Debit and credit cards are now more popular than cheques, but direct debits lag

THE AUSTRALIAN PAYMENTS SYSTEM

The Australian payments system is a broad term which describes the payment instruments by which individual payments are made or funds transferred, ranging from cash to sophisticated mechanisms on the Internet; payments clearing arrangements by which financial institutions exchange the resulting instructions; and payments settlement arrangements for the final transfer of value between financial institutions.

The Payments System Board has undertaken a detailed review of the Australian payments system, looking at how its characteristics have changed over the past decade and, where possible, "benchmarking" it against other countries. This review has been the basis for the Board's preliminary assessment of the efficiency and safety of the payments system.

The payments system covers two distinct types of payments: retail (which includes commercial) and high-value. Retail payments account for almost all payments by number but only a small part of total values exchanged; they are where efficiency gains are most likely to be found. High-value payments are small in number but account for most of the value of payments exchanged; they are critical to the stability of the payments system.

Australia: Payments cleared 1998

	RETAIL	HIGH-VALUE
Purpose	Retail and commercial payments	Foreign exchange, money market trades, corporate payments
Mechanism	Cash, cheques, direct credits and debits, cards	Real-time gross settlement
Daily turnover*	$20 billion	$100 billion
Average daily number*	8 1/2 million	16 000

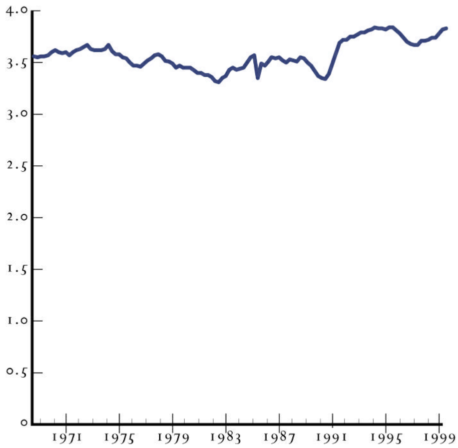
*Excluding cash

Retail payments

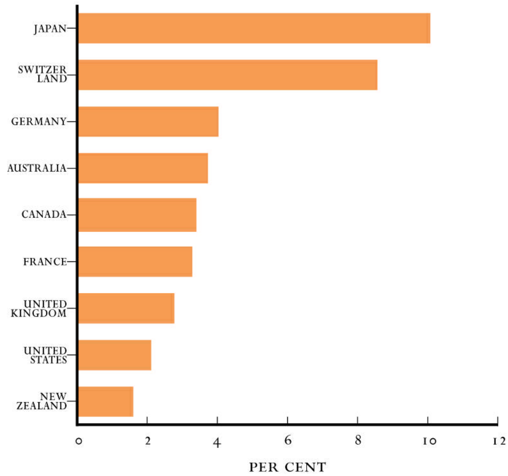
Cash

The Australian propensity to use cash has not declined. Although flow data on the number and value of cash transactions are not available, stock data suggest that cash is probably still the most important retail payment instrument. The stock of currency (notes and coins in the hands of the non-bank public) can be compared, on a per capita basis, with expenditure or shown as a ratio to GDP. Either way, the use of cash appears to be just as widespread in the late 1990s as it was in the 1980s.

Australia - Currency to GDP
per cent



currency to GDP
1998



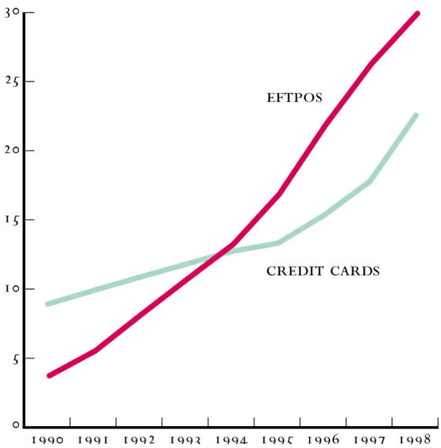
Automated teller machine (ATM) withdrawals provide another proxy for cash transactions. This does not measure the total value of cash transactions because a single currency note can be used many times before being returned to a financial institution, but it does give a lower bound. Annual withdrawals from ATMs are around $60 billion, exceeding the value of payments made by electronic funds transfer at point-of-sale (EFTPOS) and credit cards combined, indicating that cash still outstrips these payment instruments.

The continued importance of cash is not unique to Australia. Indeed, cash is even more popular in some other countries, and Australia is only in the middle of the field when currency to GDP ratios are compared.

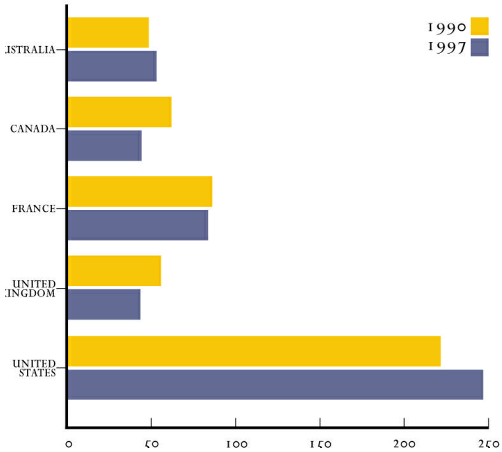
Non-cash retail payments

Although the use of cash remains well entrenched, non-cash payment instruments are becoming increasingly important in the retail payments system in Australia. Australians have always been keen users of cheques. The number of cheques each person writes annually has risen slightly over the 1990s, but cheques as a share of non-cash payments have declined substantially (from 50 to 36 per cent over the four years to 1998) in the face of the growing popularity of other means of payment, particularly debit and credit cards; together, these cards are now more frequently used than cheques.

Number of card payments per capita



Number of cheque payments per capita 1990 vs 1997

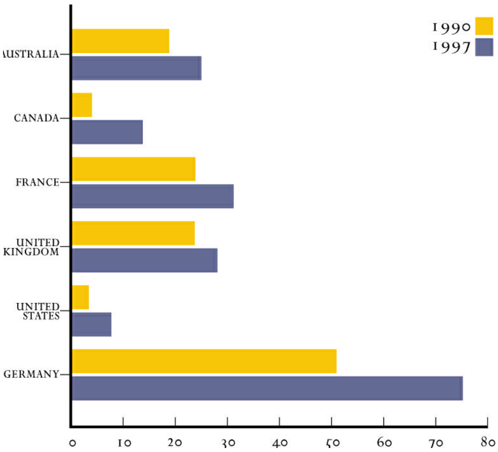


Number of non–cash retail payments per cent, 1998

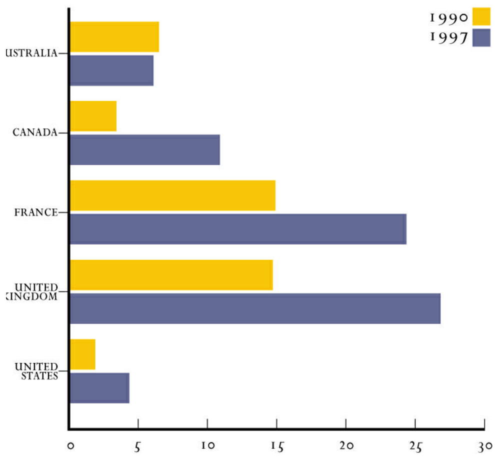
Cheques	36
EFTPOS	22
Direct entry credits	19
Credit cards	17
Direct entry debits	6
	100

In the retail payments area, industrial countries divide roughly into two categories - those that use cheques extensively and those that use credit transfers ("giro payments"). Australia falls into the first category, along with the United States, the United Kingdom, Canada and France. Most of the European countries and Japan are in the second. In all the high-cheque-use countries, the share of payments by cheque has declined and in some - namely France, the United Kingdom and Canada - the number of cheque payments per capita has also declined. In contrast, the number of cheque payments per capita in Australia and the United States has been on the rise.

NUMBER OF DIRECT CREDIT PAYMENTS PER CAPITA
1990 vs 1997



NUMBER OF DIRECT DEBIT PAYMENTS PER CAPITA
1990 vs 1997



Direct credits to customers' accounts at financial institutions are widely used in Australia for recurring bulk payments of salaries, pensions, interest and dividends, health fund refunds and social security payments. Usage has grown steadily over the 1990s, as has been the case in all G10 countries. Nevertheless, Australia is not a high user of direct credits by international standards; in a number of European countries, direct credits are also heavily used for single payments by individuals to other individuals and companies through giro systems.

Direct debits have always been a relatively little-used payment instrument in Australia. Though a convenient and relatively low-cost way of meeting recurring bills, the number of direct debit transactions per capita has actually fallen in Australia over the past decade. This is in sharp contrast to countries with payment patterns comparable to Australia and, in fact, to the experience of every G10 country.

In contrast to their reluctance on direct debits, Australians have taken to card payments with enthusiasm. At the beginning of the 1990s, EFTPOS and credit cards together accounted for around 15 per cent of non-cash payments but that figure has now risen to almost 40 per cent.

In summary, the key features of the Australian payments system are that:

- despite a decline in relative importance, cheques remain the most frequently used non-cash payment instrument; but
- with their strong growth over recent years, debit and credit cards *together* are now more important than cheques; and
- direct debits are the least used of payment instruments and Australia lags well behind other countries.

Efficiency of the retail payments system

The Financial System Inquiry concluded that there was considerable scope to increase efficiency in the Australian payments system, that is, to meet the needs of those using the payments system with fewer resources. On the basis of its preliminary stocktake, the Board generally concurs with that view but it is mindful that definitive conclusions are some way off.

An assessment of efficiency in the payments system is not a simple task. As a minimum, reliable data are needed on the costs of producing payment services, to enable a meaningful benchmarking of costs with other countries. Such data are not available in Australia.

In addition to costs, there are two other important dimensions of efficiency. The first is performance. Minimising production costs does not, of itself, maximise efficiency if it is at the expense of performance. Faster processing of transactions, increased accessibility, more convenience and improved reliability and control are all elements of a payment system which can increase efficiency, even at higher cost. As discussed below, recent improvements to the cheque-clearing system have provided important efficiency gains to consumers and small business, despite the cost of the project to financial institutions. Quality of service needs to be taken into account in any benchmarking exercise. The second dimension is pricing. A payment system will not be efficient unless the relative costs of payment instruments are reflected in their relative prices, so that consumers have appropriate signals on which to base their decisions.

The data needed to measure efficiency rigorously are extensive. The Board has commissioned a comprehensive data collection from banks, other financial institutions and payments service providers, and preparations are well under way. The information gathered will provide a basis to benchmark the costs and performance of the Australian payments system against international best practice. It should also shed light on some puzzles about the pricing of payment instruments - particularly cheques and cards - revealed in the Board's initial stocktake.

Overseas evidence suggests that paper-based payment instruments such as cheques are more expensive than electronic instruments and that automated direct credits and debits are the least costly payment method. If this ordering of costs also applies in Australia, as would be expected, it does not appear to be fully reflected in pricing. Although interpretation is complicated by fee-free transactions, banks in Australia tend to impose a higher charge for over-the-counter transactions than for others; cheque transactions also usually attract a higher fee than electronic transactions. In many cases, however, the fee for an EFTPOS transaction is similar to that for writing a cheque.

Transaction fees — August 1999

	ANZ	COLONIAL STATE	COMMONWEALTH	NATIONAL	ST.GEORGE	WESTPAC
	Access Flexible Option	*State Basic Account*	*Streamline Account*	*National Flexi Account*	*Everyday Account*	*Classic Account*
No. of free transactions	8[1]	5	5[1]	8[2]	8	8
Account-keeping fee (per month)	$6.00	-	$3.00	$4.00	$5.00	$5.00
OTC withdrawal	$2.50	$2.00	$2.00	$2.00	$2.00	$2.00
Cheque	$0.65	n.a.	$0.60	$1.00	$0.50	$0.65
EFTPOS	$0.40	$0.50	$0.40	$0.50	$0.50	$0.65
ATM withdrawal						
— Own bank	$0.65	$0.50	$0.60	$0.50	$0.50	$0.65
— Other bank	$1.50	$1.50	$1.25	$1.25	$1.50	$1.25
Telephone transaction	$0.40	$0.50	$0.40	-	$0.20	$0.65
Bill payments	$0.40	$0.50	$0.40	$0.30	$0.20	$0.65

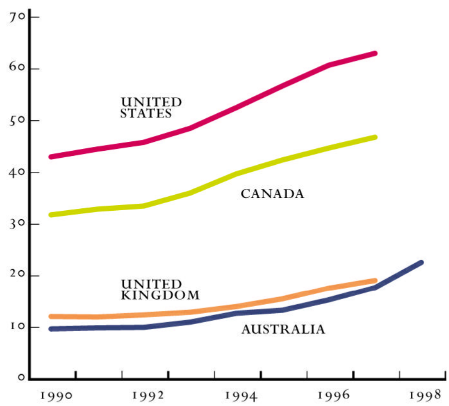
1 Maximum of 2 over-the-counter
2 Maximum of 4 over-the-counter and cheque
n.a. not applicable

Australians are relatively heavy users of cheques, which are probably the most costly instrument for retail payments. If other payment methods could be substituted, the resource costs of the payments system could be considerably reduced. As a minimum, this would require a charge on cheque usage which reflected its relative cost; it would also require the ready availability of acceptable alternatives priced to reflect their costs.

Although already a mature product, credit cards have grown in popularity over recent years in Australia and other industrial countries. Credit cards are being used for new classes of payments, including theatre tickets, mail order and, increasingly, utility bills. The Internet is likely to provide another boost to popularity. Underlying this shift in payment patterns seems to be the spread of loyalty and other reward programs. These schemes can have the effect of making the marginal cost of each transaction to the customer negative. However, the cost of the transactions to the banks and the card companies is positive, and merchants bear those costs directly through merchant service fees (which are passed on to all customers, not only those using credit cards). The fees paid to credit card issuers appear to be an important source of revenue funding loyalty schemes. This pricing structure, encouraging as it does the use of credit cards, may prove to be impeding the efficient allocation of resources in the retail payments system.

Loyalty schemes also appear to be having an effect on the market for a close substitute, namely, direct debits. Australia is falling well behind comparable countries in the use of direct debits for routine bill payments. Faced

Number of credit card payments per capita



with a choice of paying a utility bill with an instrument that grants loyalty points and an interest-free period (but which can be relatively costly to provide), or one that requires a willingness to give up a degree of control to billers and financial institutions (but which is relatively cheap to provide), Australian consumers have responded rationally to inefficient price signals and opted for the credit card rather than the direct debit.

High-value payments

In June 1998, Australia introduced its real-time gross settlement (RTGS) system for high-value payments. Under this system, all high-value payments are settled individually, as they are made, using funds in institutions' Exchange Settlement (ES) accounts at the Reserve Bank. Payments are "prefunded", in that they are made only if the paying institution has sufficient funds in its ES account.

There are three high-value payment streams which settle on an RTGS basis. The core system, where the exchange of value takes place, is the Reserve Bank Information and Transfer System (RITS), an electronic depository and settlement system for Commonwealth Government securities (CGS), which also provides access to ES accounts. The other two streams are Austraclear, an electronic depository and settlement system for other debt securities, and the SWIFT Payment Delivery System (PDS), the main vehicle for making payments which do not have an associated securities transaction. Overall, RTGS payments average around $100 billion each day and account for over 90 per cent of the value of payments exchanged between financial institutions in Australia.

RTGS transactions 1998/99 — daily average

	SYSTEM	VALUE ($ BILLION)	NUMBER (THOUSANDS)
CGS and money market transactions	RITS	13.8	0.7
Other fixed-interest and money market transactions	Austraclear	21.3	2.6
Foreign exchange, corporate transactions, etc	SWIFT PDS	66.7	12.5

Safety of the payments system

Australia's RTGS system replaced a deferred net settlement system under which interbank obligations accumulated throughout the day and were not settled until 9.00am the following day. The RTGS system, in contrast, prevents the build-up of unsettled obligations and has sharply reduced interbank settlement exposures. It has made the Australian payments system much more robust.

The safety and stability of payment systems have been a major preoccupation of central banks over recent years. An initiative is under way to codify the desirable features of payment systems of systemic importance and to develop a set of guiding principles and practices. This work is being carried out by the Committee on Payment and Settlement Systems at the Bank for International Settlements, and the Reserve Bank has been fully involved in the exercise. The work is not yet finished, but five main themes that are emerging from it - legal underpinnings, risk control, timely settlement, access and oversight - emphasise Australia's recent progress in improving the safety and stability of its payments system.

As in most other countries, Australia's payments system arrangements grew up largely as a matter of convenience and convention. But closer inspection of the legal underpinnings by the industry and the Reserve Bank revealed a number of gaps and uncertainties. The main concerns were that:

- transactions might be declared void under a so-called "zero hour" ruling;
- payments netting arrangements might not be enforceable; and
- banks might have to pay out on cheques deposited with them, even if the bank on which they were drawn was unable to settle for them.

Two key pieces of legislation which came into force last year - the *Payment Systems and Netting Act 1998* and amendments to the *Cheques Act 1986* - give the Payments System Board a basis for dealing with these concerns. The Board has taken advantage of this legislation and its response is explained later in this Report.

Prior to the implementation of Australia's RTGS system, the payments system was subject to unacceptably high levels of settlement risk. Most participants could neither measure the risk nor control it. Now, over 90 per cent of the value of payments exchanged in Australia are settled on an RTGS basis, eliminating settlement risk for those payments. The Reserve Bank is also working with the Australian Payments Clearing Association to strengthen settlement arrangements in those clearing streams which continue to settle on a deferred net basis, by ensuring that they will have the protections afforded by the *Payment Systems and Netting Act 1998* and the *Cheques Act 1986*.

High-value transactions are now subject to more timely settlement, that is, continuously throughout each business day rather than at 9.00am the following day. This has moved Australia from being well behind international best practice to being unambiguously at best practice. Survey data recently published by the Reserve Bank show that the RTGS system has also made an important contribution to reducing foreign exchange settlement risk for the Australian dollar leg of foreign exchange transactions.

Before the RTGS system, the access of many banks to the high-value payments system was through agency arrangements in the paper clearing system, or through a high-value electronic system operated by five of the largest banks. This had the effect of concentrating risks in a limited number of banks and making smaller banks dependent on their commercial relationships with their larger rivals. All banks now have direct access to the various streams which operate on an RTGS basis.

Finally, oversight of the Australian payments system has been clarified and strengthened through the introduction of the new regulatory framework, with the Payments System Board at its centre. There is no doubt about the Board's authority or its ability to initiate change where this is deemed necessary.

Overall, the safety and stability of the Australian payments system scores highly against these broad principles. It would not have done so, however, before the RTGS system was introduced.

The Payments System Board acknowledges that it inherited a payments system in robust condition, but the agenda in this area is not complete. At present, the Board is closely following two issues which are fully engaging the Reserve Bank. These are the preparations for inclusion of the Australian dollar in the proposed CLS Bank and the concerted effort being made by participants at all levels to ensure that the Australian payments system is ready for the Year 2000. Both issues are discussed in the next part of this Report.

Safety of Australia's payments system

	BEFORE JULY 1998	NOW
Legal underpinnings	Significant gaps	Identified gaps closed
Settlement risk	High and uncontrolled	Reduced by over 90 per cent
Timely settlement	Next day	Continuously (for high-value payments)
Access	Through agents (for many institutions)	Direct (for high-value payments)
Oversight	Informal	Statutory