

The Reserve Bank's Collateral Framework

Yasaman Naghiloo and David Olivan*

The Reserve Bank, like other central banks, holds collateral to reduce the risk of financial loss in its domestic market operations. The Reserve Bank's collateral framework sets out how the diverse portfolio of collateral assets is managed and ensures that collateral of sufficient quality and value is held at all times. Over the past two decades, the framework has been adjusted to address changes in collateral supply, changes in market functioning during the global financial crisis, payment system innovations and new banking regulations. This article explores the rationale for these changes and discusses the key features of the current framework.

Introduction

A central bank implements monetary policy and supports the smooth running of the payments system by managing the availability of cash in the financial system. A central bank can also provide liquidity during times of financial system stress to promote financial stability. It does so by lending against collateral, that is, an asset held as security by the cash lender. If the borrower cannot repay the loan, the lender can sell the collateral and minimise the risk of financial loss. This is commonly known as secured lending.

In their domestic market operations, central banks may provide their counterparties such as banks and other regulated financial firms with cash in return for collateral of sufficient quality and value.¹ Central banks take collateral to reduce the risk of financial losses in the event that a counterparty were to default. Unless it is bound by specific laws or regulations, a central bank generally determines

its own rules for what constitutes collateral of sufficient quality and value. These rules are set out in its collateral framework, which determines the policies for choosing and managing collateral. This includes an eligibility process, as well as the daily processes for managing the risks that come with holding collateral – namely credit, liquidity and market risk. This article discusses how central banks choose and manage their collateral, focussing on the Reserve Bank's collateral framework.

Some common collateral rules

Central banks typically accept a range of collateral assets in their secured lending operations.² The criteria typically include:

- Type of asset and issuer – generally debt securities (e.g. bonds) and their approved issuers, classified as either public sector (government) or private sector (banks or non-financial corporate issuers).

* The authors are from Domestic Markets Department.

1 Collateral provided by a central bank to a counterparty in return for cash is not discussed here, as such transactions are typically governed by a different set of rules.

2 For more information, see *Central Bank Collateral Frameworks and Practices* (BIS 2013); *Central Bank Operating Frameworks and Collateral Markets* (BIS 2015).

- Credit standards – a mix of internal and external credit rating processes are used to determine the credit worthiness of the collateral issuer and its debt securities.
- Currency and issuer jurisdiction – whether the collateral issuer must be incorporated within the central bank's jurisdiction or not and whether the collateral is issued in a foreign currency or not.
- Settlement – the form and system used to transfer the collateral between the central bank and its counterparties.

Collateral must be of sufficient quality and value to cover the amount of cash lent by the central bank to its counterparties.

A number of other things are taken into consideration in deciding the range of eligible collateral and the ways risks are managed, including whether assets are marketable, how related party risks are managed and how ownership of collateral is transferred to the central bank.

Marketable assets

High quality marketable assets, such as bonds and money market instruments issued by governments, banks or non-financial corporations provide a ready source of collateral for central bank market operations. These debt securities are traded in financial markets and, as a result, can be easily sold (or valued) in the event that a cash borrower were to default. Bonds from high-quality issuers are less risky than other marketable assets such as equities. This is because bonds represent an obligation for the issuer to make regular interest payments and to repay the debt in full at an agreed future date. For these reasons, central banks widely accept bonds in their collateral frameworks.

Limited use of non-marketable assets

Some central banks also accept assets that are less actively traded in financial markets, such as bank loans or residential mortgage-backed securities (RMBS). In such cases, specific credit criteria apply to ensure that these are performing assets, that is, they provide dependable returns and are unaffected by borrower defaults or arrears. In general, these non-marketable assets are used for specific circumstances, for example for special lending facilities or during periods of financial market stress.

Managing related-party risk

Central banks typically do not buy bonds from counterparties that are related to the issuer of the bond, because if a counterparty cannot repay the central bank, a related bond issuer may also be unable to repay its bond obligations. In some limited cases, central banks can make exceptions to this principle. For instance, a central bank can accept RMBS issued by the bank that is also the originator of the mortgage loans backing the security. The main reason for this exception is that the loans underpinning the RMBS would not be directly impaired if the issuer of the RMBS was to fail – that is RMBS are 'bankrupt remote' structures. RMBS share this characteristic with covered bonds, which are also accepted in some central banks' frameworks. The Reserve Bank permits related-party RMBS in limited cases, for example, to support the provision of liquidity for timely settlement in the payments system.

Buying versus pledging

Central banks typically obtain collateral securities by buying them in their domestic market operations. Securities can be bought 'outright', but more often, they are bought under a repurchase agreement ('repo'). Repos involve the purchase of a security for cash with

an undertaking to reverse the transaction at an agreed future date and price.³ Alternatively, in some frameworks, collateral can be pledged to the central bank under a collateralised loan agreement. Although repos and collateral pledges are legally different, they are economically equivalent. In both cases, collateral is transferred to the central bank in return for cash, and then at a future date, the central bank returns the collateral to the counterparty when it repays the central bank.

Central banks apply different rules regarding the types of assets they will accept depending on how they implement their monetary policy and the types of liquidity facilities they run. Other differences include which counterparties can participate in their domestic market operations and legal restrictions on what asset types can be accepted as collateral. Importantly, collateral frameworks also reflect specific characteristics of domestic financial markets such as their size and level of sophistication.

Collateral frameworks for open market operations and standing facilities

Central banks that only accept marketable assets with low credit risk, such as government bonds, have a narrow framework. Often, narrow frameworks are used in routine open market operations (OMOs) to implement monetary policy.

Liquidity can also be provided via standing facilities (SFs), which are provided by the central bank for specific purposes. For example, in Australia, counterparties can borrow overnight from the Reserve Bank's SFs if there is a shortage of cash in the money market. The provision of the central bank's SFs for such a scenario can reduce the pressure for participants in the money

market to trade at interest rates well above the central bank's operational target for the money market interest rate. Liquidity under the SFs can also be used to support the smooth running of the payments system. Banks can take out very short-term liquidity – such as intraday liquidity – to make their payments to other banks in advance of the payments they plan to receive from other banks. Because this liquidity smooths out the volume of payments, it can help to avoid gridlock in the payments system, where a large volume of payments are delayed to late in the day. Emergency liquidity, such as lender of last resort liquidity can also be made available under the SFs in periods of financial system stress. Under its SFs, the central bank may accept high-quality but less liquid securities, such as bank bonds and RMBS. This is called a wide framework.

The Reserve Bank, the Eurosystem national central banks and the Swiss National Bank have a wide framework for both their OMOs and SFs (Table 1). Other central banks, such as the Federal Reserve System, have historically applied a narrow framework for OMOs and a wider one for their SFs. The Bank of England also differentiates collateral types depending on the liquidity facility being accessed.

Developments in the Reserve Bank's Collateral Framework

This section reviews the collateral securities purchased by the Reserve Bank in its domestic market operations. The Reserve Bank's collateral framework has changed significantly in recent decades. This has been driven by changes in collateral supply, the response to the global financial crisis, as well as more recent payment system and regulatory developments.

³ Cash refers to exchange settlement balances that market participants transfer between each other, rather than banknotes.

Table 1: Central Bank Collateral Frameworks and Practices
Key cross-country characteristics

	Reserve Bank of Australia Australia	Bank of England United Kingdom	European Central Bank Eurosystem	Federal Reserve System United States of America
Collateral eligibility across lending operations and facilities	Differentiated	Differentiated	Uniform	Differentiated
Collateral eligibility	Wide for OMOs Varies for SFs (based on counterparty); but may be wider or narrower than OMOs	Varies across lending operations and facilities	Wide	Narrow for OMOs Wide for SFs
Collateral system	Earmarked	Mostly pooled	Mostly pooled	Earmarked for OMOs Pooled for SFs
Counterparty eligibility for lending operations and facilities	Wide	Varied	Wide	Narrow for OMOs Wide for SFs
Risk management techniques				
<i>Margins</i>	Yes	Yes	Yes	Yes
<i>Valuations</i>	Yes	Yes	Yes	Yes
<i>Margin calls</i>	Yes	Yes	Yes	Yes
<i>Limits</i>	No	Yes; can be counterparty or collateral specific	Yes; can be counterparty or collateral specific	Yes; can be counterparty or collateral specific
Tri-party collateral management services and providers	Yes, service provider: ASX Collateral	No	Yes, service providers: Bank of New York Mellon, Clearstream, Euroclear, JP Morgan, SIX SIS	Yes, service providers: Bank of New York Mellon, Clearstream, Euroclear and JP Morgan

Sources: BIS; various central banks

The Reserve Bank's domestic market operations

The Reserve Bank provides liquidity to the domestic financial system in the form of exchange settlement (ES) balances. These funds are held by banks in accounts at the Reserve Bank. The Reserve Bank supplies this liquidity through its domestic market operations, which include OMOs and SFs. In return for the liquidity provided in these operations, the Reserve Bank buys Australian dollar-denominated securities. These purchases are mainly contracted as repos.⁴

The Reserve Bank's OMOs are held every business day. OMOs are used to adjust the supply of liquidity in the interbank market so as to ensure that the cash rate remains consistent with the target rate set by the Reserve Bank Board.⁵ They are conducted as competitive liquidity auctions and successful counterparties must promptly sell eligible collateral securities to the Reserve Bank in return for ES funds.⁶

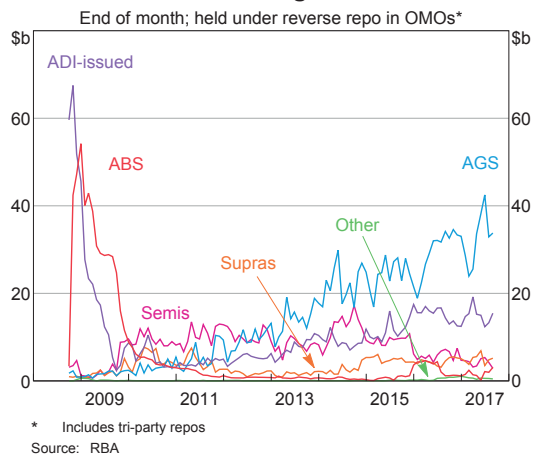
Unlike OMOs where liquidity is auctioned, the Reserve Bank's SFs are made available to banks at pre-specified terms, with the cost of accessing them known in advance. SFs can be accessed by banks and a small number of other institutions that have key interbank obligations in the domestic payments system. These facilities provide intraday liquidity to help smooth the flow of interbank payments, either via intraday SF repos for payments during business hours,

or via 'open' SF repos for after-hours payments such as those that will be going through the New Payments Platform.⁷ The SFs can also be accessed for overnight terms if a counterparty is unable to obtain funds in the interbank market, with the Reserve Bank charging the counterparty a margin above the cash rate.⁸

Most of the securities purchased by the Reserve Bank under repo in its OMOs are issued by the Australian Government (AGS) and State and Territory governments ('semis') (Graph 1). Securities issued by authorised deposit-taking institutions (ADIs) comprise most of the remainder. In contrast, asset-backed securities (mainly RMBS) account for most of the collateral purchased by the Reserve Bank for open repos under the SFs (Graph 2). When banks enter into intraday SF repos with the Reserve Bank, the bulk of these repos are against AGS and semis.

Over the past two decades, the Reserve Bank has progressively widened its collateral framework by expanding the range of securities it is willing to accept under repo in its domestic market operations (Table 2).

Graph 1
Market Value of Eligible Collateral



4 Collateral may also be purchased by the Reserve Bank on an outright basis and generally held as an asset until maturity. Only securities issued by the Australian Government or by the central borrowing authorities of the State and Territory governments are purchased outright by the Reserve Bank in its OMOs.

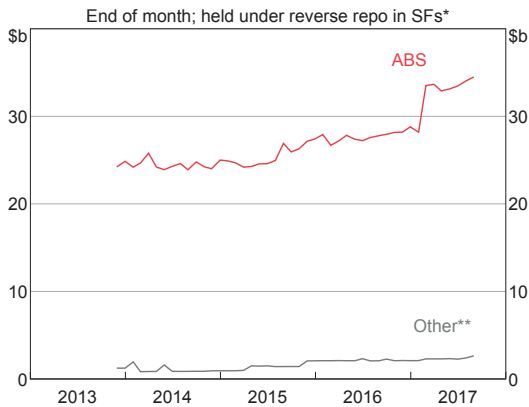
5 The cash rate is defined as the weighted average of interest rates on unsecured, overnight loans between banks in the cash market. While the Reserve Bank does not participate directly in the cash market, it controls the availability of ES balances through its OMOs. For more information on the Australian cash market, see Hing, Kelly and Olivan (2016).

6 For further information on the Reserve Bank's OMOs, see <<https://www.rba.gov.au/mkt-operations/resources/tech-notes/open-market-operations.html>>.

7 For further information on the New Payments Platform, see <<http://www.nppa.com.au/what-is-the-new-payments-platform/>>.

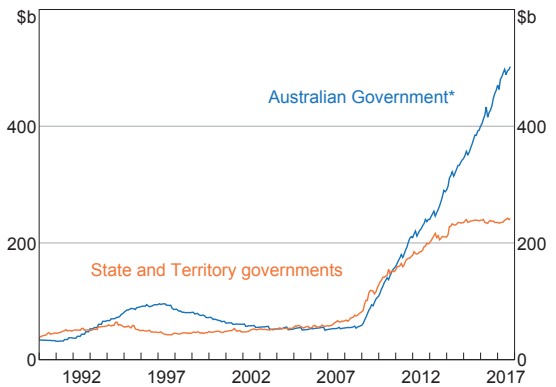
8 For further information on the Reserve Bank's SFs, see <<https://www.rba.gov.au/mkt-operations/resources/tech-notes/standing-facilities.html>>.

Graph 2
Market Value of Eligible Collateral



* Includes open SF repos, but excludes intraday SF repos
 ** Includes all eligible collateral that are not ABS
 Source: RBA

Graph 3
Government Securities on Issue



* Excludes securities purchased by the Australian Government
 Sources: ABS; AOFM; RBA; State and Territory Treasury Corporations

Adapting to collateral shortages

The outstanding amount of AGS gradually declined from the late 1990s to the mid 2000s, as the Australian Government budget was in surplus during this period (Graph 3). The small amount of AGS on issue made it difficult for the Reserve Bank to conduct OMOs only using AGS as collateral

so, in 1997, the Reserve Bank expanded the list of eligible collateral to include semis.⁹ However, State and Territory governments were also tending to run balanced or surplus budgets at that time, so the total supply of collateral remained low.

To ensure that collateral of sufficient value and quality was available for its domestic market

Table 2: Changes in Australian Dollar Securities Eligible for Purchase by the Reserve Bank under Repo

	Date of Eligibility
Australian Government Securities	1969
Semi-government Securities	June 1997
Securities Issued by Supranationals	October 2000
ADI-issued securities	
Residual maturity less than 1 year – SFs	July 2002
Securities Issued by Foreign Governments/ Securities with a Foreign Sovereign Government Guarantee	March 2004
ADI-issued securities	
Residual maturity less than 1 year – OMOs	March 2004
Residual maturity of 1 year or more	September 2007
Asset-backed Securities of unrelated parties	October 2007
Asset-backed Securities of related parties (self-securitised)	October 2008
Securities with an Australian Government Guarantee	November 2008
Other Securities (A-1 or AAA rated)	November 2008

Source: RBA

⁹ For more information on the implications of the decline in Australian government debt, see Edey and Ellis (2001).

operations, the Reserve Bank widened its collateral framework throughout the 2000s. Initially, bonds from other public sector issuers were accepted. These included Australian dollar-denominated bonds issued by certain supranational agencies, such as the World Bank, in 2000. In 2002, certain ADI-issued short-term securities (with a residual maturity of less than 12 months) were permitted for use in intraday SFs. This decision preceded the go-live of Continuous Linked Settlement (CLS), a foreign exchange settlement system. In 2004, Australian dollar-denominated securities issued by foreign governments and government agencies with an explicit government guarantee were approved, and short-term ADI-issued securities already eligible for use in intraday SFs were also approved for use in OMOs.¹⁰

Responding to the global financial crisis

Over the course of 2007 and 2008, financial market conditions deteriorated sharply and market participants increased their demand for ES balances, which provide a risk-free source of liquidity. At the same time, segments of the domestic bond market became increasingly illiquid as banks globally became averse to lending to each other. To promote financial stability and help keep liquidity flowing in the financial markets, the Reserve Bank further widened its collateral framework. This coincided with similar changes in the collateral frameworks of other central banks, such as the Bank of England, Eurosystem national central banks and the Federal Reserve System around this time (Table 3).

In particular, following the first signs of liquidity stress in the financial markets in September 2007, the Reserve Bank decided to accept long-term ADI-issued securities ('bank bonds'). The following

month, the framework was expanded to include Australian RMBS and shorter-term securities called asset-backed commercial paper (ABCP).

In September 2008, the default of Lehman Brothers triggered another bout of financial market stress. To further expand the range of funding options for financial institutions and bolster financial stability, the Reserve Bank adjusted its related-party restriction on RMBS in October 2008. This meant that certain institutions (such as banks) could use related-party RMBS in the Reserve Bank's domestic market operations. This exemption remained in place until November 2009, when related-party RMBS could no longer be used. This reflected the improvement in liquidity and funding conditions in the domestic financial markets. Consequently, the need for banks to fund themselves using internal securitisations of mortgages had passed. To support liquidity in a number of other markets, the Reserve Bank further widened its collateral framework in November 2008, including other highly rated bonds, covered bonds, other asset-backed securities (ABS), as well as ADI-issued securities with an Australian Government Guarantee.¹¹

Supporting faster payment systems

In recent years, the Reserve Bank's collateral framework has also evolved in response to developments in the payments system. Direct entry (DE) payments are used by businesses and government agencies to make and receive regular payments, such as salaries and frequent bills. In 2013, the settlement process for DE payments

¹⁰ The Reserve Bank does not accept ADIs' own securities or securities for which they are a related party as collateral in its domestic market operations.

¹¹ Although ADIs retained access to credit markets during the global financial crisis, the announcement of similar schemes in other countries and significant financial market uncertainty, led the Australian Government to introduce a Government Guarantee Scheme for Large Deposits and Wholesale Funding in October 2008. The guarantee was offered on bonds issued by eligible ADIs for a fee and was used substantially as the demand for unguaranteed debt globally diminished. The Government Guarantee Scheme ended in March 2010 and liabilities ceased to exist by October 2015. For more information on the scheme, see Schwartz and Tan (2016).

Table 3: Summary of Eligible Collateral in Selected Central Bank Open Market Operations

	Reserve Bank of Australia Australia	European Central Bank Eurosystem	Federal Reserve System United States of America	Swiss National Bank Switzerland
Marketable securities				
Debt issued by:				
Central borrowing authorities of Federal, State or Territory governments	Yes	Yes	Yes	Yes
Government agencies	Yes	Yes	Yes	Yes
Central banks	n/a	Yes	n/a	Yes
Supnationals	Yes	Yes	No	Yes
Financial institutions (excluding covered bonds)	Yes	Yes	No	Yes
Corporations (other than financial institutions)	Yes	Yes	No	Yes
Asset-backed	Yes	Yes	No	No
Other securities (including covered bonds)	Yes	Yes	No	No
Non-securities (such as equities or gold)	No	No	No	No
Non-marketable securities				
Credit claims (such as bank loans)	No	Yes	No	No
Non-marketable asset-backed securities	No	Yes	No	No
Cross-border securities				
Currency	No	Yes	No	Yes
Issuer	Yes	Yes	No	Yes

Sources: BIS; various central banks

was enhanced so that it now occurs in a series of batches on the same day up to 9.15 pm, rather than at 9 am on the following day. To ensure that there was enough liquidity in the payments system for the evening DE batches to settle after the close of the interbank cash market, open SF repos were established.¹² They allow banks to maintain a pre-determined amount of ES balances, which are then available to settle DE payments outside of normal market business hours. Given the relatively large size of open

SF repos required to support these payment processes (currently around \$27 billion), the Reserve Bank permits banks to use related-party RMBS as collateral in open SF repos. Open SF repos will also be used to provide after-hours liquidity for the Fast Settlement System – the technology that supports the New Payments Platform for the 24/7 real-time settlement of retail payments.

Supporting reforms to strengthen the banking system

The Reserve Bank further amended its framework following the introduction in 2015 of the

¹² For more information on the introduction of same-day settlement of direct entry obligations, see Fraser and Gatty (2014).

Liquidity Coverage Ratio (LCR) by the Australian Prudential Regulation Authority (APRA).

Under the LCR, banks must hold sufficient high-quality liquid assets (HQLA) to meet their (expected) net cash outflows for a 30-day liquidity stress scenario. However, the supply of HQLA securities, which are limited to AGS and semis, is not sufficient for the banks to be able to meet their LCR requirements without unduly affecting market functioning for AGS and semis. To address this, locally incorporated banks are able to establish a Committed Liquidity Facility (CLF) with the Reserve Bank to meet their LCR requirements.¹³ Not all LCR banks in Australia require a CLF and those which do must apply to APRA for approval before establishing a CLF.

A CLF is a contractual liquidity commitment from the Reserve Bank whereby a fee of 15 basis points per annum is charged on the size of the commitment. Any drawdown on the CLF must meet certain conditions, including that APRA does not object to the drawdown and the RBA assesses that the ADI has positive net worth. All SF repos for CLF banks represent a partial drawdown on the CLF, and these banks are allowed to use all eligible collateral when entering into SF repos, including related-party RMBS. However, to ensure that the Reserve Bank's collateral framework is consistent with APRA's liquidity standard, banks subject to the LCR that do not have a CLF can only use AGS and semis in the Reserve Bank's SFs.

Risk Management of Collateral

Collateral receivers continually manage the risks associated with holding collateral, such as credit, liquidity and market risk. The Reserve Bank monitors and manages the risk on the collateral it accepts by applying margins, performing daily valuations and making margin calls.

¹³ For more information on the CLF, see Debelle (2011).

Limiting credit risk

The Reserve Bank only buys securities with low credit risk. Apart from AGS and semis, all other securities are subject to an approval process. This involves a credit assessment for each issuer and security. As part of this process, minimum credit ratings criteria apply to each collateral type.¹⁴ Even if a security qualifies on the basis of its credit rating, it may still be rejected if the Reserve Bank determines that its structure is overly complex.

The credit ratings of individual securities and bond issuers are constantly monitored. A credit rating downgrade generally results in the security, or issuer, being withdrawn from the list of eligible collateral. When this happens, counterparties with affected collateral outstanding must immediately provide eligible securities in place of the ineligible collateral.

The Reserve Bank's potential exposure to RMBS has increased substantially over the past decade following the introduction of open SF repos and the CLF. To ensure that this risk is properly monitored, extensive reporting requirements apply to any issuer that wants to have their RMBS deemed eligible for repo with the Reserve Bank. These requirements include providing the Reserve Bank with up-to-date reports on the RMBS and the underlying loans, including loans amounts and balances, and information about the borrower (e.g. income and employment type) and collateral (e.g. property and location).¹⁵

Managing other risks

Even when securities pass the eligibility test, the risk of financial loss in the event of a counterparty default is not eliminated. This is because the

¹⁴ For further details on the minimum credit ratings that apply to each collateral type, see <<https://www.rba.gov.au/mkt-operations/resources/tech-notes/eligible-securities.html>>.

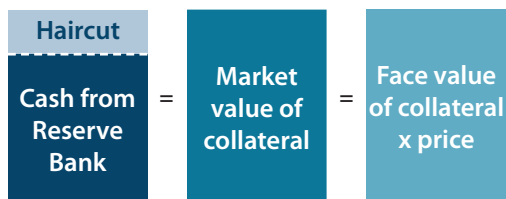
¹⁵ For detail on the data to be reported, see <<http://www.rba.gov.au/securitisations/data-to-be-reported/index.html>>.

value of collateral purchased by the central bank can change over the life of the repo and may not be able to be fully realised in the event of a counterparty default. A range of risk mitigation techniques are used to ensure that the value of collateral is always sufficient. Approaches to risk management are broadly similar across central banks, with margins, valuations and margin calls typically used in lending operations and facilities (Table 1).

Applying a haircut

When the Reserve Bank buys securities against cash, the security is subject to an upfront margin, which is also known as a 'haircut' or 'initial margin'. A margin is a certain percentage of additional collateral the counterparty has to sell on top of the value of the initial cash loan (Figure 1). For example, in a \$100 million repo with the Reserve Bank, the counterparty must sell \$102 million worth of government securities, which is a 2 per cent haircut.

Figure 1



Source: RBA

Haircuts are designed to protect the cash lender against a potential fall in the value of the collateral. The riskiness of each security depends on its characteristics, including its maturity, price volatility, the creditworthiness of the issuer and the time it would take to sell the security. For example, long-term securities are more price sensitive than short-term securities. In addition, government securities' prices are less volatile than bank bonds' prices, where credit risk is also greater. Also, government securities

could be sold fairly quickly in the event that the repo counterparty were to default, since they are actively traded in financial markets, whereas ADI-issued securities and RMBS would take more time to liquidate. To address these risks, haircuts on securities such as bank bonds and RMBS are significantly higher than for government securities in the Reserve Bank's collateral framework. Securities with lower market liquidity, greater credit and price risk, and longer terms attract a higher haircut. These haircuts are applied uniformly to securities bought in OMOs and SFs.¹⁶

Haircuts can be changed as new information about how collateral performs over time comes to light. For example, the Reserve Bank changed its haircuts following the global financial crisis. During this time, volatility in the market prices of bonds increased significantly. The new haircuts were introduced in February 2012. They were more sensitive to the specific credit, liquidity and maturity characteristics of each collateral type. They also reflected the new information gained about the performance of eligible securities in stressed market conditions.

Daily margining

Daily margining, also known as 'variation margin', is the process for maintaining the value of the haircut. For example, if the value of a government bond declined and represented \$101 million instead of \$102 million against a loan of \$100 million, the Reserve Bank would make a margin call equivalent to \$1 million of government bond securities. The margin call would bring the haircut-adjusted value of the government bond back to the 102 per cent.

In a collateral framework, it is important to ensure that robust processes exist to keep track of the daily value of all collateral securities.

¹⁶ For further details on the Reserve Bank's current margin schedule, see <<https://www.rba.gov.au/mkt-operations/resources/tech-notes/margin-ratios.html>>.

This ensures that collateral is always sufficient. For securities that trade in liquid markets, such as government securities and most ADI-issued securities, the Reserve Bank obtains the latest prices from publically available and independent sources. For securities that are less liquid, such as related-party RMBS, alternative model-based techniques are used to determine a price. For example, the Reserve Bank makes use of the updated data it receives for RMBS to independently value these securities.

Methods to Transfer Collateral

The Reserve Bank's collateral framework operates as an 'earmarked' system, where a counterparty sells individual securities under each repo. For example, a \$100 million repo may involve purchases by the Reserve Bank of one or more individual securities. Repos can therefore involve many transactions. Some central banks have instead opted for a 'pooled' system, whereby a general selection of collateral securities is pledged to the central bank in the form of an aggregate pool. The loan is therefore secured by the aggregate value of the pool, not by individual purchases of securities under repo. In recent years, a number of central banks, such as the Bank of England and some Eurosystem national central banks, have moved towards collateral pooling for their operations or facilities (Table 2).

The choice of system has implications for collateral management for both the central bank and its counterparties. Pooled systems often involve the 'pre-positioning' of collateral. This means that a counterparty pledges a pool of collateral to the central bank and the central bank can lend funds to the counterparty at any time against the value of that collateral (net of haircuts). On the other hand, under an earmarked system, collateral is not pre-positioned but sold in exchange for cash each time a counterparty

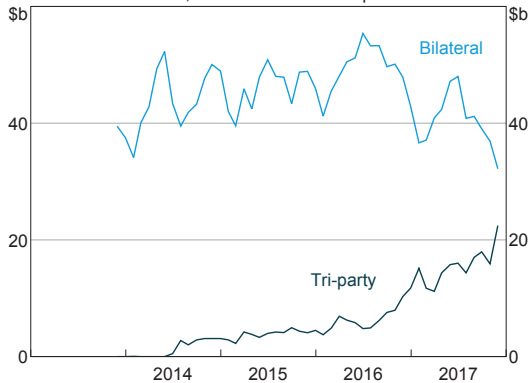
accesses a central bank's liquidity operations or facilities. Also, collateral can only be moved by a process of collateral substitutions. This means that counterparties can recall the securities they sold under repo, but must replace those securities with other eligible securities. This can be a time-consuming process, although in recent years tri-party arrangements have allowed for this activity to be automated.

Tri-party facilitates the automatic allocation of collateral and has been adopted by a number of central banks over the past few years. In a tri-party repo, the terms of a repo transaction – that is the repo rate, maturity of the trade and cash value – are agreed bilaterally. However, a third party takes responsibility for the settlement, collateralisation and margin maintenance of the collateral securities. This party is called the tri-party agent. In February 2014, the Reserve Bank began to accept tri-party settlement for its OMOs using ASX Collateral – a collateral management service whereby the ASX is the tri-party agent to the Reserve Bank's repos. This service provides significant operational efficiencies, including faster book entry of repo details and no manual collateral substitution activity.

Over time, the proportion of OMO repos settled in ASX Collateral has gradually increased to around 40 per cent (Graph 4). However, uptake of this service by domestic financial market participants has remained low relative to international standards. In countries such as the United States, where there is a well-established tri-party repo market, tri-party arrangements are offered by a number of service providers and are actively used by market participants.

Graph 4
Cash Value of Reverse Repos

End of month; held under reverse repo in OMOs



Source: RBA

Conclusion

When conducting OMOs and providing SFs, the Reserve Bank takes collateral of sufficient quality and value to manage the risk of financial loss. Collateral securities are carefully chosen and managed. Robust processes are in place to constantly manage credit, liquidity and market risks; such processes include eligibility criteria, prudent collateral haircuts and daily valuation and margin maintenance. Over time, the Reserve Bank has adapted its collateral framework to changes in government bond supply, the global financial crisis and more recently, new regulations to make banks better able to manage financial market stress and innovation in the payments system. ✨

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