

# The Equity Securities Lending Market

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An equity securities loan is an arrangement in which one party (the lender) agrees to transfer an equity security to another party (the borrower) temporarily, usually in exchange for collateral and a fee. The market for securities loans is an important component of Australia’s equity market and contributes to its efficiency and smooth functioning. Regulatory developments since the global financial crisis are contributing to significant changes to the equity securities lending market globally, including in Australia. This article discusses some of these changes and how participants in the market could respond.

The equity securities lending market contributes to the efficiency and smooth functioning of Australia’s equity market. By facilitating certain trading strategies, securities lending adds to equity market liquidity, helps to improve price discovery and contributes to lower bid-offer spreads. Securities lending also supports the equity settlement process. Regulatory and behavioural changes since the global financial crisis are giving rise to significant structural changes in the equity securities lending market.

This article describes some of the changes underway and their expected implications for the functioning of the market. The article presents an overview of the structure of the equity securities lending market in Australia. It then reviews some of the domestic and international regulatory developments in recent years and considers their implications.

## The Structure of the Market

The equity securities lending market in Australia is characterised by a decentralised network of bilateral relationships. The basic structure of a securities loan is described in Figure 1.

The ultimate owners (beneficial owners) of loaned securities are usually long-term wholesale investors – superannuation funds, insurance companies and investment managers. These institutions loan their securities to earn an incremental return on their investments. Beneficial owners typically use intermediaries (in most cases large internationally active ‘custodian banks’) to manage their lending. Similarly, borrowers, including hedge funds, often use intermediaries (generally large ‘prime brokers’) to support their activity.<sup>1</sup> Borrower intermediaries may also act in a proprietary capacity. Since most

Figure 1: Structure of a Securities Loan



Source: RBA

\* The authors are from Payments Policy Department and would like to thank Timothy Hogben (ASX Group), Adam Judd and Anna Zajkowski (Australian Securities and Investments Commission), Kieran Buckley, Natalie Floate and Peter Martin (Australian Securities Lending Association), Karen King (Markit), and Jenny Hancock and Mark Manning (Reserve Bank of Australia) for their valuable comments in preparing this article.

1 A lending intermediary generally acts as ‘agent’ in the transaction – that is, enters into a securities loan on behalf of the beneficial owner – but in some cases acts as ‘principal’, in which case the beneficial owner lends to the intermediary who then on-lends to the borrower intermediary. The majority of borrower intermediaries act as principal to the loans they arrange.

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lending and borrowing intermediaries, as well as beneficial owners and borrowers, are large overseas institutions, much of the securities lending involving ASX-listed equities occurs offshore.

The majority of securities lending activity occurs under industry standard documentation that sets out the legal terms of a loan. In Australia, this is the Australian Master Securities Lending Agreement, which is modelled on the Global Master Securities Lending Agreement. Under these terms, the lender generally has the right to recall loaned securities at any time. If securities are recalled, the borrower is obliged to return the securities within three business days. Most loans involve the transfer of title from the lender to the borrower. This allows the borrower to use the securities as if they were its own.

In return for lending its securities, the beneficial owner receives a fee from the borrower. Where a lending intermediary is used, this fee is shared between the beneficial owner and the intermediary. Typically, all the economic benefits and risks associated with ownership of the security, such as dividends, are retained by the beneficial owner.

To mitigate credit risk, the beneficial owner or its intermediary usually sets a minimum credit rating for borrowers. In addition, both borrowers and lenders generally use credit limits to mitigate the risks associated with concentrated counterparty exposures. The borrower will also usually be required to provide collateral against any loan, in accordance with collateral eligibility criteria and concentration limits determined by the beneficial owner. Collateral may take the form of cash or non-cash assets.<sup>2</sup> If non-cash collateral is provided, the lender generally applies a margin (or 'haircut') that discounts the value of the collateral to cover possible future declines in the market price of the collateral. Over the life of the loan, which most often ranges from overnight to 364 days, both the loaned securities and the collateral are revalued daily to assess the adequacy of collateral coverage. Additional collateral may be requested if

<sup>2</sup> Intermediaries generally can 're-use' the securities delivered as collateral to collateralise another transaction.

coverage is insufficient. Notwithstanding the controls to mitigate credit risk, lending intermediaries often – and increasingly – provide indemnities to beneficial owners against financial risks that may arise from their lending activity.

Collateral received in the form of cash is typically reinvested; the return on such reinvestment funding is used to cover an agreed interest payment to the borrower. Any return above this agreed payment contributes to the beneficial owner's overall income from lending its securities. Accordingly, the beneficial owner sets criteria for the reinvestment activity of its lending intermediary.

Securities lending transactions in Australia are mainly driven by borrower demand for specific equity securities, not lender demand for cash. Borrowers typically have two primary motivations: to support certain trading strategies; and to cover equity settlement obligations. These are described below.

### Trading strategies

A variety of trading strategies require an investor to be able to establish a 'short position'. To do this, an investor must first arrange to borrow the security from a lender.<sup>3</sup> The investor then sells the security and fulfils its delivery obligation using the borrowed security. The investor subsequently buys the security to close the short position and returns the security to the lender. The profit or loss from the transaction is the price at which the security was sold less the cost of borrowing the security and the price at which it was bought back.

Short positions are used by institutions and individuals for a number of purposes. The most obvious is 'directional' or speculative short selling, where an investor anticipates a decline in the price of a security and therefore establishes a short position to make a profit. Another motivation is hedging, whereby an investor takes a short position

<sup>3</sup> Since 2008, the Australian Securities and Investments Commission (ASIC) has required that all investors 'cover' a short position (i.e. arrange for the security to be borrowed or have already borrowed it) before selling the security.

in a security to mitigate the risk of future losses from another related investment. Finally, short positions can also support arbitrage trading, which involves seeking to profit from the price difference between two instruments that have highly correlated prices or values (e.g. an equity derivative and the security to which it is referenced).

## Equity settlement

The settlement of equity securities in Australia is facilitated by ASX Settlement, which is the securities settlement facility for all equity securities issued in Australia.<sup>4</sup> Equity settlements take place daily in a multilateral net 'batch' process in which all scheduled securities obligations are reduced to a single net transfer per equity for each participant. The payments associated with the batch are settled simultaneously across banks' accounts with the Reserve Bank of Australia (RBA) using the Reserve Bank Information and Transfer System, also on a net basis.<sup>5</sup>

To make sure that market participants have sufficient securities and cash to meet their delivery obligations in the batch, the financial institutions directly involved in the settlement process must ensure that their clients' securities are in the correct accounts. This can be an operationally complex process, in part because securities generally need to be transferred from a number of custodian banks, some of which are based overseas. Any operational disruption preventing clients or their custodian banks from transferring their securities could mean that the financial institution does not have enough of the correct securities in its account.

Participants' access to the securities lending market is essential to cover any such shortfalls. The result of this access, combined with incentives to meet

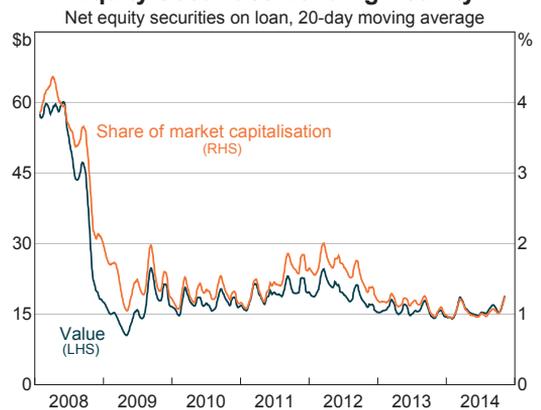
delivery obligations on time and the efficient design of ASX Settlement's systems, has meant that the incidence of market participants failing to deliver their equity securities is very low in Australia. The daily failure rate averaged around 0.1 per cent of the value of equities scheduled to be settled in 2013/14.

## Activity

Data from a survey of market lenders conducted by the financial data provider Markit suggest the net value of ASX-listed equity securities loaned – which broadly measures the underlying demand for borrowed securities – decreased sharply during the global financial crisis. This can be attributed to a combination of deleveraging by both borrowers and their intermediaries and a decrease in short positions. It has since been relatively stable at this lower level, largely reflecting the amount of short positions in the market. From 2009, securities lending has remained between \$15 and \$25 billion by value, and between 1 and 2 per cent as a proportion of total market capitalisation (Graph 1).

Notably, the net value excludes on-lending activity by intermediaries (i.e. borrowed securities that fund onward loans, and loans that are funded by borrowed securities). Outstanding positions can also be measured on a gross basis, which includes this activity. Since the beginning of 2010, gross positions

**Graph 1**  
**Equity Securities Lending Activity**  
Net equity securities on loan, 20-day moving average



Sources: Bloomberg; Markit; RBA

4 ASX Settlement is a subsidiary of ASX Group. It is a licensed Clearing and Settlement facility, jointly regulated by ASIC and the Reserve Bank of Australia.

5 Simultaneous settlement of securities and associated funds transfers is known as delivery-versus-payment. This settlement mechanism mitigates the principal risk that could otherwise arise should one party complete its delivery (of either securities or funds) and the other party fail to do so.

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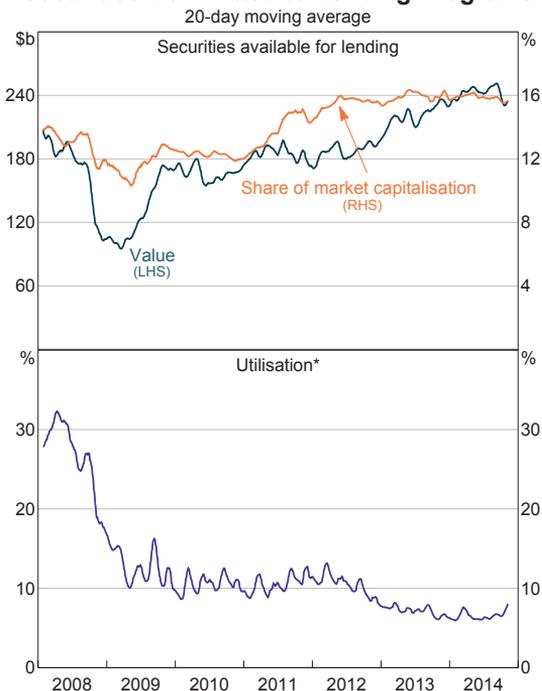
have been on average around twice the value of net positions. That is, there have been on average two intermediate loans before any security reaches the ultimate borrower.<sup>6</sup>

After a significant decline during the global financial crisis, the value of securities committed to lending programs – that is, the securities that beneficial owners have made available to lend – has since recovered and increased substantially, both in value terms and relative to market capitalisation (Graph 2). Since the low point in 2009, securities committed to lending programs have almost doubled by value and have increased by around 4 percentage points relative to market capitalisation. This is most likely the result of lower volatility and more positive investor sentiment since the crisis, encouraging beneficial owners to return to the market. Given lower growth

in the value of securities loaned, however, aggregate utilisation – the share of securities committed to lending programs that is actually loaned – has fallen around sixfold since early 2008.

Relative to market capitalisation, the level of equity securities lending activity in Australia is similar to that in a number of other countries, at around 1 to 2 per cent (Graph 3). The value of securities committed to lending programs, however, tends to be more variable across countries, ranging from around 5 to 25 per cent of market capitalisation. In Australia, this proportion is in the middle of that range; this is higher than in Asian economies, but lower than in most of the large Northern Atlantic economies.

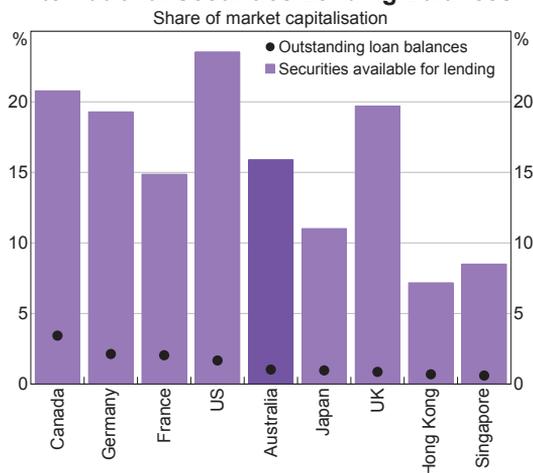
**Graph 2**  
**Securities Committed to Lending Programs**



\* Share of securities committed that are loaned  
Sources: Bloomberg; Markit; RBA

6 The level of on-lending in the market is calculated using data collected under the Australian equities securities lending disclosure regime, which is described in further detail in the section 'Securities Lending Disclosure and Settlement Risk in the Australian Market'.

**Graph 3**  
**International Securities Lending Balances\***



\* Daily average from 1 January 2014 to 30 September 2014  
Sources: Bloomberg; Markit; RBA

## Securities Lending Disclosure and Settlement Risk in the Australian Market

In Australia, the securities lending market received some regulatory attention in the RBA's 2008 *Review of Settlement Practices for Australian Equities* (RBA 2008). One finding of that review was that transparency in the Australian equity securities lending market could usefully be improved. The benefits of this included helping both ASX Group (ASX) and market

participants identify potential settlement risks arising from securities lending activity. Settlement risk in this context arises primarily because beneficial owners may recall their securities at any time, and borrowers may not be able to deliver the securities within the specified three-day period. This risk is likely to be most acute when there is a widespread recall of securities; for instance, after an event that materially affects the price of the security. Greater transparency was also expected to improve the balance of information in the market; previously, only those directly involved in these transactions had access to such information.

As a result, the RBA worked with ASX and industry participants to develop a disclosure regime for equity securities lending, which was implemented in 2009. Disclosure requirements under the regime apply to all ASX Settlement participants (and any related bodies corporate).<sup>7</sup> The regime consists of three components:

- *Transaction tags.* Participants are required to identify whether settlement instructions submitted to ASX Settlement are associated with securities lending transactions.
- *Daily reports of outstanding positions.* Participants are required to report the number of shares, by security, outstanding as either borrowed or loaned positions under a securities lending arrangement.
- *Quarterly reports of securities committed to lending programs.* Participants are required to report the number of shares, by security, available for loan in a lending program.

<sup>7</sup> ASX Settlement is obliged to make available such information as part of its disclosure requirements under the RBA's Financial Stability Standards for Securities Settlement Facilities. Guidance note 18.3.1 states: 'A securities settlement facility should disclose to each individual participant data to help each participant understand and manage the potential financial risks stemming from participation in the securities settlement facility. For instance, participants should have access to sufficiently timely and broadly comprehensive data on equities securities lending to enable them to assess the potential implications for settlement risk. This is particularly important where equities securities loans are bilaterally negotiated and not novated to (or otherwise cleared through) a central counterparty, but nevertheless settled alongside centrally cleared exchange-traded transactions.'

Reports based on these data are publicly available on ASX's website on an aggregated basis (across reporting entities).<sup>8</sup> To provide useful context for statistics on the tagged transaction component of the securities lending data, ASX has also increased the availability of data on total settlement activity and settlement performance. These data are published alongside the securities lending data.

The coverage of ASX's reporting regime is not as extensive as that of some private sector providers of securities lending data, such as Markit. However, while some other data are often available only to market participants or subscribers, the ASX data are accessible to the public and also available at a more granular level. The ASX data may also be used to track lending activity on both a gross and a net basis. Accordingly, the ASX data are complementary to those available via other sources and may be used to assess the settlement risk posed by large securities lending positions.<sup>9</sup> For example, using the data, three statistics can be calculated that may provide an indication of the potential difficulty in covering an obligation to return borrowed securities:

- *On-lending.* The more on-lending activity is observed for a given equity, the more likely it will be that chains of securities loans exist. Therefore, the higher the probability that the recall of a single loan may trigger one or many additional recalls of securities loans.
- *Utilisation.* The higher the utilisation of securities committed to lending programs, the more difficult it is likely to be to borrow the equity to deliver a recalled loan.
- *Securities loaned as a proportion of turnover and market capitalisation.* The larger the value of

<sup>8</sup> The data are available at <<http://www.asx.com.au/services/information-services/securities-lending-disclosure.htm>>.

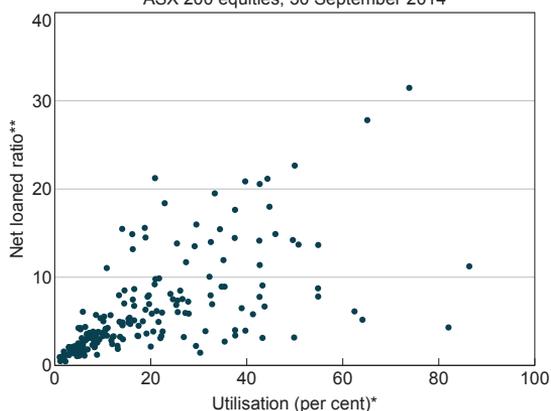
<sup>9</sup> Under the regime, only ASX Settlement participants are required to report their securities lending positions. Accordingly, institutions that are active in the Australian securities lending market but do not participate directly in ASX Settlement are not obliged to report. However, these institutions' positions would be captured if the counterparty to their positions is an ASX Settlement participant. To ensure that at least some non-reporters' positions are reflected in the statistics, the disclosure regime requires that reporting institutions report both their loaned and borrowed positions.

securities loaned as a proportion of turnover or market capitalisation, the more difficult it may be to access market liquidity to purchase securities to complete the delivery of a recalled loan.

To illustrate the use of these statistics, Graph 4 and Graph 5 compare utilisation with the net loaned ratio and on-lending, respectively, for ASX 200 equities. Equities towards the top right of both graphs are likely to have a high degree of settlement risk. In

Graph 4, the equities with both a high utilisation and a high net loaned ratio – that is, the equities for which it would be difficult to borrow or access sufficient liquidity to purchase after a mass recall of loans – are likely to have a higher degree of settlement risk. Likewise, in Graph 5, there would be a higher degree of settlement risk for the equities with both high utilisation and a high level of on-lending, since a mass recall would be likely to lead to an unwinding of a number of linked loans and it could be difficult to source equities to borrow.

**Graph 4**  
**Utilisation and Net Loaned Ratio**  
ASX 200 equities, 30 September 2014

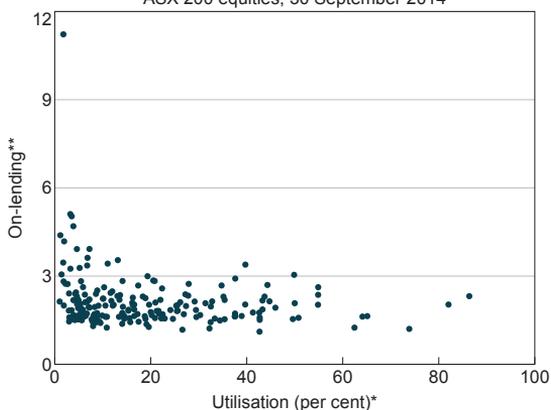


\* Net value of the security loaned as a share of the value committed to lending programs

\*\* Net value of the security loaned as a per cent of the daily average value of turnover in that security over the preceding 20 days

Sources: ASX; RBA

**Graph 5**  
**Utilisation and On-lending**  
ASX 200 equities, 30 September 2014



\* Net value of the security loaned as a share of the value committed to lending programs

\*\* Gross value of the security loaned divided by the net value on loan

Sources: ASX; RBA

## International Regulatory Developments

The global financial crisis highlighted a number of shortcomings in the policies and practices of both financial institutions and regulators, primarily in North Atlantic jurisdictions. In response to these shortcomings, authorities have initiated regulatory reforms in a number of areas to increase the resilience of the financial system. With the G20 providing the impetus, these reform efforts have mainly progressed through the Financial Stability Board (FSB) and its member standard-setting bodies. Three areas of reform, in particular, are contributing to significant change in the equity securities lending markets internationally, with potential implications for the market in Australia:

- *FSB work on securities lending.* As part of its work to address 'shadow banking' risks, the FSB established the Workstream on Securities Lending and 'Repos' (hereafter referred to as the FSB Workstream) to develop policy recommendations, where necessary, in order to strengthen regulation of the securities lending and the repurchase agreement (repo) markets.<sup>10</sup>
- *Basel III.* While not having a direct focus on the securities lending market, the initiative that will probably have the most prominent effect on the securities lending market is the extensive reform to bank prudential regulatory standards.

<sup>10</sup> The shadow banking system is defined as entities and activities outside the regular banking system that are associated with credit intermediation, and maturity and liquidity transformation.

These reforms, known as Basel III, consist of a comprehensive set of measures that aim to strengthen the regulation, supervision and risk management practices of the banking sector, developed by the international bank standard-setting body, the Basel Committee on Banking Supervision.

- *Reforms to the over-the-counter (OTC) derivatives market.* Reforms to improve the way counterparty risk is managed in the OTC derivatives market, while not having a direct impact on the securities lending market, are likely to affect the use of collateral in financial markets more broadly, including in the securities lending market. Among other things, these reforms are increasing the use of central counterparties (CCPs) in the OTC derivatives market and the exchange of collateral to support OTC derivatives trades that are not centrally cleared.

At a high level, these reforms are likely to have implications in three main areas: the transparency of the securities lending market and participants' risk management practices; the cost of intermediation in the lending market; and the management of collateral.

The impact of the reforms and participants' potential responses are discussed below.

### Transparency and risk management

As part of its work, the FSB Workstream reviewed market practices in securities lending and repo markets and existing regulatory frameworks. Based on this review, the Workstream identified a number of characteristics of activity in these markets that could have implications for financial stability. Two of the most significant of these issues are:

- *Leverage and procyclicality.* Securities lending and repo markets facilitate credit and maturity transformation that is not subject to prudential regulation. In addition, the degree of leverage that can be gained through these markets is procyclical. That is, it is positively correlated with the value of the collateral, the re-use of collateral, the size of haircuts and the creditworthiness of trading counterparties.

- *Interconnectedness.* Cash collateral reinvestment and the re-use of non-cash collateral can increase interconnectedness in the financial system, which may increase the possibility of contagion; that is, the likelihood that problems in one financial institution could affect another.

Both these characteristics increased the fragility of the financial system in the lead up to the global financial crisis. In addition, due to the opaqueness of these markets, authorities were unable to properly assess the financial stability risks arising from these markets.

Shortcomings in some financial institutions' risk management practices further exacerbated the financial stability implications of these characteristics. For example, insufficient rigour in the calibration of haircuts allowed participants to take on excessive leverage. Additionally, inadequate practices in relation to the valuation and management of collateral and securities purchased through reinvestment programs contributed to the risk of contagion in the financial system.

In response to the issues it had identified, the FSB Workstream developed a number of recommendations. To allow regulators to better identify vulnerabilities in the securities lending and repo markets, the FSB has recommended that authorities should collect data on securities lending frequently and with a high level of granularity. It has also recommended that the transparency of participants' practices, especially in relation to collateral reinvestment and re-use, should be increased.

The FSB Workstream has also proposed minimum regulatory standards in relation to collateral reinvestment, and the valuation and management of collateral. Qualitative standards for calculating haircuts and the imposition of minimum haircuts have also been proposed. As well as improving participants' practices, these regulatory standards aim to reduce the potential for leverage in the securities lending and repo markets to be increased in a procyclical way. The FSB Workstream has also

proposed standards in relation to rehypothecation, which is the re-use of *client* assets, in part to decrease the degree of interconnectedness in the market.

In part reflecting that most of the FSB's recommendations have only recently been finalised, to date there has been relatively less focus in Australia on the implementation of reforms to the securities lending market (as well as to shadow banking more broadly). This also recognises that shadow banking accounts for a relatively small and declining share of financial system assets in Australia (see, for example, Schwartz and Carr (2013)).

Nonetheless, anecdotal evidence suggests that many of the FSB's recommendations are already reflected in some of the practices of a large number of participants in the Australian market. This reflects the earlier observation that most of these participants are overseas institutions and have adopted practices that reflect overseas regulatory changes that are consistent with the FSB's recommendations. Enhancements to these practices have been reinforced by an increased focus among beneficial owners on the risks that they face in engaging in securities lending transactions.

### Cost of intermediation

One of the main areas of reform under Basel III is enhancement to the regulatory capital framework for banks. Capital in its simplest form represents a bank's ability to withstand losses without becoming insolvent. Basel II, the previous iteration of international bank prudential standards, included requirements for banks to maintain minimum capital ratios – that is, the ratio of a bank's capital to its assets adjusted for risk, known as 'risk-weighted assets'. Financial exposures assumed by intermediaries in their equity securities lending activity, including any indemnities to beneficial owners, would be taken into account in calculating risk-weighted assets for capital purposes.

Under Basel III, minimum capital ratios have been raised and capital has been defined more strictly to refer to financial instruments that are better able to absorb loss (and are therefore generally more costly). In addition, Basel III also strengthens the risk coverage of the capital framework, with more capital being required for counterparty credit risk arising from off-balance sheet exposures, such as securities lending transactions. Combined, these changes require banks to better manage the risks arising from their activity. In doing so, however, they also have the potential to increase the capital cost of securities lending activity for banks borrowing and lending as principal, as well as for agent lenders providing indemnities to beneficial owners.

Another important element of the new regulatory capital framework is a ceiling on the total (i.e. non-risk-adjusted) amount of leverage a bank can take on, which is known as the leverage ratio. In certain cases, the leverage ratio may be a constraint for the securities lending activity of some institutions. This is partly because banks borrowing as principal are not allowed to offset their securities lending exposures with collateral accepted as part of the trade when they calculate the ratio. In addition, strict conditions must be satisfied to be able to net offsetting transactions.<sup>11</sup> If the leverage ratio requirement is a binding constraint – that is, if a bank's leverage ratio is at or around its minimum level – the bank may have to allocate extra capital for any securities lending activity, which would in turn push up the cost of that activity.

While most elements of Basel III have been implemented or are in the process of being implemented in a majority of FSB member jurisdictions, including Australia, the impact of the reforms are still working their way into the market.

<sup>11</sup> These conditions are: transactions have the same explicit final settlement date; the right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable; and the counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement.

With banks increasingly focused on the cost of capital as the new requirements under Basel III are being rolled out, many of them have implemented more sophisticated processes for capital allocation across business functions. For bank intermediaries involved in the securities lending market, this has created a heightened awareness of the capital cost of the business and the pricing of services both on the lending and borrowing sides of the market.

Accordingly, the way that intermediaries conduct and price their securities lending market activity may change in response to the higher costs. Some intermediaries may pass on a portion of the higher costs to their beneficial owner and borrower clients. This could manifest itself in a lower split in revenue for beneficial owners and higher fees for borrowers. There may also be consolidation in the industry. That is, the changing economics may encourage some intermediaries to exit the market or refocus their activity on customers or loans that attract higher fees; others may increase their activity to achieve greater economies of scale. Higher activity may also allow certain intermediaries that are both borrowing and lending, for example borrower intermediaries that engage in a high amount of on-lending, to increase the scope for risk offsets. These risk offsets could reduce the amount of capital they need. In the longer term, intermediaries may seek to increase their use of centralised infrastructure, such as CCPs and electronic trading platforms, which have the potential to generate both capital and operational efficiencies (see 'Box A: Centralised Market Infrastructure').

### Management of collateral

Since the global financial crisis, higher risk aversion has caused an increase in investors collateralising their wholesale transactions. However, regulatory change is increasing the demand for collateral, particularly for high-quality collateral assets (see, for example, Cheung, Manning and Moore (2014)). The most prominent drivers of this trend are

reforms to improve the way counterparty risk is managed in the OTC derivatives market. These reforms are increasing the use of central clearing in this market, which is in turn increasing the demand for high-quality securities to meet CCP initial margin requirements. In addition, starting from December 2015, requirements to collect both variation and initial margin on non-centrally cleared OTC derivatives will be implemented in a number of FSB member jurisdictions. The new Basel III 'liquidity coverage ratio' is another source of demand for such assets. This will require banks to hold sufficient high-quality liquid assets, such as cash and Australian government debt, to withstand a hypothetical 30-day period of funding stress.<sup>12</sup>

Rising demand for collateral assets, in particular high-quality assets, will likely push up the opportunity cost of providing collateral for securities lending activity. In recent years, participants have been increasingly taking into account these costs when arranging their transactions. For instance, borrowers and their intermediaries are less willing to provide cash and high-quality securities as collateral. In addition, participants are seeking to optimise the use of their collateral assets. This is, for instance, through the establishment of 'collateral desks' that manage institutions' collateral across different business lines (e.g. across an institution's securities lending and repo businesses). By centralising collateral management, these desks are able to allocate collateral more efficiently and better recognise collateral offsets. Institutions are also increasingly utilising tri-party collateral managers, which can improve the efficiency of an institution's use of collateral securities (see 'Box A: Centralised Market Infrastructure').

<sup>12</sup> The Australian Prudential Regulation Authority has defined these high-quality 'liquid' assets as comprising reserve balances with the RBA, Commonwealth Government securities and semi-government securities.

## Box A

## Centralised Market Infrastructure

In recent years, there has been increased interest in centralised infrastructure in a range of markets, including the securities lending market. This is in part because the use of these infrastructures has the potential to generate capital and other cost efficiencies. Three types of infrastructures that could be used for these purposes are described in greater detail below.

### Central Counterparties

A central counterparty or CCP inserts itself between both trading counterparties after trades are executed to protect each counterparty from the risk that the other defaults before the obligations are settled. This occurs through a process known as 'novation', whereby the contract between the original parties to a trade is replaced by two contracts: one between the buyer and the CCP; and one between the seller and the CCP. To manage the risks it takes on, a CCP maintains a comprehensive, conservative and transparent risk management framework. A typical framework includes: minimum financial and operational requirements for direct participation; initial and variation margin requirements; and additional prefunded pooled financial resources.<sup>1</sup>

While no CCP currently offers clearing services for securities loans in Australia, CCPs do offer such services in overseas markets. In the United States, a securities lending central clearing service has been offered since July 1993 by the Options Clearing

Corporation. More recently, in November 2012, Eurex Clearing launched a clearing service for securities loans for equities listed in a number of European countries.

To date, securities lending volumes in these CCPs has not been high. However, anecdotal evidence suggests that there is increasing interest from the industry in securities lending CCPs due to the potential for CCPs to offset banks' increasing capital costs. Under Basel III, banks are allowed to allocate less capital for exposures that are cleared by a CCP compared with exposures that are not. In addition, central clearing allows greater scope for intermediaries with offsetting exposures to realise those offsets, which can in turn allow those intermediaries to economise on their capital.<sup>2</sup> Finally, the use of CCPs may also enhance the integrity and stability of the equity securities lending market.

CCPs are also innovating to overcome barriers that have historically prevented the use of central clearing in the securities lending market. One of these barriers is that beneficial owners generally find the cost of meeting initial margin requirements prohibitive. Recently, participation models have been developed which allow beneficial owners to clear their loans as principal without having to post initial margin.<sup>3</sup>

<sup>1</sup> CCPs collect variation margin to cover observed changes in the mark-to-market value of participants' open positions and initial margin to manage potential future price changes before an exposure to a defaulted participant's position can be closed out. For more information on CCP risk management practices, see RBA and ASIC (2009) and Rehlon and Nixon (2013).

<sup>2</sup> There is the potential for these offsets to be recognised across securities lending transactions and also in some cases across product classes (e.g. across equity options and securities loans).

<sup>3</sup> For example, Eurex Clearing avoids requiring initial margin from a beneficial owner by 'pledging' (rather than transferring title of) the collateral received from the borrower to the beneficial owner. Under this arrangement, Eurex Clearing retains title to the collateral and would be able to use it to cover losses incurred in the event of the default of the borrower.

## Trading Platforms

Over the past decade, new electronic platforms have emerged that reduce search costs and improve the efficiency of arranging securities loans. These platforms come in a number of different forms. For example, some platforms automatically match borrower and lender orders anonymously using a price finding algorithm, similar to central limit order books used in the trading of cash equities. Others are designed to improve the efficiency of existing bilateral relationships by providing tools to decrease the cost of matching borrowing and lending intentions among bilateral counterparties. While use of these electronic platforms has been widespread overseas, only recently has one of these platforms, Equilend, received regulatory clearance from the government to operate in Australia.

Traditionally, lending transactions have been arranged through bilateral communication channels, such as the phone, fax or electronic messaging platforms. The use of these communication channels involves high search costs and may also introduce back-office inefficiencies, since transactions may need to be processed and reconciled manually. For this reason, the use of electronic platforms has the potential to decrease the cost of arranging and processing securities lending transactions, especially transactions with more standardised terms that generally require little negotiation.

## Centralised Collateral Management

Tri-party collateral management services act as intermediaries between the giver and receiver of collateral. Tri-party services enable greater efficiency in collateral use, with collateral being optimised across exposures arising from a firm's different business lines. A greater degree of collateral diversification is also an advantage of tri-party services since they can handle a wider range of collateral than is typically used in bilateral arrangements. Tri-party collateral services allow participants in the securities lending market to outsource their back-office and IT functions.

The four major tri-party service providers include two custodian banks (Bank of New York Mellon and JPMorgan) and two international centralised securities depositories (Clearstream and Euroclear). Several national securities settlement facilities also operate tri-party services, including ASX Collateral in Australia, which uses technology developed by Clearstream. Users of custodian banks' services have the advantage of access to a wider range of securities over a larger number of markets around the world. National offerings from securities settlement facilities are typically limited both by geography and the types of securities held in the relevant facility, although, in time, links with other facilities internationally may expand the scope of these offerings. Services offered by securities settlement facilities also have the benefit of being directly integrated with the securities settlement infrastructure, making it easier to transfer securities in and out of the tri-party system.

## Conclusion

The securities lending market is an integral component of Australia's equity market, contributing to the efficiency of the market and supporting the equity settlement process. In recent years, a number of regulatory developments have been reshaping the landscape of the market.

Domestically, the RBA, working with ASX and industry participants, has sought to increase the transparency of the lending market by initiating a reporting regime. Statistics collected under this regime facilitate the identification of settlement risks arising from securities lending positions.

International regulatory initiatives since the global financial crisis, directed at weaknesses in the securities lending market, as well as vulnerabilities in the financial system more broadly, are contributing to significant changes to the equity securities lending market. The FSB has recommended a number of enhancements to participants' risk management practices, as well as greater transparency in the market. In addition, Basel III reforms to improve the resilience of the banking sector will be likely to increase the direct cost of banks' securities lending activity, and therefore the cost of intermediation in the lending market. Reforms to the OTC derivatives market, combined with new Basel III liquidity standards, are also fundamentally altering the way that collateral is used in financial markets. And, by generating competing demands for high-quality assets, these developments are focusing attention on using collateral efficiently in the securities lending market.

It will take some time for the full effect of these reforms to work their way through the securities lending market. However, there is some evidence to suggest that participants are already responding in the form of higher fees and changes in the composition of collateral. In the longer term, there are likely to be further changes in the way the market operates, potentially involving greater use of centralised infrastructure. ✎

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