

Pre-paid cards

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There have been a number of indications recently that the use of pre-paid cards for making payments may be about to increase significantly. This article describes the similarities and differences between pre-paid cards and other payment instruments such as currency and debit cards. It goes on to examine some of the policy issues involved, such as the implications for the Reserve Bank's currency issue. The article concludes that pre-paid cards do not raise any substantial policy concerns, but notes some prudential and legal matters that may need to be addressed.

Introduction

Pre-paid cards are plastic cards on which a monetary amount can be stored, and used (in whole or in part) for transaction purposes. Such cards have been available to a limited extent for some time. Telecom phone cards, and the cards used in some photocopiers and buses, are obvious examples which many people will have encountered. They differ from debit cards — the plastic cards generally used in EFTPOS transactions — in that the monetary amount available for spending is stored on the card itself. By contrast, debit cards provide a means of access to money in a bank or deposit account which is located elsewhere.

Up until now, pre-paid cards have been fairly narrowly restricted in terms of what they can be used for, and they have not enjoyed many of the characteristics of "money". However, there have been a number of recent indications that a quantum change in the characteristics and usage of these cards is about to take place. In particular, there is likely to be a move towards:

- (a) "Smart" card formats, which will enable two-way transactions and/or recharging to take place. Such cards will not be pre-loaded with a fixed amount, but rather it will be possible to load them (or re-load them) at any time with any amount desired — subject, of course, to any limitations that may be set by the issuers of the cards. These cards will not be "disposable" when they are used up: it will be possible to use them over and over again, until they wear out or expire. These cards are akin to an "electronic purse", which is how they are often described.
- (b) Multi-purpose rather than single purpose cards — i.e. cards which can be used in a variety of different locations. Most cards at present can be used only for a single purpose, or in a single place.

This note considers first the possible role of pre-paid cards in the monetary system, and then turns to consider the policy issues involved.

I. The role and impact of pre-paid cards

Several technologies are presently available for making "current" payments: currency, debit cards, cheques and credit cards are the most common ones. In thinking about where electronic purses might fit in, it is worth reflecting on the main attributes of *currency* (i.e. the notes and coin issued by the Reserve Bank):

- (a) It is a *standard* product (or a set of standard products) and is therefore easily recognised and identified.
- (b) It is *risk-free*, in the sense that the Reserve Bank stands fully behind it. (Of course, currency can be risky to hold in that it can be lost or stolen).
- (c) It is fully *negotiable*. Possession of currency is sufficient to establish a right of use, and it can be simply handed to someone else in order to make a payment.
- (d) Usage is *anonymous* and not directly traceable.
- (e) It is *convenient* and efficient for making small payments.
- (f) It is *valid consideration* in all places and circumstances, and (except where forgery is suspected) its status cannot be questioned (both legal tender rules and the law more generally imply that, when it comes to the crunch, this is the only type of "money" which really counts).

These attributes collectively imply that currency is *generally accepted*. However, it is not always the *preferred* method of payment, particularly for higher value transactions — since use of currency involves handling, storage and security costs which may not arise to the same extent with other methods.

By way of distinction, debit cards do not have most of the above attributes. They are now relatively standardised and EFTPOS penetration is now extensive, so that most

debit cards can be used pretty well anywhere. They are more convenient than currency for making many "medium" sized payments. But they cannot be used universally, and acceptance of debit cards may still generate some risk (albeit small) for recipients (or their banks) that final settlement of the payment may not be received. In terms of the above list, debit cards thus go a long way towards meeting (a) and (e).

Private electronic purses, depending on how they are designed, *may* meet (c), (d) and (e) — but not (b) or (f) and probably not (a). Thus, while these innovations are often thought of, and presented, as "currency" substitutes, it would seem that conceptually they are considerably closer, in fact, to debit cards than they are to currency. By contrast, a government- or central bank- issued electronic purse could be set up in a way which passed all of the above tests.

There is also good reason to think that, in *practical* terms, electronic purses may be a closer substitute for debit cards than for currency. However, the extent of substitution which may take place is not clear, and will depend on a number of factors. People will tend to prefer to use payment technologies which are cheaper, more convenient, and/or less-risky than available alternatives. Many will probably prefer cards which can be used for multiple purposes, rather than having to carry a selection of different cards to meet different needs. The level of acceptance of particular cards by retailers, merchants and other suppliers will have an important influence on the take-up of cards. Exactly how such influences will work themselves out remains to be seen.

II. The policy issues

The Reserve Bank's main interests in pre-paid cards lie in two areas: the effect that they might have on the Reserve Bank's currency issue, and the possible implications for the safety and soundness of the financial system. These issues are discussed in turn, along with one or two other matters of interest.

1. Reserve Bank Currency Issue

The Reserve Bank Act gives the Bank the sole right to issue bank notes and coins in New Zealand. For banknotes, this has been the case since the foundation of the Reserve Bank, and the 1989 Reserve Bank Act extended the monopoly to include the coin issue as well (the coin issue had previously been a Treasury monopoly).

The conceptual case for *public provision* of currency is probably reasonably strong. The various attributes of

currency cited above embody the reasons: there is a public benefit in having available a standard, reliable and efficient method for making certain (particularly small) payments.

However, the case for a *statutory monopoly* rests more on the seigniorage argument. Traditionally, at least, currency issue has been very profitable, and monarchs and governments have been keen to keep such a useful source of revenue to themselves. The profits have come from a combination of two features:

- (a) The ability to issue currency which has a much higher face value than the actual production cost.
- (b) The ability to invest at interest the proceeds of the currency issue — on which, of course, no interest is paid. [An alternative way to look at this is that currency issue can be a particularly cheap form of government borrowing]

Neither of these sources of profit is guaranteed in all circumstances. In fact, it is conceivable in a low-inflation low-interest-rate environment that the profit on the currency issue may be insufficient to cover the production and administrative costs involved.

In practice, the monetary authorities have been quite relaxed about seeing most of the "money" in the economy taking the form of commercial bank liabilities rather than central bank liabilities; and we have been relaxed about the banks (and others) developing payment methods (e.g. cheques, travellers cheques, debit cards and credit cards) which are close substitutes for the use of currency. Pre-paid cards are simply another innovation in this context, and do not raise any new issues of principle.

Thus, Reserve Bank provision of currency under a statutory monopoly is seen as a useful public service, and one which provides a basis on which other payment arrangements and contracts must ultimately rest. But it is not thought to be an area where the Reserve Bank should seek to maximise its income. Rather, the Bank's role is to facilitate and encourage overall payment system efficiency by continuing to offer currency as just one payment technology amongst several. Alternative payment technologies and innovations can be freely allowed within this framework, and users can be allowed to choose freely amongst those competing technologies.

At this stage, there is no intention that the Reserve Bank should itself issue pre-paid cards. However, the possibility that this might happen at some point in the future cannot be completely ruled out. If electronic developments proceed to the point where payment using currency becomes a nuisance rather than a convenience, then it could

prove to be necessary in effect to convert our paper and metal currency issue into electronic form in order to provide the public benefits that will continue to be necessary. Some form of pre-paid card could be a satisfactory method of achieving this goal. One or two other countries have already decided to have some type of "government" issued pre-paid card, although perhaps not for this reason.

Finally in this section, it should be noted that pre-paid card developments (and any erosion of the currency issue that may result) do not seem to pose any threat to the Reserve Bank's ability to operate monetary policy. Even if they did pose such a threat, the appropriate response would probably not be to seek to control or prevent such developments. It is generally much better to adapt the monetary policy operational framework to the realities of the marketplace than to seek to do the opposite.

2. Prudential Issues

Earlier, it was indicated that there are some quite important distinctions between "currency" and privately issued pre-paid cards. In particular, currency liabilities reside on the books of the Reserve Bank, and effectively carry a government guarantee. It is not known exactly where the liability for different private pre-paid cards will rest, but they will obviously not carry any government guarantee.

It is important that members of the public fully appreciate this distinction. If they are told that something is an "alternative to cash" they may believe this, and fail to realise that the monetary amount stored on a card is only as good as the bank or other organisation which has the ultimate liability to pay on the card. Issuers will therefore need to be careful to represent their products as akin to a "deposit" rather than "cash". This concern may not be very serious with low-value cards, where the amount at risk for any individual is not very material. However, the concern will become more significant as higher-value cards emerge, and as options for re-loading and/or third-party transfers of liabilities are introduced.

One of the reasons for this heightened concern is that it seems possible that card-issuing could be a risky business, because of the potential for counterfeiting. Depending on the technical characteristics of pre-paid cards, counterfeiting could take place *either* by physical reproduction of a card, *or* by manufacture of a "re-loading mechanism" which could be fraudulently used to add new balances to authentic cards. With some types of cards, it might be difficult or impossible for the recipient of an electronic payment, or even for an issuer, to detect an electronic counterfeit. By contrast, counterfeit currency can often be detected by a recipient, and is always detected

by the Reserve Bank — which never pays out on it. Sophisticated security features will mean that the risk of successful counterfeiting of pre-paid cards (or the amounts stored on them) is likely to be very low. However, given that the perceived returns could be quite high, the possibility cannot be ignored. The costs if successful counterfeiting occurred — for the issuer, and perhaps for some of its customers — could be devastating.

It is clear that card issuers will need to take great care to ensure that the danger of counterfeiting is minimised, and that they are vigilant in monitoring their systems and operations so that it is quickly detected when it occurs.

In addition, it may be desirable that substantial issuers of pre-paid cards (or issuers of cards with the potential to store "high" monetary values) should be subject to a disclosure regime, so that card purchasers can be made more aware of the financial condition of the issuers, and the potential risks they may face. It is likely that many actual or potential card issuers will be subject to disclosure requirements under the Securities Act or the Reserve Bank Act in any case, but there may be a need to fill any significant gaps in coverage which emerge.

3. Standardisation and Competition

The indications that a number of pre-paid cards are likely to emerge raises some questions about the need for standardisation. The original EFTPOS developments demonstrated that competing alternatives can sometimes delay progress because retailers — and others — do not want to have to deal with a number of incompatible systems. At this point, it is not clear whether the cards that are on the way will meet common standards, or whether developments will be more fragmented. However, this is primarily an issue for the various promoters to sort out — they have strong incentives to get it right themselves. There is no obvious role for the Reserve Bank — or other Government agencies — in choosing or setting technical standards, or expressing any particular technological preferences. Indeed, any attempt to agree upon, or impose, common standards could work to prevent the best choices being made, and to deter subsequent innovation. Such costs would need to be weighed against the potential benefits involved.

A more general point here is that it is necessary to strike the right balance between co-operation and competition. Co-operation amongst different issuers and card-acceptors may be necessary in order to achieve the degree of interchangeability which will attract people to use the cards. However, customer needs are likely to be best met through effective competition, and this will require that genuine choices amongst alternative products are avail-

able. The two goals are not necessarily incompatible, but they will not necessarily be achieved automatically or easily.

4. Statistics

Part of the Reserve Bank's role is to ensure that adequate information is available on the structure and operation of the financial system. Statistical and other information is an essential input into the monetary policy process, and into evaluation of the efficiency and soundness of the financial system. The Bank has long collected monetary statistics of various types, and it is important that these be kept up-to-date, and relevant, in the light of financial innovations of various types. Recent and pending payments system developments, including the expected expansion in the role and importance of pre-paid cards, are posing some challenges in this respect. The Bank will be actively working with the various parties involved to ensure that its statistical collection and reporting arrangements are appropriately extended and adapted to meet the future information needs of both policymakers and market participants.

5. Legal Matters

Any arrangements for making monetary payments require satisfactory legal underpinnings. It is important that all of the parties to a payment — the payer, the recipient, and any other parties such as banks or clearing systems who may be involved as intermediaries — clearly understand their rights and obligations, and any risks they may face. The rules need to specify clearly who carries risks at the various stages that a transaction may pass through, and what happens when things go wrong.

In practice, the overall rules which apply in a payment arrangement generally reflect a combination of statute law, common law, contractual arrangements and industry codes of practice. In the case of pre-paid cards, it is likely that all of these will have some role to play. It may be possible to use current legal bases to create much, or even all, of the legal underpinning that is required. However, the distinctive characteristics of pre-paid cards may require some new thinking, and some new rules. The Bank will be monitoring developments in this area with considerable interest.

III. Conclusions

The Reserve Bank does not have any substantial concerns about pre-paid card developments at this stage. More widespread use of pre-paid cards will be a financial inno-

vation which is not radical from a conceptual viewpoint, and does not raise any new issues of principle. However, it may raise a number of issues of practice, including risk management and legal issues. The Bank will be watching developments, with a view to ensuring that the integrity of the financial system is maintained. ■