increased by around 18 per cent per annum, to around 160 000 organisations.[6]

There has been even stronger growth in the number of organisations offering customers the option of payment by direct debit; the number of billers using this option has increased by nearly 30 per cent per year over the last five years, albeit from a low base. The relatively high average transaction size of these payments (more than $5 000 in 2002) suggests that businesses are also using direct debits for business-to-business payments as well for billing their retail customers. In fact, based on total retail payments value, Australia now has among the highest rate of direct debit usage of any country, at around 30 per cent of non-cash retail payments, whereas five years ago direct debit usage was comparatively low.

Government

Payments to or from Commonwealth, state and local governments make up an important part of the retail payments landscape and a significant part of the overall size of the payment system. Trends in government payments can therefore have a significant impact on overall retail payment trends. In many countries, given their huge scale of payment operations, governments have been at the forefront of the conversion from paper to more efficient electronic payments.

In Australia in the early 1980s, the Commonwealth Government began moving significant amounts of payments – mainly welfare benefits previously paid by cheques – to electronic files of direct credits to beneficiaries' accounts at financial institutions. Government cheque volume drawn on the Reserve Bank fell by two-thirds as a result between 1983 and 1986, from around 100 million per year to 33 million. The Government Direct Entry Service (GDES) was introduced by the Reserve Bank in 1991 to facilitate these electronic payments for government organisations using high-speed data links to send transaction information to financial institutions; GDES now handles more than 200 million direct entry payments per year. Mirroring the overall trends in the economy, the number of cheques written by the Reserve Bank's government customers has decreased by about 5 per cent annually since GDES was implemented.

Providers of Payment Services

Payment services are provided by financial and non-financial institutions, which often coordinate their processing activities through various payment systems and networks to enable widespread access for users to a variety of interconnected services. The Australian payments system continues to be highly concentrated. The four major Australian banks dominate the provision of most types of payment services. However, non-banks, including specialised providers and payments processors, are active in some areas.

Financial institutions

In the provision of payment services to consumers, the four major banks accounted for about 85 per cent of transactions on personal credit cards, 70 per cent of debit card transactions, and around 60–70 per cent of

6. Source: APCA

Table 4: Payments Market Shares
Per cent, 2002

	Banks		Credit unions and building societies	Other
	Four majors	Total		
Credit and charge card transactions	78	88	1	11
Customer cheques	75	90	6	5
Debit card transactions	70	86	14	0
Direct entry payments	70	79	7	14
Deposits	63	94	6	0

Sources: APRA; RBA

personal cheques in 2002 (Table 4). The dominance of the major banks is greater in the provision of payment services to businesses, where about 80–85 per cent of cheques were drawn on these banks in 2002. The four major banks also provide about 85 per cent of merchant credit and debit card acquiring services, although this share has been falling gradually in recent years.

At the same time, non-bank financial institutions have had some success in attracting the transaction business of households and smaller businesses. Customers of building societies and credit unions account for 14 per cent of debit card transactions and a slightly larger share of personal cheques written, despite holding only 6 per cent of total deposits. However, only about 1 per cent of credit card transactions are made on cards issued by building societies and credit unions.

Other organisations

Non-deposit-taking institutions such as charge card issuers and certain finance companies also play a role in the Australian payments system. Non-financial companies provide proprietary payment products in the form of traditional store credit cards, finance company cards and petrol retailer cards. Store cards allow customers to make purchases using credit at selected stores. Data are not available on transactions on store cards, but survey data from Roy Morgan Research indicate that in 2002, 9 per cent of respondents held department store cards, 3 per cent held finance company cards and 2 per cent held petrol cards. This compares with around 60 per cent who held one or more general-purpose credit cards issued by a financial institution.[7]

In addition, independent ATM operators own and operate ATMs without providing deposit accounts or debit card facilities to customers; their ATMs reportedly now account for more than 25 per cent of all ATMs.[8] This may be partly responsible for the rise in 'foreign' ATM transactions – those conducted at an ATM not owned by a cardholder's own financial institution. The Reserve Bank's new data collection shows that foreign ATM transactions have increased significantly to more than 40 per cent of ATM cash withdrawals in 2002, up from around 30 per cent according to data available in 1999. For some cardholders, the added convenience of access to cash from any ATM may outweigh the significant added cost in terms of fees charged for foreign ATM transactions, which are often around twice the cost of using ATMs of the customer's financial institution.

7. Source: Roy Morgan Research, 12 months to December 2002.
8. See ATM Industry Steering Group Discussion Paper, 'Direct Charging for "Foreign" Automatic Teller Machine (ATM) Transactions in Australia', 4 March 2003.

Central banks around the world also commonly act as significant providers of payment services, although many central banks do not consider it necessary to be directly involved in retail payment systems.[9] The *Reserve Bank Act 1959* requires the Reserve Bank to act as banker and financial agent to the Commonwealth Government if the Government wishes, and as noted above, the Reserve Bank continues to process certain payments for governments. However, significant changes have occurred in the Reserve Bank's role in recent years. On 1 July 1999, Commonwealth departments and agencies were required to 'market test' their transactional banking requirements and were permitted to use the banking services of institutions other than the Reserve Bank. Although some agencies have since moved their banking requirements to other institutions, the Reserve Bank currently remains the primary banker to the Commonwealth Government. In this role, the Reserve Bank is responsible for a significant share – nearly 5 per cent of all cheques and 15 per cent of direct entry payments cleared each day.

Changes to Published Statistics

The Reserve Bank has been publishing monthly credit and debit card statistics in the *Bulletin* since 1994, based on a monthly survey covering domestic banks and a few foreign banks that issue cards in Australia. In recent years, it became clear that the data collection needed to be broadened to capture non-bank providers of card services, and to capture other payment instruments. As a result, the Bank has now implemented a new statistical collection that includes expanded data on credit and debit cards, as well as data on cheques, charge cards and direct credit and debit transfers. Tables C.1, C.2 and C.3 in this *Bulletin* incorporate key series from the new collection. Additional data can be found on the Reserve Bank's website at www.rba.gov.au.

Coverage

The new collection increases the number of direct reporting institutions from 14 to more than 50 (in addition to other institutions, primarily credit unions, for which data are obtained indirectly), redefines certain series, and adds considerable detail in a number of areas. New participants in the statistics collection include larger building societies and credit unions and their industry service providers, and some non-deposit-taking institutions (including, for example, the Reserve Bank itself) that are significant payment services providers. Table 5 shows a breakdown of the types of direct reporting institutions, by payment type.

Impact on existing data

The Reserve Bank's aggregate series on debit and credit card transactions (Tables C.1

Table 5: Direct Reporting Institutions

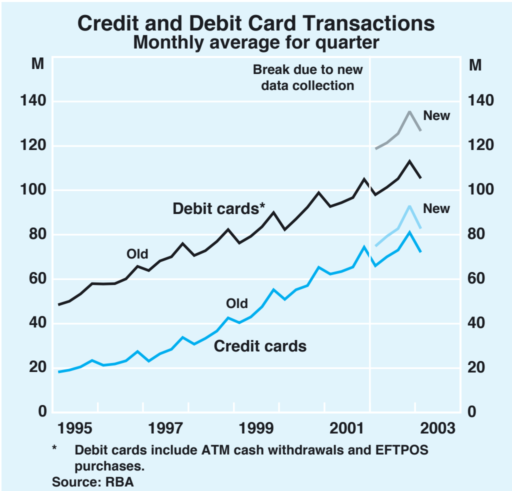
	Cheques	Direct entry	Credit/charge card issuing	Debit card issuing	Card acquiring
Banks	29	24	12	15	13
Building societies	11	12	2	12	10
Credit unions[(a)]	10	9	2	8	6
Other	1	1	3	0	3
Total	**51**	**46**	**19**	**35**	**32**

(a) Data for a number of additional institutions also captured through indirect reporting.

Source: RBA

9. See Bank for International Settlements, *Clearing and Settlement Arrangements for Retail Payments in Selected Countries*, September 2000.

Graph 4



and C.2) will continue to be published, but breaks now exist for many series in January 2002 (Graph 4). In addition to the inclusion of additional institutions, some significant definitional changes to the series should also be noted. First, the credit card statistics now include general-purpose charge cards, which generally do not carry a revolving line of credit. However, since charge cards are issued by a limited number of institutions in Australia, the data are not separately published. Second, commercial credit and charge cards are now included, whereas previously reporting practices varied across banks. Third, some institutions had previously reported signature-based debit cards issued under global credit card scheme brands as credit cards; these cards are now reported in the debit card series. Finally, the historical series on credit card balances and limits outstanding has been revised downward significantly to reflect the correction of certain reporting errors.

Additional detail has also been added to the existing debit and credit card data. Table C.1 now includes that portion of outstanding balances on credit cards that is accruing interest (at end month), a measure that allows separate analysis of the use of credit cards as a payment instrument as distinct from the provision of revolving credit. (However, not all banks are able to report this breakdown at the present time, so the series is slightly understated.) Data on monthly repayments of balances on credit card accounts are also now included. The breakdown of credit cards with and without interest-free periods is no longer published in the *Bulletin* but will continue to be available on the Reserve Bank's website.

The debit card series (Table C.2) have been expanded to include greater detail on cash withdrawals, specifically the share of cash-outs at the point of sale, and ATM transactions conducted at institutions' own ATMs by their customers. Prior to August 2002, when all of the larger reporting institutions were able to report data on cash-outs separately, some cash-out transactions were included in EFTPOS purchases and some in cash withdrawals. Because some of the smaller institutions are not yet able to report these more detailed series, they are understated to some extent.

The Reserve Bank has ceased publishing Table C.3, 'Card Transactions Acquired from Merchants – Banks' in the *Bulletin*. This table mirrors transaction information collected from card-issuing institutions in Tables C.1 and C.2. With the now expanded reporting population of card issuers, data from the acquiring side of transactions do not add significantly to the information provided in Tables C.1 and C.2.

Instead, new Table C.3 in the *Bulletin* contains monthly data on cheques and direct entry payments. The Australian Payments Clearing Association (APCA) has historically been the primary source for data on these payment instruments, but surveys were conducted by APCA only annually. The figures for total cheques and direct entry payments published in Table C.3 include both those transactions cleared through APCA's inter-institution clearing stream, as well as transactions cleared within the same financial institution.