Review of Banknote Distribution Arrangements: Issues Paper

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RESERVE BANK OF AUSTRALIA

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Contents

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1. Introduction

The use of cash in Australia is changing. Despite the value of currency in circulation continuing to increase, physical cash is being used less as a means of payment. This trend has accelerated with the COVID-19 pandemic as consumers have turned further to electronic and online payment methods. Nonetheless, cash is expected to remain an important means of payment into the future, particularly as some parts of the community rely heavily on cash in their daily lives. Cash is also important as a back-up for electronic payment methods and as a store of wealth; this applies on a day-to-day basis but becomes particularly important in times of economic or financial uncertainty. For now, the Australian public has good access to cash.

The Reserve Bank of Australia is the sole issuer of banknotes, but is only one participant in the banknote distribution system. This system is the means by which banknotes move between the Reserve Bank and the businesses and consumers that use them; it also includes mechanisms to maintain the quality of banknotes in circulation. The key elements of Australia's banknote distribution system have been in place since 2001. They were established at a time when cash was the most commonly used retail payment method and have worked well to ensure access to cash for both businesses and consumers. The declining use of cash for retail payments, accelerated by the COVID-19 pandemic, has placed pressure on the current cash distribution system. Specifically, lower processing volumes have led to underutilisation of cash distribution infrastructure and increased the average cost of transporting and processing banknotes.

1.1 Objectives

The Reserve Bank is committed to meeting public demand for its banknotes so that cash continues to be available for those who want or need to use it. It places a high priority on the community having good access to cash withdrawal and deposit services. Having a banknote distribution system that is sustainable in an environment of declining transactional cash use is critical to this goal. Consequently, the Reserve Bank is conducting a public consultation to determine what changes to Australia's banknote distribution system might be required so that banknote distribution is:

- **effective** – the distribution system enables demand for banknotes across the country to be met and supports the maintenance of good quality banknotes in circulation
- **efficient** – the distribution system is cost-effective and enables the community's cash needs to be met without prices being unreasonably high
- **sustainable** – the distribution system is able to continue operating in the face of declining and/or comparatively low levels of transactional cash use
- **resilient** – the distribution system is able to withstand disruptions and shocks to cash demand.

The consultation will review:

- the structure of the banknote distribution system and the roles of existing participants including the Reserve Bank, commercial banks and the cash-in-transit (CIT) industry
- issues faced by industry participants in carrying out banknote distribution
- how the current banknote distribution arrangements with the Reserve Bank impact the ability of industry participants to meet banknote demand and adapt or innovate to the changing economic environment,

including the ability of new participants to be involved in banknote distribution or for new business models to emerge.

1.2 Scope

This consultation will focus on various aspects of the banknote distribution system – namely, the movement of banknotes to and from the Reserve Bank, within the network of cash depots, and to financial institutions and retailers. The Reserve Bank invites views related to the following factors:

- The arrangements that govern how industry participants transact with the Reserve Bank to purchase and return banknotes. This includes the contractual, reporting and other obligations on current participants, as well as the ability of other entities to access these arrangements.
- The arrangements in place to manage the quality of banknotes in circulation.
- The operation and ownership of the infrastructure necessary for the wholesale storing, processing and transportation of banknotes. This infrastructure includes, but is not limited to, secure cash depots, banknote processing and quality-sorting equipment, and the associated vehicles, systems and software.

This review is intended to identify issues related to the arrangements in place for distributing banknotes around Australia. However, there may be other areas of the broader cash landscape that provide context and are relevant for understanding distribution-related issues. Although we are not considering coin distribution arrangements, we recognise that these arrangements rely largely on the same infrastructure as banknote distribution.

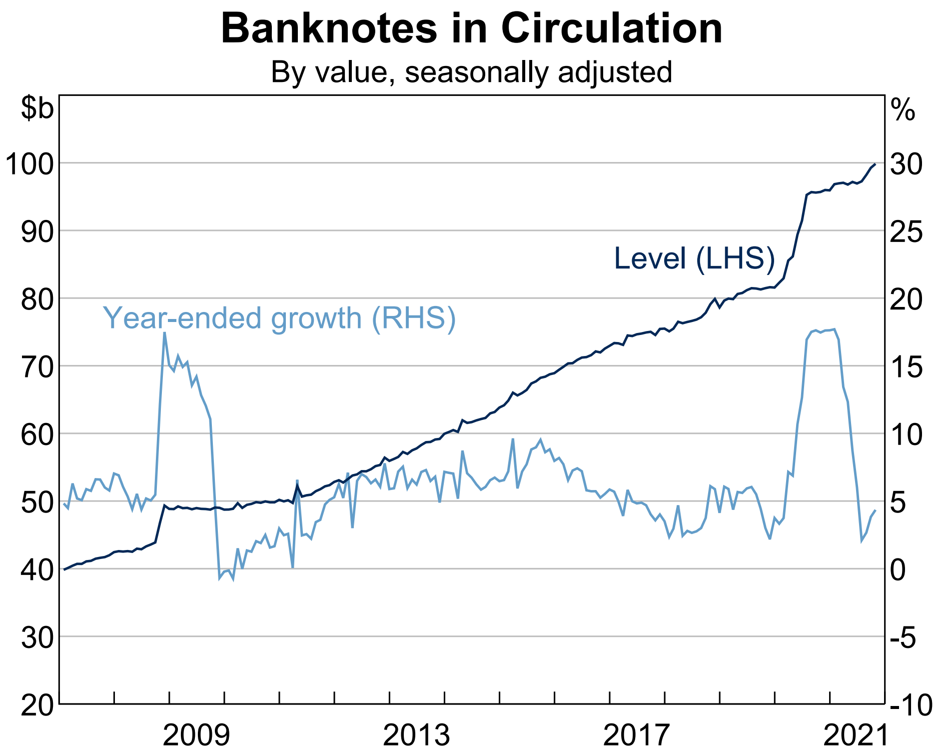
The Reserve Bank is seeking views from interested parties on the issues raised in this paper. Section 6 provides details on how to contribute. Key questions for stakeholders are included throughout the paper and collated in the Appendix. This paper seeks to identify the key strategic issues and potential options for changes to banknote distribution arrangements in an environment of declining transactional cash use. A subsequent paper, which is expected to be released in mid-2022, will provide a summary of the consultation responses and set out recommendations.

2. The Cash Landscape in Australia

2.1 Demand for banknotes is strong …

Demand for banknotes in Australia has remained strong for many years. Over the decade prior to the COVID-19 pandemic, growth in the value of banknotes in circulation was around 6 per cent annually, outstripping nominal GDP growth. Since the onset of the pandemic, overall demand for banknotes has been extraordinarily high, with the value of banknotes in circulation increasing by around 20 per cent between February 2020 and October 2021. As at October 2021, the total value of Australian banknotes in circulation was $100 billion, double the value in 2010 (Graph 1).

Graph 1

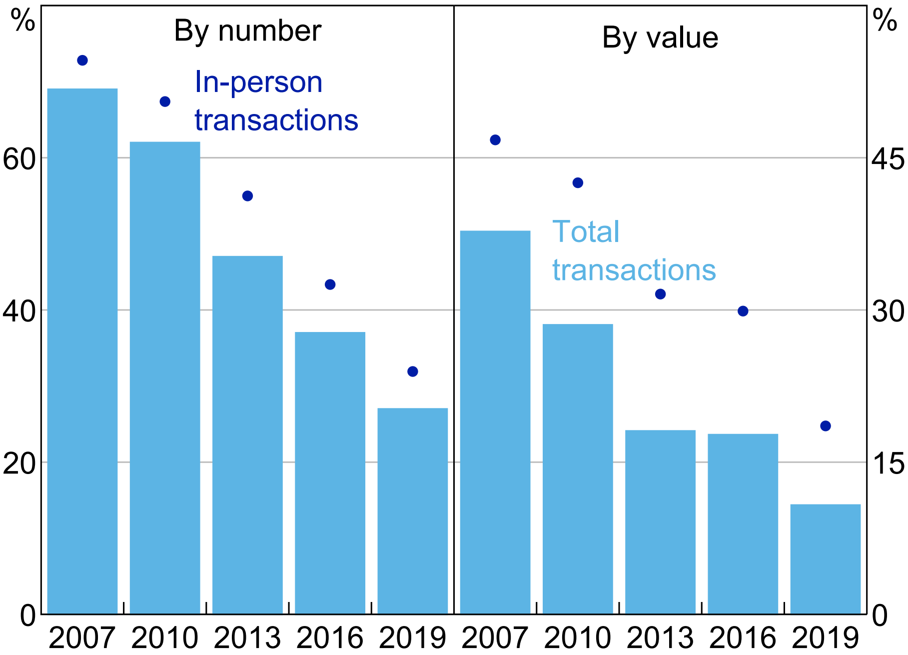


Source: RBA

2.2 … despite declining transactional cash use

Over the past decade, cash use for retail payments has been declining alongside growing use of electronic payments. The Reserve Bank's Consumer Payments Survey shows that the share of total retail payments – both in-person and online – made with cash fell from 69 per cent in 2007 to 27 per cent in 2019 (Caddy, Delaney and Fisher 2020). Part of this trend reflects the increasing use of online shopping, with the share of payments made with cash for in-person transactions a little higher, at 32 per cent in 2019 (Graph 2) (Delaney, McClure and Finlay 2020). Cash is used most often for low-value transactions, although this is rapidly changing with the uptake of contactless payment methods (such as tap-and-go cards and mobile wallets). As consumers switch away from cash for retail payments, demand for low-value banknotes ($5, $10 and $20 denominations) has been subdued.

Graph 2
Cash Payments
Share of consumer payments



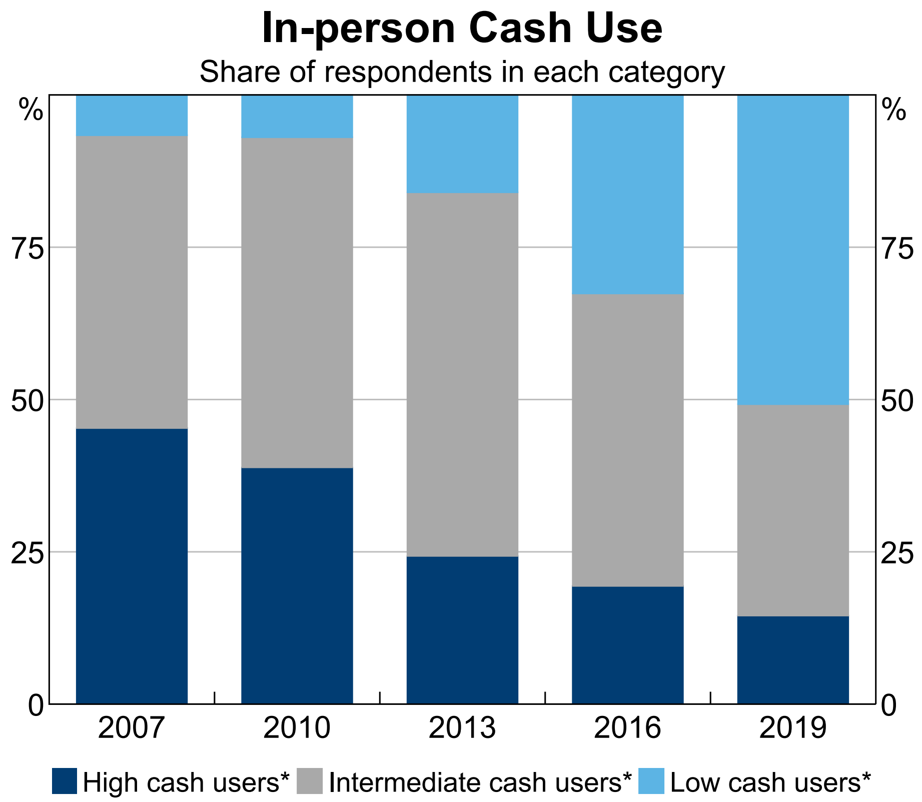
Source: RBA calculations, based on data from Colmar Brunton, Ipsos and Roy Morgan Research

The COVID-19 pandemic has accelerated the trend decline in the use of cash as a means of payment. Part of this decline will likely be temporary, with some transactional cash demand returning as lockdown restrictions ease. However, much of the decline is expected to be permanent, with part of the shift towards electronic payments and online spending persisting.

2.3 Cash is an important payment mechanism for some

While the share of transactions made with cash is declining, cash remains an important means of payment for some members of the community. In the 2019 Consumer Payment Survey, around 15 per cent of people used cash for 80 per cent or more of their in-person transactions (Graph 3) (Delaney *et al* 2020). These high cash users are more likely to be older, have lower household income, live in regional areas, and/or have limited internet access. The majority of these high cash users indicated that they would suffer a major inconvenience or genuine hardship if they could no longer withdraw cash or if retailers stopped accepting cash.

Graph 3

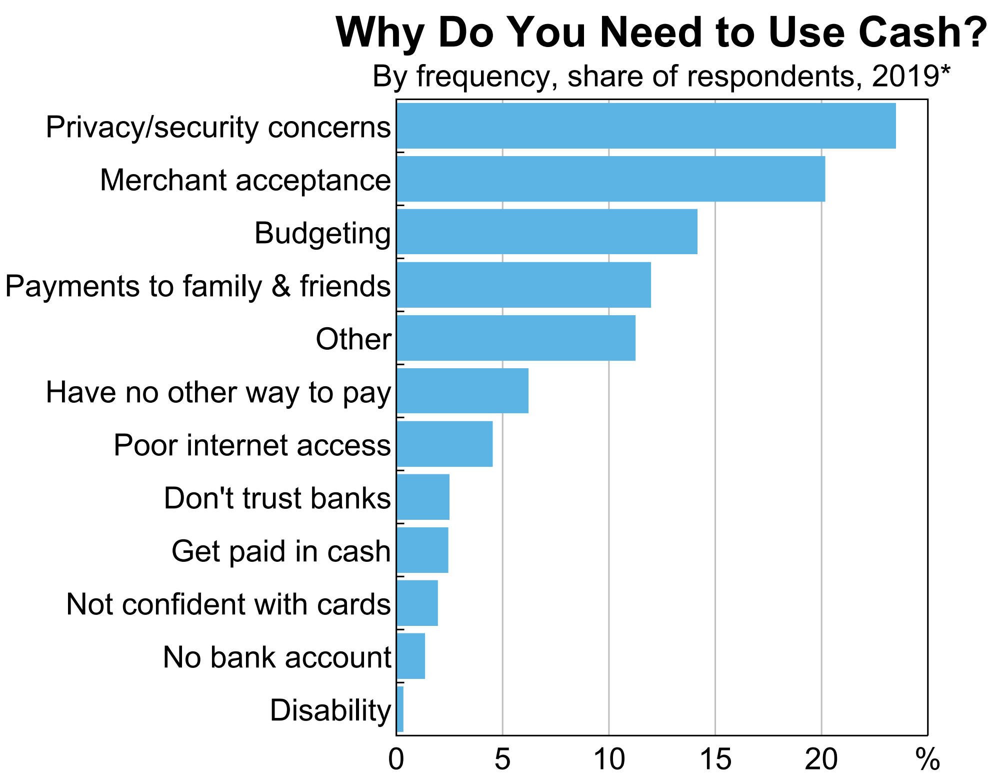


* Frequency based on share of in-person payments in cash (low: ≤ 20 per cent , high: ≥ 80 per cent)

Source: RBA calculations, based on data from Colmar Brunton, Ipsos and Roy Morgan Research

People who indicated that they would experience a major inconvenience or genuine hardship were asked why they used cash rather than another payment method. These people responded that they value cash for a variety of reasons, including that it is private, widely accepted, helpful for budgeting and for making payments to family and friends (Graph 4).

Graph 4



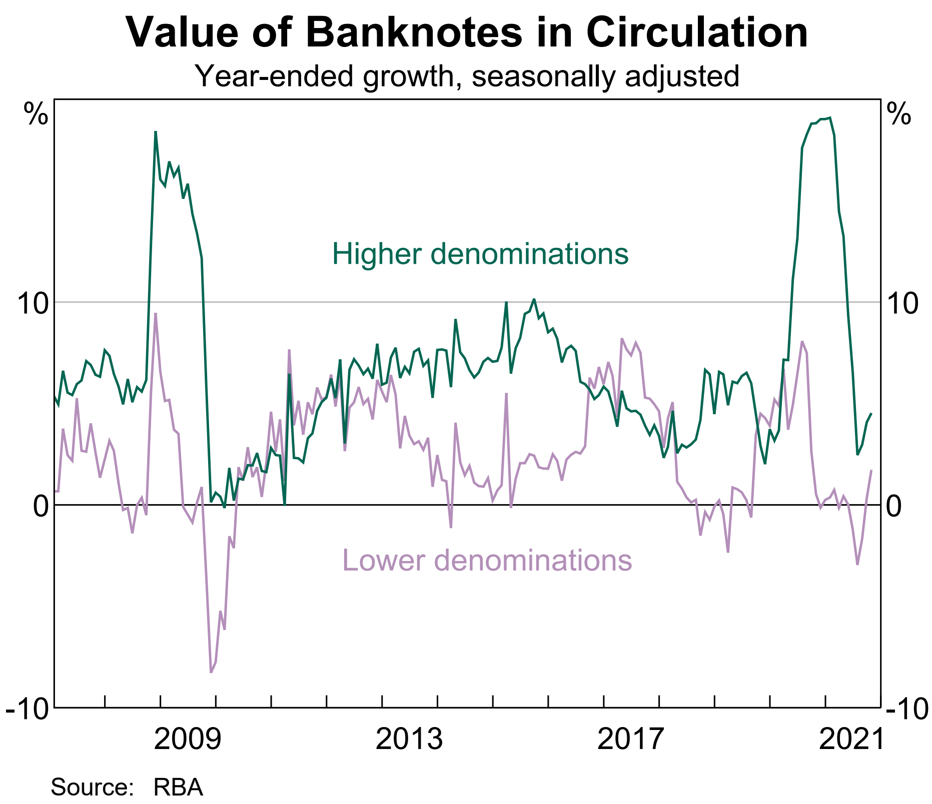
* Of the 277 respondents who indicated it would be difficult if shops stopped accepting cash or they could no longer withdraw cash

Sources: based on data from Roy Morgan Research; RBA calculations

2.4 Cash is increasingly used as a store of wealth

The increase in banknotes in circulation against the backdrop of declining transactional cash use can be attributed to the growing role of cash for precautionary and/or store-of-wealth purposes. Around half to three-quarters of banknotes on issue are estimated to be hoarded (Finlay, Staib and Wakefield 2018). Reflecting this trend, much of the growth in banknotes in circulation has been driven by demand for higher-denomination banknotes (Graph 5). Around 73 per cent of the number, and 94 per cent of the value, of banknotes in circulation are accounted for by the $50 and $100 denominations.

Graph 5

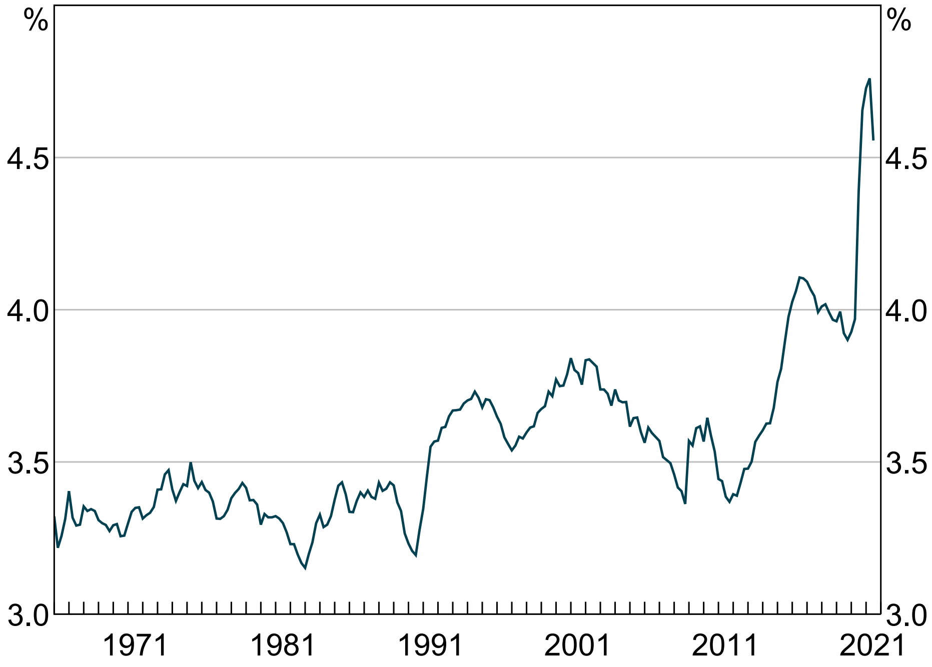


The store-of-wealth function performed by banknotes is particularly important during times of financial and economic uncertainty, such as the global financial crisis (GFC) and the COVID-19 pandemic (Guttmann *et al* 2021). Consequently, cash demand often surges during times of economic stress, driven by an increase in high-denomination banknotes. The current low level of interest rates also makes holding cash relatively more attractive, due to the lower opportunity cost of holding physical cash (which earns no interest). Measured as a ratio to GDP, the value of currency in circulation reached a historic high in the March quarter of 2021 at 4.8 per cent (Graph 6).

Graph 6

Currency Value*

Per cent of nominal GDP, seasonally adjusted



* Holdings of notes and coins by the private non-bank sector

Sources: ABS; RBA

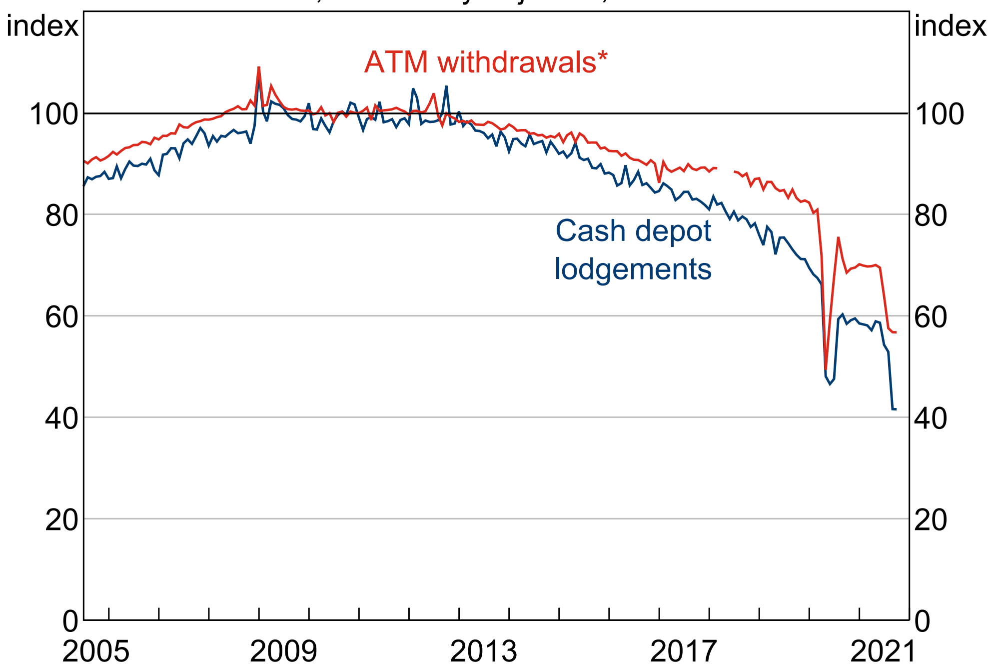
2.5 Cash is circulating less

As a result of these trends in the use of cash, banknotes do not circulate through the economy as frequently as they used to. This has a significant effect on the cash distribution system and its participants as it means activity within the system has fallen substantially. For example, the value of ATM withdrawals has fallen by around 40 per cent since 2012, and the number of withdrawals has fallen by close to two-thirds (Graph 7). Cash withdrawals from other sources, such as over-the-counter and debit card cash-outs, have experienced similar declines. Likewise, lodgements at cash depots – in which cash is moved from a retailer to a financial institution via a commercial cash depot – have also fallen significantly. Both the number and value of banknote lodgements at major cash depots were around 55 per cent lower in September 2021 than in 2012. As noted in Section 2.2, the pandemic has accelerated these trends, and it is unlikely that ATM withdrawals or cash depot lodgements will return to pre-pandemic levels.

Graph 7

Indicators of Cash System Activity

Values, seasonally adjusted, 2012 = 100



* Series break between February 2018 and May 2018 due to changes in collection and reporting methodology

Source: RBA

3. Australia's Banknote Distribution System

The Reserve Bank aims to ensure that banknotes are available to meet public demand and that banknotes in circulation are of a good quality. Good-quality banknotes support the community's confidence in using physical currency by making it more difficult for counterfeits to be passed or remain in circulation; they also help to prevent problems with banknote accepting and dispensing equipment, such as ATMs and ticketing machines.

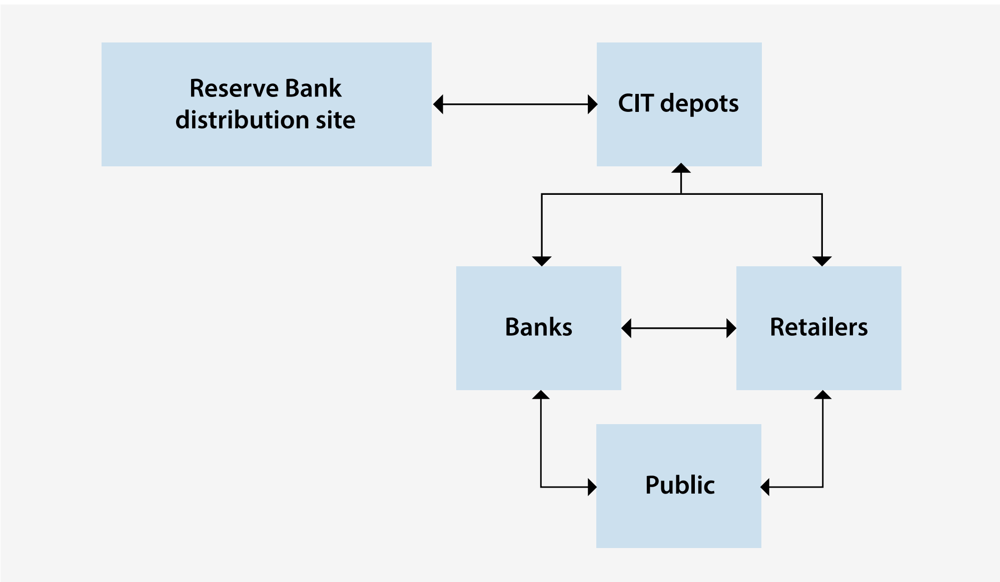
This section provides an overview of the current system for distributing banknotes across Australia, as well as the evolution of that system and how it compares to models employed in other countries. It also asks whether changes should be made to these arrangements given the shifting nature of cash use.

3.1 The cash cycle

The movement of banknotes from the Reserve Bank into the hands of businesses and consumers – the cash cycle – involves a number of participants. The Reserve Bank is the wholesaler of banknotes and ensures that the banking sector has sufficient access to banknotes so as to meet its customers' needs. The private sector then plays an important role in banknote distribution and processing – a role that has increased over time (see Box A for a discussion of previous distribution arrangements in Australia). CIT companies carry out the majority of the logistics associated with distributing and processing banknotes on behalf of banks, other authorised deposit-taking institutions (ADIs) and retailers (Figure 1). The wholesale part of banknote distribution involves the bulk movement of banknotes from the Reserve Bank to CIT cash depots around the country. Banknotes are then distributed from these depots to bank branches, ATMs and retailers, from where they are available to the public (retail distribution). Delineating between wholesale and retail distribution, however, is not straightforward, as it tends to involve the same industry participants and infrastructure.

Figure 1: The Cash Cycle in Australia

Physical movement of banknotes



3.1.1 Production and issuance of banknotes

The Reserve Bank is responsible for the production and issuance of Australia's banknotes. Banknotes are printed by Note Printing Australia Limited (NPA), a wholly owned subsidiary of the Reserve Bank. Once printed, they are delivered to the Reserve Bank's primary storage, processing and distribution site in Victoria – the National Banknote Site (NBS). The Reserve Bank also has a contingency site for banknote distribution located in Sydney.

The issuance of banknotes from the Reserve Bank into circulation is facilitated by a series of legal agreements, known as the Banknote Distribution Agreements (BDAs). These are bilateral agreements between the Reserve Bank and participating institutions – currently the four major Australian commercial banks (the BDA participants). The BDAs provide the legal framework under which the distribution and processing of banknotes in circulation is carried out. Only BDA participants can purchase banknotes directly from the Reserve Bank. They take ownership of the banknotes upon collection from the Reserve Bank's distribution site. At this point, banknotes are considered to be in circulation.

As an alternative to purchasing banknotes directly from the Reserve Bank, BDA participants are encouraged to purchase surplus banknotes from each other. This is also how organisations that are not party to a BDA are able to obtain banknotes. The exchange and distribution of bulk cash between the four BDA participants is governed by the Australian Cash Distribution and Exchange System (ACDES), which is managed by the Australian Payments Network (AusPayNet).[1]

3.1.2 Transport, storage, processing and quality sorting

The distribution of banknotes throughout the country is carried out by the private sector. The BDA participants engage CIT companies to transport, process and store banknotes on their behalf. In order to collect banknotes from the Reserve Bank, these CIT companies must be nominated by a BDA participant and approved by the Reserve Bank (approved CITs). These approved CITs collect banknotes from the Reserve Bank's distribution site and transport them to their cash depots for distribution to financial institutions and retailers throughout Australia. There are currently four approved CITs that operate around 60 approved depots around the country. There are also a large number of smaller CIT companies operating in the Australian market that are not part of these wholesale arrangements but nevertheless support retail cash distribution. The CIT industry is described further in Section 4.1.

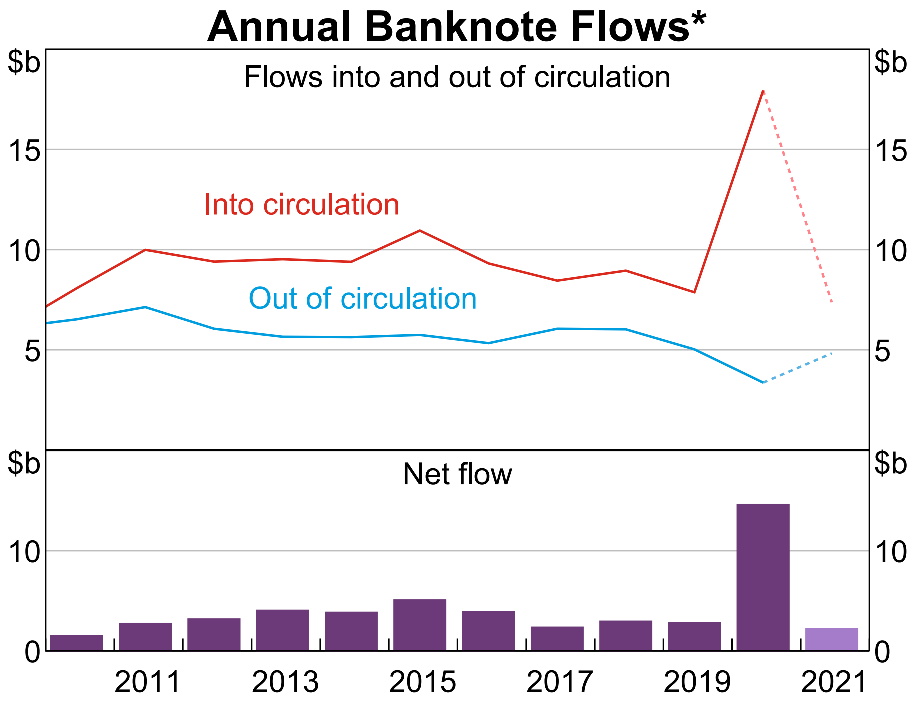
The BDA participants hold some banknote stocks within Reserve Bank-approved depots (approved depots) to enable them to meet the cash demands of their customers as well as for contingency and risk management purposes. These banknote stocks are known as verified cash holdings (VCH). The Reserve Bank compensates the BDA participants for interest forgone on their holdings of banknote stocks at approved depots, provided the banknotes have been quality sorted and the depots are regularly audited to verify the reported banknote holdings. The interest compensation payment is in line with the interest that would have been earned by the commercial banks were they to instead hold electronic balances at the Reserve Bank.

Banknotes in circulation that are surplus to the requirements of the public are returned by financial institutions and larger users of banknotes (such as major retailers) to approved depots. These banknotes are then processed by the approved CITs, which involves verifying, counting and sorting banknotes based on their denomination and whether they are fit or unfit (i.e. the extent of any damage associated with regular wear and tear).[2] Poor-quality banknotes that are no longer fit for circulation (unfit banknotes) are packaged and returned to the Reserve Bank. Banknotes that are deemed to be of good quality (fit banknotes) remain in circulation. Part of this processing involves CIT companies packaging banknotes for individual financial institutions, ATMs and retailers.

3.1.3 Removal from circulation and destruction

Banknotes are returned to the Reserve Bank by approved CITs on behalf of the BDA participants, and ownership transfers from the BDA participant to the Reserve Bank on receipt at the Reserve Bank's distribution site. Banknotes are deemed 'out-of-circulation' once they have been returned to the Reserve Bank. Over the past decade, $5½ billion worth of banknotes (or 160 million banknotes) have been returned to the Reserve Bank each year on average, compared to $10 billion worth of banknotes (or 240 million banknotes) that were issued by the Reserve Bank each year (Graph 8).

Graph 8



* Excludes small changes in circulation due to damaged banknote claims and ad hoc transactions; 2021 estimate based on partial data

Source: RBA

BDA participants return two types of banknotes to the Reserve Bank – surplus and unfit banknotes. First, given the seasonal nature of banknote demand, they return banknotes that are surplus to their current needs. These banknotes are stored at the NBS and reissued into circulation as they are demanded. Second, as already noted, BDA participants are responsible for returning unfit banknotes to the Reserve Bank. These banknotes are processed by the Reserve Bank to count them, confirm their authenticity and to remove any fit banknotes. Unfit banknotes are then destroyed by the Reserve Bank, while fit banknotes are repackaged and returned to circulation as they are demanded.

3.2 The Banknote Distribution Agreements

The bilateral BDAs that the Reserve Bank has with BDA participants govern the wholesale distribution of banknotes. These agreements (which are periodically renegotiated) outline the contractual terms, conditions and procedures associated with:

- **meeting the demand for banknotes**, which includes wholesale banknote purchases and returns, as well as the payment of interest compensation to BDA participants on their cash holdings at approved depots

- **maintaining the Reserve Bank's quality standards for banknotes in circulation**, by quality sorting banknotes and returning unfit banknotes to the Reserve Bank; this also includes payments by the Reserve Bank to support accurate quality sorting by the industry to the standards specified by the Reserve Bank.[3]

3.2.1 Meeting demand for banknotes

Wholesale access to banknotes

In principle, any organisation can enter into a BDA with the Reserve Bank, provided they are prepared to sign up to the contractual requirements. In practice, however, there are aspects of the arrangements that may limit the ability of some organisations to enter into a BDA. For example, the nature of the BDA requirements means that participants need to have sufficient financial resources to purchase banknotes that are held in inventory in the depot system.[4] They also need to be prepared to meet the control measures outlined in the BDAs – such as procedural, reporting and auditing requirements – and bear the cost of those measures. Further, the BDA as it is currently framed is comprehensive and relates to banknote purchases, returns and quality management. Hence, one area for consideration in this review is whether the nature of the BDA system provides sufficient flexibility to support different types of participation in wholesale banknote distribution (discussed in Section 5.2).

Contingency stocks

It is important that there are sufficient stocks of banknotes throughout the country, both to meet day-to-day demand and to provide for unexpected and large increases in demand, such as during the GFC or the COVID-19 pandemic. In the extreme, if a financial institution was unable to meet banknote demand from the public for a period of time, particularly in a time of heightened economic uncertainty or stress, this could have significant reputational consequences for that institution and, more broadly, could impact confidence in parts of the financial system. While temporary minor disruptions to cash supply do occur from time to time without substantial consequences (such as individual ATMs running out of banknotes), the arrangements for banknote distribution need to be sufficiently robust to prevent a prolonged disruption in the ability of the public to access cash.

As noted in Section 3.1, the Reserve Bank compensates BDA participants for interest forgone on VCH within approved depots. In an environment where interest rates are at or close to zero, the financial incentive paid to BDA participants to hold banknotes is reduced.

> Q1: Are there aspects of the current BDA arrangements that affect the ability of existing BDA participants and approved CITs to manage cash distribution in an environment of declining transactional cash use? If so, please provide details.
>
> Q2: Do the current BDA arrangements prevent additional parties who might otherwise wish to do so from participating in wholesale cash distribution? If so, how?

3.2.2 Maintaining banknote quality

Quality sorting of banknotes is a key function of Australia's wholesale distribution system. As banknotes are returned from public use to CIT depots, they are checked for wear and damage before being returned for public use if they remain fit for circulation. There are three key elements of the Reserve Bank's approach to maintaining the quality of banknotes in circulation:

- setting quality standards that specify when a banknote is no longer fit for circulation[5]
- providing financial incentives for the industry to sort banknotes to the Reserve Bank's desired quality standards

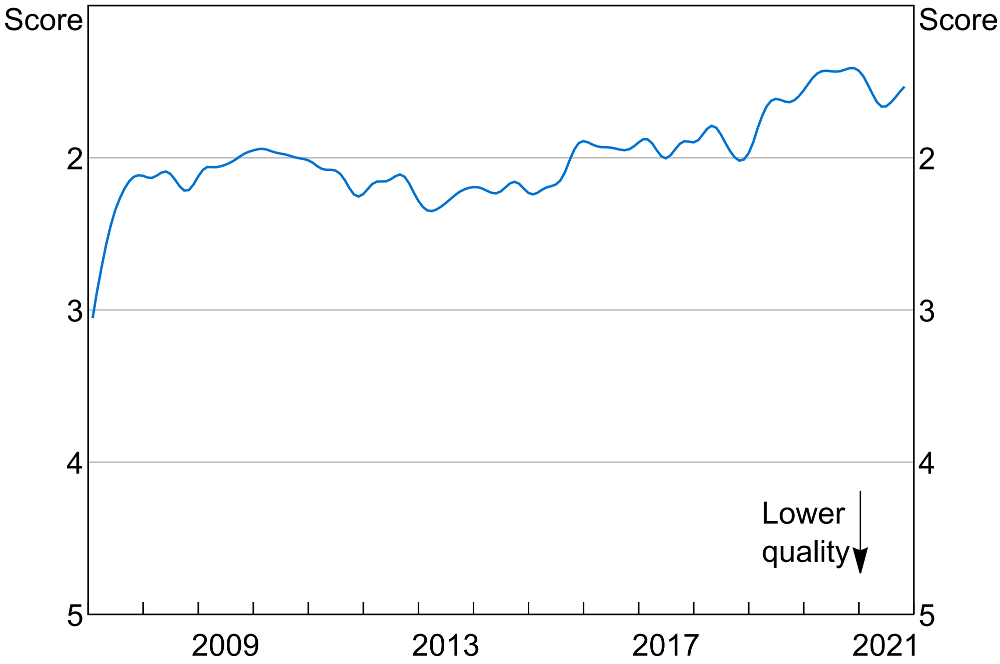
- providing financial incentives for the return of unfit banknotes to the Reserve Bank.

As mentioned, BDA participants must sort to the Reserve Bank's quality standards for their banknote holdings at approved depots to qualify for interest compensation payments. The Reserve Bank further incentivises the quality sorting of banknotes via the Note Quality Reward Scheme (NQRS) (Cowling and Howlett 2012). Under the NQRS, the Reserve Bank samples fit banknotes that have been quality sorted at approved depots, quantitatively measures their quality and makes payments to the BDA participants based on the assessed quality of banknotes sampled (Graph 9). By rewarding accurate quality sorting, NQRS payments are intended to incentivise industry participants to carry out ongoing investment in their quality-sorting capability. Since the start of the NQRS scheme in late 2006, the Reserve Bank has paid BDA participants more than $150 million in NQRS payments.

Graph 9

NQRS Quality Scores*

Smoothed, inverted scale**



* Shift higher in quality scores after 2016 is due to introduction of NGB series

** 13-period Henderson trend

Source: RBA

At the same time, the cash handling industry has its own requirements for banknote quality, so as to minimise problems with banknote processing equipment. For example, folded banknotes and banknotes with tears can cause issues in ATMs and ticketing and vending machines; these issues are costly as they can take the machine out of service and/or require a technician to rectify the problem. The Reserve Bank's standards for banknote quality are higher than private sector standards as it also seeks to remove from circulation banknotes with worn or damaged security features. The Reserve Bank regards this as important because security features, such as the raised print on the banknote or the top-to-bottom window, can be used by the public to determine whether a banknote is genuine or counterfeit. The BDA encourages the industry to sort to the Reserve Bank's higher quality standards.

Quality sorting banknotes does, however, impose costs on the private participants in the cash distribution system. These include the cost of investing in and maintaining the necessary banknote processing equipment, as well as the cost of employing the workers required to operate that equipment. While the Reserve Bank provides well as the cost of employing the workers required to operate that equipment. While the Reserve Bank provides incentive payments for quality sorting, ongoing investment in banknote processing equipment in the current environment may become increasingly challenging.

Another important element of maintaining the quality of banknotes in circulation is removing poor-quality banknotes from circulation. The Reserve Bank encourages BDA participants to return these banknotes to the Reserve Bank by making incentive payments for the transportation of these unfit banknotes. Setting the transport rate at an appropriate level is an ongoing challenge. While a higher rate would further encourage the removal of unfit banknotes from circulation, it could also encourage inefficient transportation of unfit banknotes by the industry, which would not be a good use of public funds. If the transport rate is set too low, it could incentivise BDA participants to recirculate unfit banknotes to reduce their transportation costs, thereby decreasing the quality of banknotes in circulation.

> Q3: What role should private participants in the banknote distribution system have in quality sorting? Are there changes that should be made to the arrangements that the Reserve Bank has in place to support the quality of banknotes in circulation?

Endnotes

[1] AusPayNet is the self-regulatory body and industry association for payments in Australia. Its role includes setting industry standards and facilitating coordination between industry participants.

[2] While some bank branches quality sort themselves, the majority of quality sorting is performed by approved CITs.

[3] The Reserve Bank partially subsidises the transport associated with the return of unfit banknotes.

[4] The smallest quantity of a single denomination that can be purchased is 100,000 banknotes. Accordingly, the starting price of wholesale banknote purchases ranges from $500,000 for $5s to $10 million for $100s.

[5] See RBA, 'Banknote Sorting Guide'. Available at <https://banknotes.rba.gov.au/assets/pdf/sorting-guide.pdf>.

Box A: The Evolution of Systems of Cash Distribution

Previous models of cash distribution in Australia

The cash distribution model used in Australia has evolved over time. Prior to the late 1990s, distribution activities were largely carried out by the Reserve Bank, which issued banknotes directly to commercial banks from its cash depots in each of Australia's eight capital cities. This changed in the late 1990s, with the establishment of Note and Coin pools. Under this arrangement, Reserve Bank-owned banknotes were held in the depots of CIT companies rather than at Reserve Bank-owned depots. These pools allowed commercial banks to more easily access cash. However, this particular arrangement was relatively short-lived. The introduction of polymer banknotes reduced processing volumes substantially due to their greater durability, creating inefficiencies and prompting a rationalisation of the Reserve Bank's role in cash processing. Due to this, and requirements to meet competitive neutrality provisions, the ownership of these cash pools was transferred to commercial banks in 2001 (Carlin 2004).[6] These changes were formalised in the Cash Distribution Deed (CDD) – agreements between the Reserve Bank and eight commercial banks, and a precursor to the current BDA arrangements.

With the ownership of Note and Coin Pools transferred to the private sector, the Reserve Bank began to pay interest on these privately owned cash pools. The interest payments compensated commercial banks for interest forgone on their holdings of physical currency, which are used by banks for meeting day-to-day cash demands, as well as for contingency and risk management purposes. The new arrangement encouraged commercial banks to trade banknotes between each other, rather than always dealing with the Reserve Bank directly. This increased efficiency by reducing excessive transportation and processing of banknotes (Wakefield, Delaney and Finlay 2019).

Banknote quality sorting was also outsourced, with commercial banks required to quality sort banknotes to the standard set by the Reserve Bank. However, the CDD did not stipulate how to measure the quality of a banknote, nor the extent of financial implications if quality-sorting requirements were not met by the private sector. These shortcomings, combined with declining banknote quality in circulation, led to the introduction of the NQRS in 2006 (Cowling and Howlett 2012). After consultation with the industry, the NQRS formally articulated the banknote quality standards expected by the Reserve Bank, introduced metrics to measure banknote quality, and assigned financial outcomes (positive or negative) associated with quality sorting. The scheme's aim was to incentivise the circulation of good-quality banknotes and support investment in the cash processing industry. With the introduction of the NQRS, the quality of banknotes in circulation improved substantially and has remained at a high level since.

These changes brought cash distribution arrangements to roughly their current form in Australia, although various adjustments have been made since then. In 2008, limits on interest compensation were removed, in response to a large build-up of banknote stocks within approved depots during the GFC (Cusbert and Rohling 2013). The BDAs were officially created in 2011. A number of other adjustments have occurred over the years, including to reporting requirements, incentive payments made for the transportation of unfit banknotes, provisions for the new banknote series, updates of fees and charges, and to operationalise the purpose-built NBS in Melbourne as the primary location of banknote purchases and returns. These adjustments, however, have not fundamentally changed the system of cash distribution in Australia. Commercial banks and CIT companies continue to play a key role in the distribution of cash.

Cash distribution in other jurisdictions

Towards the end of the 20th century, many central banks around the world began outsourcing some of their cash distribution and/or processing functions to private banks, CIT companies and other institutions. As a result, large differences have appeared in cash distribution arrangements globally.

Internationally, the CIT industry has been characterised by a number of stylised models (Scholten 2017). The 'traditional CIT model' involves CIT companies being primarily focused on transport services. This model continues to have an important role in many jurisdictions (Table 1). In some countries, however, CIT services have become increasingly integrated into the cash distribution process. In these cases, CIT companies own the physical cash infrastructure, and therefore have taken on the processing role in addition to transport ('CIT as a handler model'); sometimes, CIT companies also act as an agent for commercial banks to provide some banking services for retailers (i.e. they provide all-in-one cash services to retailers; 'CIT as an agent model'). Finally, CIT companies can also hold cash on their own balance sheets, effectively becoming an owner of cash ('CIT as an owner model').

Table 1: Stylised Models of the CIT Industry

	Model 1 Traditional CIT model	**Model 2 CIT as a handler model**	**Model 3 CIT as an agent model**	**Model 4 CIT as an owner model**
CITs' cash services	Transportation only	Transportation and processing	Transportation and processing	Transportation and processing
Ownership of cash depots	Owned by commercial banks	Owned by CIT operators	Owned by CIT operators	Owned by CIT operators
Relationship with retailers	Acts as courier only	Acts as courier only	Acts as courier; CITs deposit cash with commercial banks on behalf of retailer	Acts as courier; CITs deposit cash with commercial banks on behalf of retailer
Ownership of cash during handling	Owned by commercial banks	Owned by commercial banks	Owned by commercial banks	Temporarily owned by CITs

Source: Adapted from Scholten (2017)

Most jurisdictions operate a combination of these different CIT arrangements. The traditional CIT model remains common in countries with relatively centralised distribution systems, and is still relevant even in countries with substantial private sector quality sorting (such as the Netherlands). In Australia, CIT services have become highly integrated, with transport companies handling the majority of wholesale cash processing and storage, and more recently retail cash distribution through ownership of ATM networks. Such arrangements have appeared in many jurisdictions with outsourced distribution activities. The arrangement with CIT companies as cash owners, however, remains uncommon, given the need to fund these cash deposits and the regulatory costs that may arise from holding cash deposits.

A number of countries have moved to a shared-service utility model for certain cash distribution functions. In these utility models, resources and infrastructure are pooled by industry participants, which can reduce costs and improve efficiency. Variations of these utility structures are common among the Nordic countries, including in Sweden and Norway. The Bank of England, along with industry participants, is actively considering a utility model for cash distribution in the United Kingdom (see Box B).

Endnotes

[6] Under the Australian Government Competitive Neutrality Guidelines, government enterprises cannot enjoy net competitive advantages, simply by virtue of their public sector ownership.

4. The Cash-in-Transit Industry

In the cash distribution system, CIT companies are largely responsible for moving and processing banknotes. Unit costs for cash processing and transportation are increasing as transactional cash use declines, which is putting financial pressure on some parts of the CIT industry. This section examines the CIT industry's role in cash distribution, the changing landscape for these businesses and its implications for cash distribution. For the purposes of this review, CIT companies refer to any cash logistics operator that transports, stores and/or processes banknotes on behalf of a client.

4.1 Nature of the industry

CIT companies form the core of the cash distribution system, where they transport, process and store physical currency. Based on information from an independent inquiry, there were more than 300 companies providing CIT services in Australia in 2015, with about 120 of these doing regular CIT work (Road Safety Remuneration Tribunal 2015). Despite the large number of firms in the industry, most of these are relatively small operators, such that the CIT market in Australia is fairly concentrated with two dominant players. The largest participant is Linfox Armaguard, followed by Prosegur Australia, both of which conduct wholesale cash distribution (i.e. moving cash to and from the Reserve Bank) and service the cash-related needs of financial institutions, large retailers and hospitality venues. These participants together comprise between 70–90 per cent of the CIT industry's market share (Road Safety Remuneration Tribunal 2015; Parliament of Australia, Rural and Regional Affairs and Transport References Committee 2021). Two other CIT companies – Streamcorp Armoured and Brinks Australia – also participate in wholesale cash distribution and processing.[7]

Wholesale distribution requires the ability to reliably and securely move large volumes of banknotes, and so the largest firms generally use armoured vehicles and specialised security guards. They also offer a range of cash management services in addition to transportation, including: vaulting and safes; cash processing; banknote refilling for ATMs and ticket machines; and cash demand forecasting. The larger CIT companies tend to have a broad geographic network of depots and trucks, although this is not a requirement to undertake wholesale distribution. Recently, the two major CIT companies have acquired ATM fleets (discussed further in Section 4.3), making it increasingly difficult to separate out the elements of wholesale and retail cash distribution. Smaller CIT firms tend to use non-armoured ('soft-skin') vehicles, typically to undertake low-volume cash transports. Liaison suggests that demand for these services may be increasing, as day-to-day cash use declines. The Reserve Bank has little involvement with these firms as they are not involved in wholesale cash distribution.

Indeed, the Reserve Bank only has access to data on a subset of the cash distribution market – namely, banknotes lodged at approved depots. Accordingly, much of the discussion in the following sections relates to this subset of cash movements at depots operated by approved CITs. This is likely to cover a large portion of cash movements in Australia, but – if firms shift their cash management to smaller firms as cash use declines – the data will become less representative over time.

4.2 Issues facing cash-in-transit companies

4.2.1 High fixed costs and a declining revenue base

Segments of the cash distribution system are likely to be characterised by relatively high fixed costs. A number of activities – such as securely storing, safely transporting and quality sorting banknotes –require investment in specialised equipment and vehicles. This means that elements of cash distribution will tend to be significantly more efficient and cost-effective with higher volumes.

While a significant proportion of the costs of cash distribution is likely to be fixed, revenues tend to be more closely related to the amount of cash that is processed and transported between the Reserve Bank, cash depots, bank branches, ATMs and retailers. The decline in cash used for retail payments has lowered the volume of cash changing hands and so processing and transport volumes by some of the larger CIT companies will have declined. Australia's vast geographic size and relatively low population density also contributes to the costs associated with meeting demand for cash services, such as picking up cash from retailers and the servicing of ATMs, in regional and remote locations. The combination of high fixed costs and lower processing volumes is likely to be having a material effect on the profitability of some businesses in the cash distribution system.

Recent testimony to a parliamentary inquiry indicated that the issues of a declining revenue base and high costs are becoming increasingly acute for at least the larger CIT players (Parliament of Australia, Rural and Regional Affairs and Transport References Committee 2021). One solution could be for these CIT companies to raise the prices charged to cover their costs, including the cost of capital. However, there may be reasons why doing so presents issues. For example, if the increased cash distribution costs were passed on, businesses may choose to use less cash in their operations or no longer accept cash as a payment method, thereby reducing the public's ability to use cash. Also, should the profitability of an individual CIT company fall to such an extent that it exits the market, cash distribution – and with it access to cash – could be disrupted, at least in the short term.

Q4: How have the cost structures and revenue streams of CIT companies changed as transactional cash use has declined? Are there aspects of cash distribution that have costs that are difficult to reduce as cash use declines, and how significant are these?

Q5: Are there factors that prevent CIT companies repricing their services to reflect rising unit costs? If so, what are they?

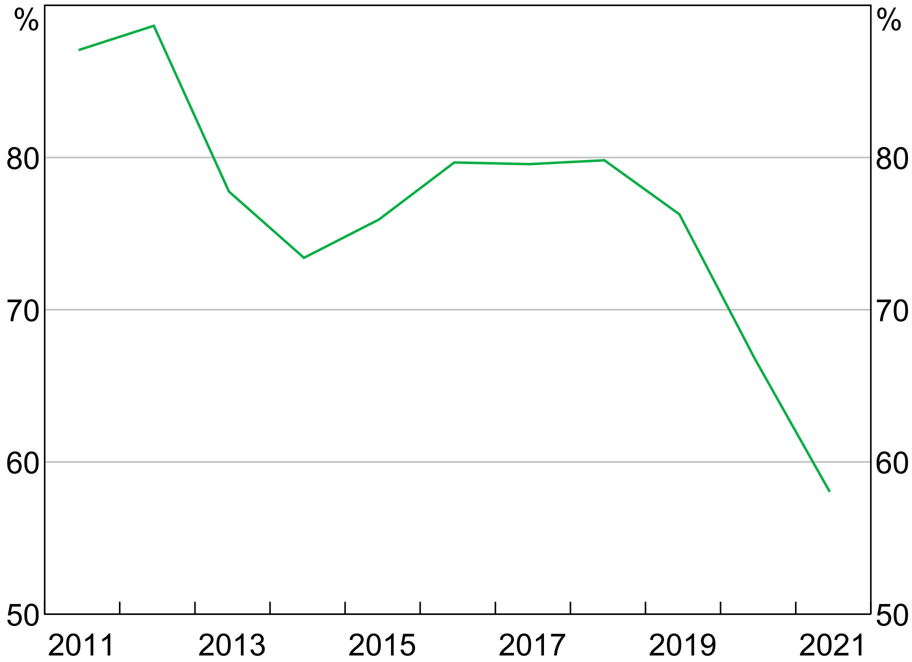
4.2.2 Underutilisation

Declining cash use for payment transactions has been associated with significantly lower processing volumes at approved CIT depots. This appears to have given rise to excess processing capacity in some parts of Australia's cash distribution network. Reserve Bank estimates of aggregate approved depot utilisation, based on the volume of banknotes processed, suggest that utilisation has declined over the past decade with a particularly sharp decline since the start of the pandemic (Graph 10). These estimates indicate that current depot utilisation may be as low as 50–65 per cent.[8] However, utilisation is unlikely to be uniform across the country, with Reserve Bank estimates suggesting that it tends to be somewhat higher in major cities compared to regional areas.

Graph 10

Annual Capacity Utilisation*

Based on banknote flows between cash depots and customers



* A depot's capacity is estimated as the highest level of banknotes it has processed in the 3 years prior to a particular month; 2021 estimate based on data to October

Source: RBA

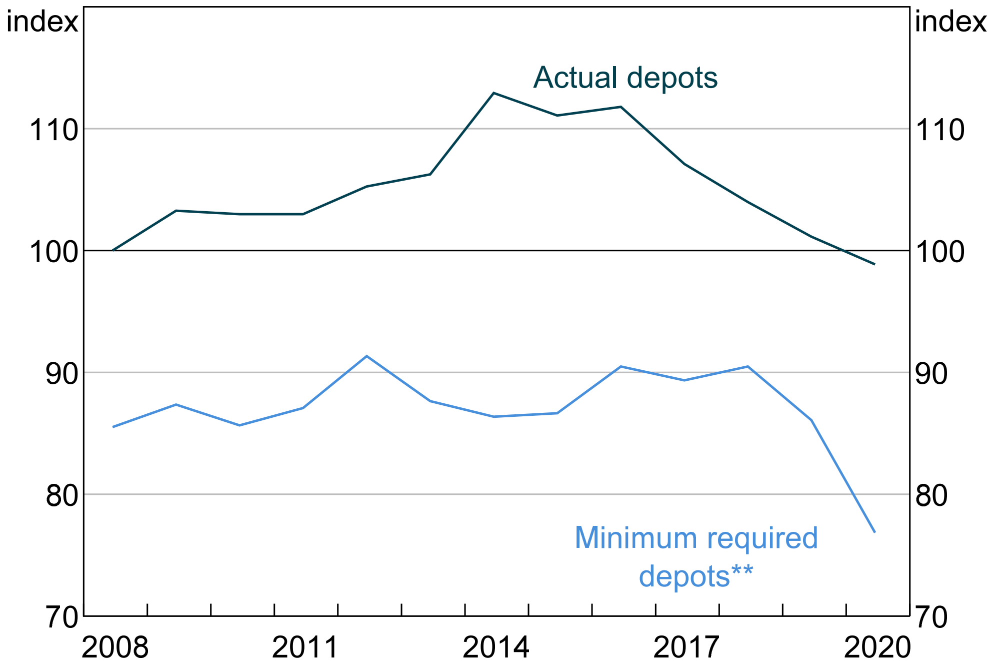
Some degree of underutilisation in the cash distribution network serves a useful function. Regarding processing, spare capacity is important to manage the normal seasonal fluctuations in demand for cash, particularly during peak periods such as Christmas. For example, the amount of banknotes processed at depots tend to be 13 per cent higher during the Christmas period than in the six months prior. Regarding storage, sufficient capacity is required to meet both regular demand and as a contingency for periods of unanticipated demand, such as in times of acute economic and financial stress. Overall, some level of spare capacity is important so that cash access is not hampered by an inability to process and/or store large volumes of cash. However, a sustained high level of underutilisation can be costly to maintain and inefficient when looking at the network as a whole.

Low and falling capacity utilisation for banknote processing implies that for some regions and in some time periods, total demand for cash services could have been met by fewer CIT depots. Reserve Bank estimates suggest that in 2020, Australia-wide cash demand could have been met by around 20–30 per cent fewer depots than were actually in operation (Graph 11).[9] While a few depots have been closed in line with falling demand, these estimates indicate that there is a sizeable gap between required and operating depots. This suggests there may be efficiency gains from, for example, consolidation or downsizing of cash depots or even adopting a different business model, particularly if the trend decline in transactional cash use continues.

Graph 11

Number of Cash Depots*

Depots in 2008 = 100



* Depots that are authorised cash centres for purposes of wholesale cash distribution

** Minimum required depots estimate based on whether a smaller group of depots in a region could have met actual customer banknote processing for the region with their estimated capacity

Source: RBA

Q6: Is there underutilisation in the CIT industry in Australia? If so, how widespread is it (e.g. by region or size of depot)? What is being done, or could be done, to address underutilisation?

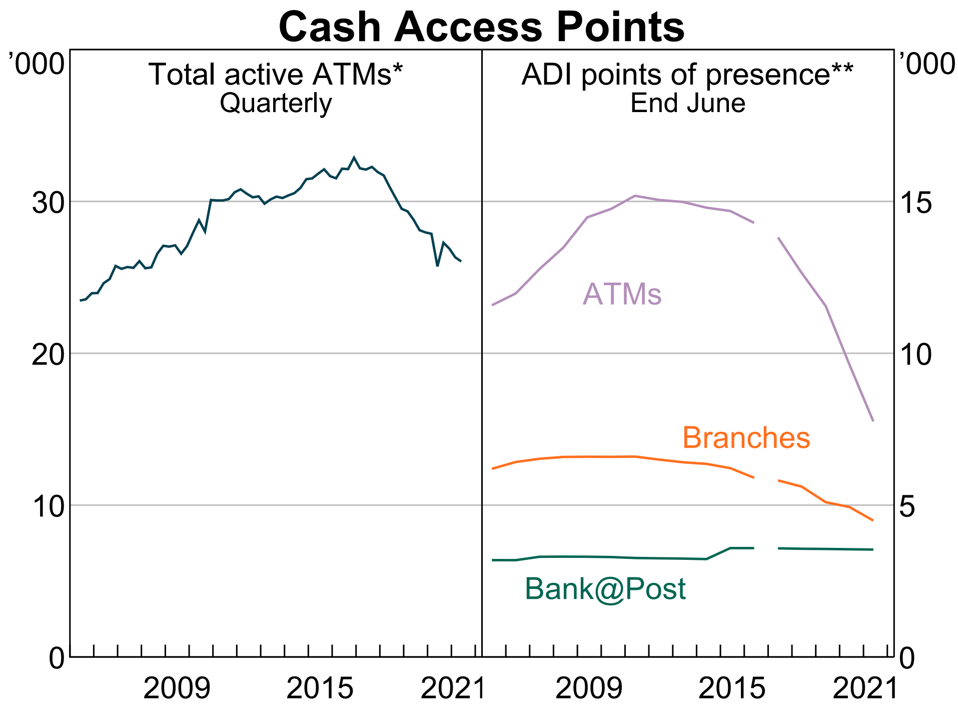
Q7: How would you describe the business conditions and issues faced by CIT companies? Are there other strategic issues faced by current or potential participants in cash distribution that have not been covered in this paper?

4.3 Responses to changes in the cash environment

Banks and CIT companies have made some changes in response to the decline in the use of cash for payments. The shift to digital payments and online banking has seen banks close some branches, and invest in improving and expanding digital services. Between 2017 and 2021, bank branch numbers declined by more than 20 per cent (Graph 12). A number of financial institutions also partner with Australia Post to offer deposit and withdrawal services through Bank@Post, which has been an increasingly important method for customers to access cash. The number of ATMs in Australia has declined by around 20 per cent since its peak in late 2016; the number of ATMs per capita, however, remains in line with other comparable countries. Overall, Reserve Bank estimates suggest that Australians generally do not have to travel far to access cash, with around 95 per cent of people living within about 5 km of a cash access point in 2020, broadly unchanged since 2017 (Caddy and Zhang 2021); these estimates do not take account of the possibility of cash access through cash-out facilities at retailers.

However, access to cash in regional and remote areas remains vulnerable to any future removal of cash services.[10]

Graph 12



* The decrease in the number of active ATMs in June 2020 was largely due to temporary COVID-19-related venue closures

** Series break in June 2017 due to APRA data collection change

Sources: APRA; AusPayNet; RBA

Recently, several banks have sold parts (or all) of their off-branch ATM fleets to third-party operators (generally CIT companies), which are looking to operate these ATM fleets on a utility basis where banks can pay for their customers to access the machines on a fee-free basis. In an environment of declining ATM use and where the costs of ATM deployment have been rising, such arrangements could be a more efficient way to sustain a broad coverage of ATMs. This may be particularly important for regional and remote areas where there are often fewer options for accessing cash services. In response to these changes in the industry, and to support broad coverage of ATMs, the Reserve Bank has recently granted an exemption from aspects of the Access Regime for the ATM System (RBA 2021). This will enable card issuers to access other participants' ATM fleets, thereby providing cardholders with wider access to fee-free ATMs.

One way that approved CIT companies have reduced their costs in response to lower transactional cash use is by closing some cash depots, although – as discussed in Section 4.2 – underutilisation remains apparent. The number of approved depots fell by around 10 per cent between 2015 and 2021 to be back around what it was in 2008. The majority of closures during this time were in regions served by multiple cash depots, so were unlikely to have made wholesale cash distribution more difficult. Indeed, in 2020 the median distance between cash access points and the nearest approved depot was around 12 km, indicating that the majority of access points were reasonably close to depots. Moreover, only 1 per cent of cash access points were further than 400 km from a depot.

Another way for CIT companies to reduce costs is by adopting new technologies. One example of this is the use of smart safes, whereby retailers can deposit cash into an on-site safe and the CIT company will credit the retailer's bank account as soon as cash enters the machine. While this shifts some risk onto the CIT company (as it owns the cash once it enters the machine), it reduces the necessity for frequent cash-pickups and allows the CIT company to optimise transport costs against interest revenues that are earned if cash is held at a depot. It is possible that this technology could reduce the market share of the smaller CIT companies, with the new machines offering faster crediting of deposits for retailers, increased security, and improved convenience. The two largest CIT companies report a combined 1,500 such machines in operation currently, and expect the market to grow significantly.

The use of ATMs with banknote recycling capability represents another way for banks and CIT companies to reduce costs. Recycling capability could be of particular value in remote parts of the country where the cost of replenishing machines with banknotes is high. This may allow banks and CIT companies to reduce transport expenditure and the amount of cash processing infrastructure, but with a potential trade-off of having lower-quality banknotes as they are not processed (and quality sorted) at CIT depots as frequently.

Q8: To what extent do the responses described in Section 4.3 assist businesses involved in cash distribution with managing the declining transactional use of cash? What other responses are being, or could be, pursued? Are there barriers to innovation in cash distribution?

Endnotes

[7] Providers of wholesale cash distribution have changed over time. For example, Chubb and Toll Secure provided these services until Prosegur acquired them in the 2010s. Cash Services Australia, partially owned by a number of commercial banks, had a cash management function and was also bought by Prosegur in 2017. In the early 2000s, Linfox acquired Armaguard from Mayne Nickless and Chubb bought Brambles' armoured car business.

[8] There is no publicly available data on actual capacity at each depot. Graph 10 presents an illustrative estimate for capacity utilisation based on actual banknote flows between approved cash depots and customers. A depot's capacity is estimated as the highest level of banknotes it has processed in the three years prior to a particular month. The 50–65 per cent utilisation referenced in the text broadens this assumption to a range of two to five years.

[9] The estimate of minimum required depots in Graph 11 is based on the capacity estimates from Graph 10. Each depot is allocated to a regional area considered to be a local market for wholesale cash distribution services. If a smaller group of depots in a region could have met actual customer banknote processing for the region with their collective estimated capacity, that smaller group is considered the 'minimum required'.

[10] Cash access points include ATMs, bank branches and Bank@Post. Based on preliminary analysis of 2021 data, cash access has not changed significantly over the previous 12 months in aggregate. However, regional areas are increasingly reliant on Bank@Post outlets. In response to these developments, the government has recently established a Regional Banking Taskforce. It will assess how bank branch closures have impacted local businesses, industries and communities and identify possible solutions.

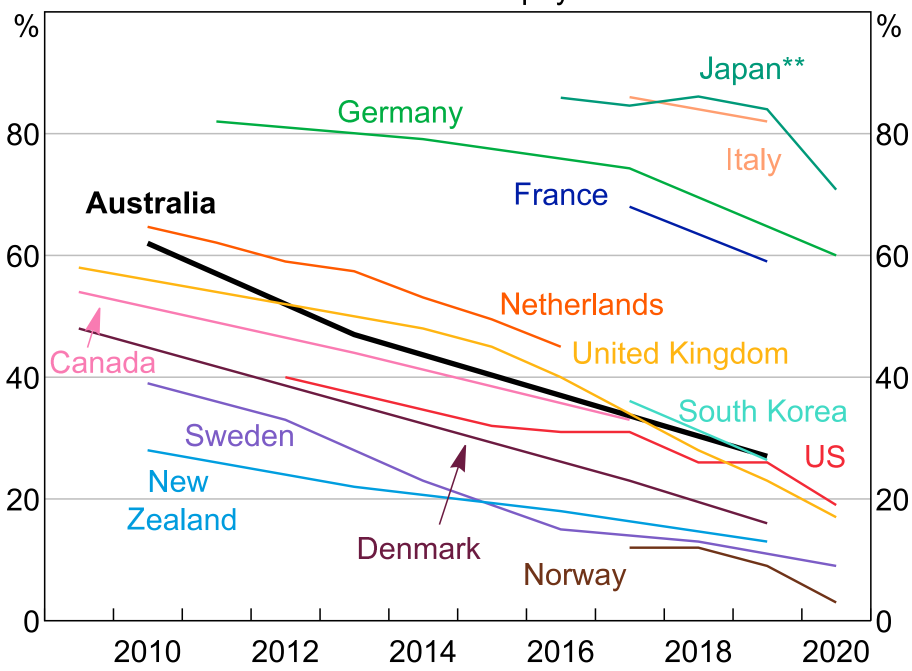
Box B: International Responses to Declining Cash Use

Transactional cash use has declined across many advanced economies (Graph 13). Policy actions have been taken in response (or are being considered), including mandating cash access and acceptance so that cash remains a convenient means of payment, and implementing alternative models for wholesale cash distribution to maintain efficiency at lower levels of cash use.

Graph 13

Trends in Cash Payments

Share of number of payments*



* Observations are not directly comparable due to differing survey methods and inclusions across countries; figures are linearly interpolated where unavailable

** For small value transactions by households with two or more people only

Sources: Central Council for Financial Services Information; Colmar Brunton; Ipsos; RBA; Roy Morgan Research; UK Finance; various central bank websites

Mandating cash access and acceptance

Transactional cash use in the Nordic countries has fallen significantly and is among the lowest in the world; as such, policy responses there are further advanced than in many other countries. In Denmark, Norway, and Sweden, these responses include obligations on banks to provide reasonably accessible cash deposit and withdrawal services to their customers. A Swedish parliamentary committee also recently recommended mandating retail acceptance of cash in some circumstances. Although cash access and acceptance are mandated in some circumstances in the euro area, the European Central Bank (ECB) and the European

Commission are currently examining ways to strengthen cash access and acceptance (ECB 2021; European Commission 2020).

There have also been efforts to protect cash access in the United Kingdom by promoting 'cashback' at retailers without making a purchase, and by potentially giving new powers to the Treasury to set geographic cash access requirements. A number of countries, including in parts of the United States and China, have mandated or encouraged merchant cash acceptance. While these policies largely target retail cash access and acceptance, they imply a requirement for a minimum level of cash distribution services.

Alternative models for wholesale cash distribution

A number of central banks have begun, or are considering, greater involvement in the distribution of cash. Recently introduced legislation has mandated the Reserve Bank of New Zealand (RBNZ) to take a greater role in cash management, including to promote an effective cash system. The RBNZ recently launched a consultation to seek feedback on its role in cash and a redesign of its cash system (RBNZ 2021).

In the United Kingdom, consideration is being given to a utility model – where a single consolidated entity is formed by a number of organisations to carry out wholesale cash distribution functions – in response to lower cash use. This followed a recommendation in 2019 from the independent Access to Cash Review (ACR), which suggested a utility model could support the ongoing use and economic viability of cash (ACR 2019). Independent analysis of the proposal found that moving to a utility model would reduce overcapacity substantially, leading to lower costs for the industry in the medium term (Wholesale Distribution Steering Group 2020). The implementation of a utility model is not without transitional costs, however, and a model is yet to be finalised. Ultimately, the decision to participate in such a utility model is seen as a commercial decision for the banks and firms involved.

The Nordic countries have used shared utility models for cash distribution for some years. The structures of these cooperative arrangements differ by country, including the role of the utility in cash processing and transport (Scholten 2017). Over time, these arrangements have expanded to encompass ATM networks in Finland, Sweden, and Norway. The ownership of these utilities has changed as well. The utilities in Denmark and Finland were acquired from commercial banks by private CIT companies in 2016 and 2020, respectively; in Norway, the central bank and commercial banks have sold their stakes in the utility.

In the case of Sweden, a review of the utility model after five years found it had an appropriate incentive structure (because banks own the utility but are also the main customers), and created efficiency gains from centralised processing of large volumes of cash. However, some concerns were raised about competitive neutrality, as not all customers are part of the utility (Riksbank 2010). More recently, a parliamentary committee recommended giving more responsibility to the Riksbank for wholesale distribution, despite the utility model being in place, in order to manage monopoly pricing and contingency risks (Riksbank 2020).

5. Options for Cash Distribution

There are a range of measures that could be taken to address the issues identified in this paper. These measures would require, to varying degrees, actions by the industry, as well as the Reserve Bank and possibly other government agencies. A combination of measures may be required to best support the sustainability of cash distribution and ongoing access to cash across the country. This section provides a brief discussion of some options that could be explored for the future of banknote distribution in Australia. The Reserve Bank is seeking views on these options as well as any other suggestions from respondents for potential changes to make the banknote distribution system more effective, efficient, sustainable and resilient in an environment of declining transactional cash use.

The options that are canvassed in this section seek to, first, address excess capacity in the CIT industry and, second, identify considerations for the structural arrangements that underpin wholesale banknote distribution.

5.1 Options for addressing excess capacity in the CIT industry

Section 4 highlights that the declining transactional use of cash is potentially leading to mounting excess capacity within the CIT sector. While part of this is a result of COVID-19-related lockdowns, it seems unlikely that transactional cash use will recover to its pre-pandemic levels. Accordingly, it is expected that the trend decline in cash use as a means of payment will continue.

The Reserve Bank has identified various courses of action that could help address these issues. Any changes in the CIT industry would need to be implemented in an orderly way so as not to materially disrupt cash access across the country. These potential courses of action include:

1. **Participants improve distribution efficiency**. Existing industry participants could work to improve the efficiency and viability of their operations. For example, CIT companies could seek to reduce costs by restructuring their depot networks, increasing automation, restructuring pricing, changing the range of vehicle fleets used or changing the mix of services provided. It is also important to consider whether there are any barriers to efficiency gains as a result of the BDA arrangements currently in place. If barriers do exist, changes to the BDA arrangements may be required so that they provide the right incentives to support the provision of cash services and do not preclude efficiency gains or the entry of new participants (see Section 5.2 for more detail).
2. **Coordination within the system**. CIT firms may wish to engage in some degree of coordination in an attempt to remove excess capacity. This could be achieved in a variety of different ways. For example, CIT companies could explore avenues for coordination between each other in order to reduce duplication and excess capacity in the depot and transport network. This could take the form of sharing or sub-contracting routes, infrastructure, or segments of the market. Coordination between distribution participants risks breaching competition laws, and so may require authorisation from the Australian Competition and Consumer Commission (ACCC). This may be granted, broadly, if the proposed conduct would either not be likely to substantially lessen competition, or the likely public benefit from the conduct outweighs the likely public detriment.
3. **Consolidation within the system**. There could be a greater degree of consolidation that results in one main entity being responsible for some or the majority of wholesale cash distribution. This could occur via mergers or acquisitions of distribution participants (by existing participants or a new entrant), or the formation of a

utility. Establishing a utility model for banknote distribution would involve a number of organisations forming a new single entity to carry out banknote distribution functions. This would require a coordinated response from a range of participants in the cash industry. Therefore, the industry would need to establish a mechanism by which it could come together to explore the option of a utility. Such coordination between participants may require ACCC authorisation, as noted above. Additionally, merger proposals would need to be reviewed or authorised by the ACCC to ensure a potential merger is not likely to substantially lessen competition, or the likely public benefit from the merger outweighs the likely public detriment.

Considerations with respect to these options would be to ensure that there is continued good access to cash across the country and that the competition issues that arise are appropriately managed. This may point to the need for additional policy responses, potentially including action by the Reserve Bank or government.

Q9: What are your views on the options presented in this paper – and do you have other suggestions – to make the banknote distribution system more effective, efficient, sustainable and resilient over the medium term as the use of cash for transactions declines? How might your preferred option(s) be implemented by the industry?

5.2 Changes to the operation of wholesale distribution

The options outlined in Section 5.1 involve changes to the structure of the banknote distribution industry, but there are also options that focus on the wholesale cash distribution arrangements. Depending on the nature of these arrangements, changes could have flow-on effects that improve efficiency or resilience of the retail cash distribution network. These options include:

1. **Changing the nature of public sector involvement.** The current distribution system is largely decentralised. The Reserve Bank's involvement currently covers the production, issuance and destruction of banknotes, as well as providing incentive payments to the private sector to encourage efficiency and the removal of poor-quality banknotes from circulation. It may be appropriate to change the structure or nature of some of these payments. Moreover, the Reserve Bank could examine its role in ensuring sufficient contingency stocks are held around the country through the ownership of some banknote stocks at CIT depots. The public sector may also need to have greater involvement in regulating aspects of cash distribution, depending on the path taken in the areas outlined in Section 5.1.
2. **Consideration of quality arrangements.** Given the reduction in cash use for transactions and the costs associated with quality sorting, the requirements for banknote quality standards – and the Reserve Bank's involvement in setting these standards – could be scaled back. On the other hand, if poor-quality banknotes remain in circulation, it could be difficult for these banknotes to be used in some machines, increase counterfeit risk and lower confidence in the use of physical cash.
3. **Segmenting the BDA.** The current BDA system requires a signatory to the agreement to participate in all (or most) aspects of wholesale distribution. This encompasses the purchase and return of banknotes to and from the Reserve Bank, as well as storage and quality sorting. This may be a barrier to entry. A potential change would be to have standalone banknote purchase arrangements accessible by a wide range of entities, with other aspects addressed separately in arrangements with a subset of those entities. This would facilitate greater access to banknotes at the wholesale level for any entity.

Q10: What are your views on changes that could be made to the current arrangements to make wholesale banknote distribution more effective, efficient, sustainable and resilient over the medium term as the use of cash for transactions declines?

5.3 Final remarks

These options are not intended to be an exhaustive list, and alternative suggestions from respondents are welcome. It is also likely that a series of changes to the distribution system are required, rather than there being a single 'quick fix'. In addition, changes to the structure of the industry – either market driven or via public sector intervention, including regulation – would likely need to be accompanied by changes to the contractual arrangements for distribution. It is also important to note that some changes are complex and would take time to work through, while others could be implemented more quickly. In particular, some of the options listed would involve only bilateral negotiations, while others would require extensive coordination amongst many parties and/or require regulatory involvement and actions.

6. How to Contribute

The Reserve Bank is seeking views from interested parties on the issues raised in this paper. Note that it is not necessary to respond to every question in this paper. The Reserve Bank also invites stakeholders to raise other issues relevant to the banknote distribution system that they would like be considered as part of this review. Respondents should ensure that submissions reflect the views of their organisation.

Written submissions on the issues discussed in this paper, and the questions for stakeholders (Appendix A) should be provided by no later than 21 January 2022, and should be sent to:

Head of Note Issue Department
Reserve Bank of Australia
GPO Box 3947
Sydney NSW 2001

or

cashreview@rba.gov.au

Submissions provided by email should be in a separate document, in Word or equivalent format. Submissions in PDF format must be accompanied by a version in an accessible format such as .rtf or .doc.

All submissions will be published on the Reserve Bank's website, unless it is specifically requested that the Reserve Bank treat the whole or any part of a submission as confidential. The Reserve Bank will review the submissions received and may meet with stakeholders to discuss their submissions. The Reserve Bank will publish a follow-up paper at the conclusion of this process.

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Unless requested otherwise, published submissions will include contact details and any other personal information contained in those documents. For information about the Bank's collection of personal information and approach to privacy, please refer to the Personal Information Collection Notice for Website Visitors and the Bank's Privacy Policy.

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Appendix A: Questions for Stakeholders

The Reserve Bank is seeking submissions on the issues discussed in this paper, including stakeholder views on some or all the following specific questions.

Q1: Are there aspects of the current BDA arrangements that affect the ability of existing BDA participants and approved CITs to manage cash distribution in an environment of declining transactional cash use? If so, please provide details.

Q2: Do the current BDA arrangements prevent additional parties who might otherwise wish to do so from participating in wholesale cash distribution? If so, how?

Q3: What role should private participants in the banknote distribution system have in quality sorting? Are there changes that should be made to the arrangements that the Reserve Bank has in place to support the quality of banknotes in circulation?

Q4: How have the cost structures and revenue streams of CIT companies changed as transactional cash use has declined? Are there aspects of cash distribution that have costs that are difficult to reduce as cash use declines, and how significant are these?

Q5: Are there factors that prevent CIT companies repricing their services to reflect rising unit costs? If so, what are they?

Q6: Is there underutilisation in the CIT industry in Australia? If so, how widespread is it (e.g. by region or size of depot)? What is being done, or could be done, to address underutilisation?

Q7: How would you describe the business conditions and issues faced by CIT companies? Are there other strategic issues faced by current or potential participants in cash distribution that have not been covered in this paper?

Q8: To what extent do the responses described in Section 4.3 assist businesses involved in cash distribution with managing the declining transactional use of cash? What other responses are being, or could be, pursued? Are there barriers to innovation in cash distribution?

Q9: What are your views on the options presented in this paper – and do you have other suggestions – to make the banknote distribution system more effective, efficient, sustainable and resilient over the medium term as the use of cash for transactions declines? How might your preferred option(s) be implemented by the industry?

Q10: What are your views on changes that could be made to the current arrangements to make wholesale banknote distribution more effective, efficient, sustainable and resilient over the medium term as the use of cash for transactions declines?