Repo Conventions

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Preface: AFMA Code of Conduct

AFMA promotes efficiency, integrity and professionalism in Australia's financial markets. The aim of the AFMA Code of Conduct (the Code) is to establish a common understanding of the standard of behaviour expected of all AFMA Member organisations and their employees when conducting business with clients, counterparties and colleagues and when providing financial services to retail and wholesale clients.

All AFMA Financial Markets Members and Partner Members[1] are expected to observe the Code and operate with integrity, professionalism and competence. The Code is designed to support behaviours that put the interests of clients, the firm and the wider community ahead of personal or individual interests and promotes confident participation by users in Australia's OTC markets.

Market participants are reminded that they are generally expected to observe and adhere to the market standards and conventions[1] as set out below when engaging in any form of market dealing.

1. Description

The Australian repo market is characterised by trades between institutions purely for liquidity reasons (General Collateral) and those dealt to cover short trading positions (Specific Collateral). Repo transactions are also undertaken by the Reserve Bank of Australia (RBA) as part of its open market operations.

1.1. Role of Repo in Financial Markets

The Repo Market serves several important functions in financial markets including but not limited to:

- Providing an efficient source of short-term funding
- Supporting a more resilient money market
- Providing a secure and flexible home for short-term investment.
- Facilitating the Reserve Bank of Australia's (RBA) open market operations.
- Hedging primary debt issuance.
- Supporting corporate bond investors.
- Supporting liquidity in the secondary debt market.
- Assisting in price discovery.
- Hedging and pricing derivatives.
- Facilitating more efficient collateral management, and;
- Facilitating more efficient employment of capital.

1.2. Open Market Operations

In undertaking repos, the RBA accepts a range of Australian currency denominated eligible securities, defined as either General Collateral or Private Securities. General Collateral includes those issued by the Commonwealth Government, State and Territory central borrowing authorities, certain supranational

[1] As defined in the AFMA Constitution

organisations and foreign sovereign guaranteed organisations. Private Securities include bank bills (BABs) and certificates of deposit (CDs) issued by eligible Australian Depository Institutions (ADI's) and certain ABS and RMBS product.

A current description of eligible securities can be found on the RBA website:
http://www.rba.gov.au/mkt-operations/resources/tech-notes/eligible-securities.html

2. Products

2.1. Repo (Repurchase Agreement)

A Repo, also known as a repurchase agreement, RP, or sale and repurchase agreement, is a transaction involving the sale of securities together with a simultaneous agreement for the seller to buy back the securities at a future date at an agreed price. The repurchase price will be different to the original sale price, reflecting the interest of the transaction.

A Reverse Repo is the opposite of a Repurchase Agreement. Effectively, one party's Repo is another party's Reverse Repo.

2.2. Open Dated Repo

An Open Dated Repo (also known as an open repo, on demand, terminable on demand or open-ended repo) is a transaction that is agreed without fixing the maturity date. The interest rate and term can be renegotiated each business Day. An open repo can be terminated on any business day in the future by either party, provided the party gives notice within an agreed period of time. See 3.10 for maturity convention.

2.3. At-Call Repo

An At-Call Repo is a transaction with a maturity date that can be "called" by either party. The interest rate and term can be renegotiated each business Day. An at-call repo can be terminated (called) on any business day in the future by either party, provided the party gives notice within an agreed period of time. See 3.10 for maturity convention.

2.4. Evergreen Repo

An Evergreen Repo is a transaction with a fixed maturity date that is automatically renewed (rolled over) at maturity to a future maturity date with the same term unless either counterparty decides not to roll the trade within a certain timeframe. The trade will end on the last set maturity date if either counterparty decides not to roll the transaction.

2.5. Extendable Repo

An Extendable Repo is a transaction where the date of the repurchase/resale can be continuously renewed (extended) by mutual agreement between the parties. Extendable repos differ from open repos in that open repos terminate immediately when they are not renewed while extendable repos generally have a remaining term to maturity.

2.6. Floating Rate Repo

A Floating Rate Repo is a transaction where the interest rate is established by reference to an appropriate benchmark/reference interest rate. The RBA introduced Floating Rate Repos for the Bank's open market operations (OMO), with a pricing rate that is linked to the cash rate target that prevails over the term of the repo. The floating rate is based on the average cash rate target prevailing over the term of the repo.

2.7. Term Repo

A Term Repo generally is a transaction with a term to maturity beyond one Business Day and is sometimes applied to all fixed-term transactions (as opposed to open repo). A Term Repo may have the rate and maturity agreed upon at the commencement of the transaction or the rate may be dealt at a spread to an agreed reference rate.

2.8. Buy/Sell Back and Sell/Buy Back Transactions

While a repo or reverse repo is technically a single transaction, a buy/sell back and a sell/buy back is a pair of transactions: in effect, a buy and a sell, or vice versa. Although this transaction is not a repo, it mirrors the economic effects of a repo. It is a structure where the spot and forward trades are executed at the same time using a cash rate to derive the forward yield from the spot yield. If a buy/sell back is open over a coupon date the return value is reduced by the coupon accrual value and its associated interest accrual. An example of a buy/sell back would be where counterparty A buys from and then sells to counterparty B.

Buy/Sell backs are covered in the GMRA if the buy/sell back annex is included or attached.

3. Dealing

3.1. Collateral

3.1.1. General Collateral (GC)

The AFMA definition of General Collateral (GC) is collateral that meets a non-specific maturity requirement but has a quality requirement. As distinct from GC transactions with the Reserve Bank of Australia, a two-tier GC market, designated as "GC1" and "GC2", is operated and classified as follows:

- GC1 – Actively traded AUD Commonwealth and Semi-Government Bonds. Treasury Notes and Commonwealth and State Government Indexed bonds.
- GC2 – Any securities accepted by the RBA in daily liquidity dealings EXCEPT Global and Exchangeable securities.

Note: Unless specified the term “GC” within these conventions refers to both GC1 and GC2.

3.1.2. Specific Collateral (Specials)

Specific Collateral is collateral that meets specific issuer, coupon and maturity characteristics. It is a particular bond/security issue sought by a dealer in order to meet a specific trading obligation, therefore specific quality and maturity of bond/security is sought and specified at the time of dealing.

3.2. Methods of Dealing

Telephone, voice broker, electronic communication networks (ECN) and platforms, Bloomberg system, Refinitiv Messaging or any equivalent vendor systems are accepted methods of transacting business. Note: When dealers send a message to multiple counterparties, it is incumbent on the dealer to specify and identify it as a broadcast, denoting the amount and term required, following up with a broadcast once covered. In the absence of broadcast, participants may assume that any messages received without the flag broadcast are personal messages.

3.3. Business Day

A Business Day is defined as any day which is not a ‘bank close day’ under the law of New South Wales. Further explanation is provided on the AFMA website.

(https://www.afma.com.au/standards/market-conventions)

AFMA recommends that transactions should only be negotiated for settlement or price fixing (rollover) on a Business Day.

3.4. Customary Market Parcel

Unless separately specified below, the customary market parcel for GC repo transactions via brokers is $20 million cash value, with a maximum of 1 line of bonds/securities in a minimum of $20 million cash value.

A market parcel is negotiable for bilateral dealings.

For other repo transactions dealt via broker screen dealing systems the following customary market parcels apply, absent bilateral agreement of the two parties:

Repo period/term	Customary Market Parcel
1-7 days	$20 million
Greater than 7 days	$50 million

3.5. Two Way Pricing

Market participants are not required nor obligated to make a two-way price to potential counterparties.

3.6. Quotation and Dealing

Dealing - As repurchase and reverse repurchase agreements are negotiated transactions, when dealing directly with other dealers, each dealer is responsible for agreeing to the terms and conditions. It is up to each dealer to make clear to the corresponding counterparty those terms and conditions. It is expected that when an offer/bid is made by one party, the other party should either deal or counter with a bid/offer.

Overnight -Today (T+0) against the next Business Day (T+1).

Tomorrow - The following Business Day (T+1).

Tomorrow/next day (Tom/next or T/N)- The first leg of the repo settles T+1 and unwinds T+2.

Spot - Two Business Days from today. (T+2)

Corporate - Three Business Days from today. (T+3)

Bid/buy/borrow - Where the collateral is borrowed and the cash is lent.

Offer/sell/lend - Where the collateral is lent and the cash is borrowed.

3.7. Other Instrument Conventions

Unless otherwise bilaterally agreed, the following conventions govern GC transactions:

- The accepted bonds/securities lodged as GC must have a longer maturity date than the term repo.
- No right of substitution exists for repos of one week or less to maturity.
- The cut-off time for substituting lines pledged as part of term GC trades is 9:30am on the Business Day preceding substitution.
- Rights of substitution shall be limited to once per week per individual repo.
- Rights of substitution do not carry over/accumulate from week to week. If a right of substitution is not used within any week it is lost.
  For example, for a one-month trade with no rights of substitution having been exercised by the seller of the collateral within the first two weeks there are only two rights of substitution left in the trade.
- One right of substitution is one ticket of the original trade.
  For example, for a $100m one-month trade for which the seller of the collateral chooses to break it into 4 parcels of $25m consisting of 4 different securities, the one right of substitution per week convention allows the seller to substitute only one parcel of $25m per week, not all four.
- When a right of substitution of collateral is exercised by the seller of that collateral, the seller should match the original cash value of the existing trade.
- Notional amounts cannot be split while exercising a right of substitution without the permission of the buyer of collateral.

  For example, for a $100m one- month trade where the seller chooses to lend 1 security of $100m, to satisfy a substitution request, the seller needs to replace the collateral with another parcel of $100m. The seller cannot substitute two parcels of $50m of different or the same collateral without the buyer's permission.
- For any GC trade dealt through a broker, it is the broker's responsibility to help mediate the substitution process during the lifetime of the trade.

3.7.1. Margining

It is customary practice in the Australian Repo market to make margin calls, settled via either the transfer of cash or securities, in preference to repricing transactions to cover exposures between the parties. AFMA recommends that parties be guided by the margining principles as described within the *ICMA ERCC Guide to Best Practice in the European Repo Market: Section 3, Best practice in margining repo*[2], however that principles specific to Australian operations be recognised, as described hereunder:

[2] The margining practices set out in the ICMA ERCC Guide are general recommendations only and may be updated from time to time. Parties to repos may agree to other terms where they see fit.

3.7.1.1. Calculation of Market Value

The fixed income dirty price is used to calculate market value.
Dirty Price = Clean Price + Accrued Interest.

3.7.1.1.1. INCLUDED Transactions / Exposures

All open activity between the counterparties, including:

- Transactions with a Purchase Date of today or earlier (unless trade date = purchase date)
- Transactions with a Repurchase Date of next Business Day or later.
- All current term repo transactions
- Coupons
  - Coupon payments are included in the margin calculation.
  - The fixed income dirty price is used to calculate market value.

3.7.1.1.2. EXCLUDED Transactions / Exposures

The following **should not** be included:

- Transactions where Trade Date and Purchase Date are on same day of margin call.
- Transactions where the Repurchase Date is today.
- Overnight Repo.

3.7.1.2. Deadline for making a margin call

Margin calls should be made and agreed upon by 11:00 am Australian Eastern Standard Time (AEST) except in circumstances where an operations team is located in an offshore jurisdiction (other than New Zealand), in which case all margin calls should issue and be agreed by 1:00 pm AEST.

Margin call trade instructions should be matched in the market by 2:00 pm AEST on the call date.

3.7.1.3. Deadline for delivering margin

Cash margin and margin securities should be delivered wherever possible on the call date (CD+0) and not later than next local Business Day (CD+1).

3.7.1.4. Interest payments on cash margin

The reference rate generally used in Australia is the interbank overnight cash rate, plus or minus an agreed spread, the former being an Australian benchmark interest rate calculated and published by the Reserve Bank of Australia and displayed on screen RBA30 or other widely published electronic pages.

Counterparties may choose to settle the cash interest on a monthly basis. Participants should reconcile and settle the interest with their counterparties in the first week of the following month.

3.8. Basis

All rates are quoted on an actual/365day basis, using a simple interest calculation payable at maturity.

3.9. Maturity Conventions

At-call/open **specific collateral** repos are automatically rolled at 9:30am on the Business Day preceding maturity. Market standard is to notify the counterparty of the intent to terminate an at-call / open **specific collateral** repo not later than 9:30am AEST/AEDT on the Business Bay preceding the date of settlement of the termination.

GC open repos are automatically rolled at 11:00am unless otherwise advised by either counterparty.

Term repos are to be collateralised with eligible securities that have a maturity date beyond the maturity date of that particular term repo.

3.10. Rate Renegotiations (re-rates)

Market standard is to notify the counterparty of the intent to renegotiate the rate (re-rate) of an Open repo trade not later than 9:30am AEST/AEDT on the Business Day preceding the effective date of the renegotiated rate, except in the case of an announcement by the RBA of a change in the Target Cash Rate, which generally occur at 2.30pm AEST/AEDT on the Business Day preceding the effective date of the renegotiated rate.

3.11. Broker Conventions

3.11.1. For Customary Market Parcels dealt via broker screen dealing systems please refer to Section 3.5.

3.11.2. All prices are subject to credit and documentation.

3.11.3. All screen prices are valid until removed or refreshed.

3.11.4. Divergence from the amount of the screen bid/offer (see section 3.5) is at the discretion of the screen quoted counterparty; The decision to change the amount from the customary market parcel of the screen bid/offer is at the discretion of the price maker if the price taker requests to do so.

3.11.5. If a broker has a price on screen and a price taker asks if the bid or offer can deal for a certain amount other than the customary market parcel, the price taker is obliged to deal that amount if it is available from the price maker making the bid/offer.

3.11.6. To encourage price making and enhance market transparency, when dealing through a broker, a price taker is expected to show the best bid/offer when countering the price maker's offer/bid or when inquiring whether the pricemaker showing the offer/bid will deal off screen between the bid/offer spread.

3.11.7. All trades conducted via the brokers are to be reported and posted within a reasonable time.

3.12. Confidentiality

Refer to the AFMA Code of Conduct.

3.13. Credit

All deals subject to individual limits.

Haircuts
This is the amount by which the market value of the repo'd bonds/securities exceeds the cash amount of the transaction. The amount of the haircut will vary depending on the amount of the transaction, the term of the repo, the quality and maturity of the collateral and the creditworthiness of the counterparty. The amount of the haircut will be determined/negotiated by the counterparties to the transaction.

3.14. Pricing Formulae

3.14.1. The first leg consideration or start consideration is calculated in accordance with the pricing formulae published on the AOFM (Australian Office of Financial Management) website.

3.14.2. The second leg consideration or unwind consideration is calculated by using the simple interest formula with the start consideration as the principal which is multiplied by the repo rate for the number of days.

Pricing formulae

Australian government bonds are priced using a formula incorporating the principles of yield to maturity and compound interest. Even though interest amounts (coupons) are paid throughout, the pricing technique present values all cash flows on a compounding basis using an effective semi-annual yield, or nominal annual yield paid semi-annually.

1) Basic bond formula:

$$P = v^{f/d}[g(1 + a_{\overline{n}}) + 100v^n]$$

2) Ex-interest formula:

$$P = v^{f/d}(ga_{\overline{n}} + 100v^n)$$

3) Near maturing bonds (specifically those entitling a purchaser to only the final coupon payment and repayment of principal). When a bond goes ex-interest for the second last time (i.e. six months plus seven days before maturity) it is treated as a special case. This formula applies until the record date for the final interest period:

$$P = \frac{100 + g}{1 + \left(\frac{f}{365}\right)i}$$

4) Near-maturity bonds (from the record date for the final coupon):

$$P = \frac{100}{1 + \left(\frac{f}{365}\right) i}$$

If the maturity does not fall on a Business Day, the proceeds date (i.e. the next Business Day) is used in the calculation of *f*.

P = the price per $100 face value, **rounded to 3 decimal places for 1) and 2) and not rounded for 3) and 4)**

$$v = \frac{1}{1+i}$$

where 100i = the half-yearly yield (per cent) to maturity in formulae 1) and 2) or the annual yield (per cent) to maturity in formula 3)

f = the number of days from the date of settlement to the next interest-payment date in formula 1) and 2) or to the maturity date in formula 3)

d = the number of days in the half year ending on the next interest-payment date

g = the half-yearly rate of coupon payment per $100 face value

n = the term in half years from the next interest-payment date to maturity

The settlement amount will be rounded to the nearest cent (0.50 cents being rounded up).

Simple interest formula

The general form for calculating the simple interest amount is:

$$I = P \times r \times t$$

where:

I = amount of interest
P = principle amount or present value
r = rate of interest per annum
t = time in years

3.15. AOFM and RBA Securities Lending Facilities

Eligible parties are able to borrow Treasury Bonds & Index Bonds through a facility provided by Australian Office of Financial Management (AOFM) settled through the RBA. Collateral provided must meet the RBA criterion for General Collateral as prescribed for RBA repurchase agreements.

Refer Addendum 1 and the links to the APRA and RBA websites for further information including applicable margin.

3.16. State Government Securities Lending Facilities

Similar to that offered by AOFM and subject to applicable fees, securities lending facilities operated by a number of the State Government borrowing authorities (NSWTC, TVC, QTC, SAFA, WATC) are available to panel members.

3.17. RBA Regular Scheduled Board Meeting

On regular scheduled RBA board meeting days all trades dealt for T+1 are automatically dealt subject to a spread to the RBA rate (RBA27) unless bilaterally agreed. The dates for RBA meetings can be found on the RBA website.

3.18. RBA Out-of-Cycle Board Meeting

In the event that RBA announces an out-of-cycle change to the official cash rate:

- On-the-day (OTD) repos are assumed to have been dealt subject to a spread to the RBA official cash rate and should reflect the cash rate target published as at 9.30am
- Open dated/at call repos should reflect the new cash rate on a T+1 basis.
- Term repos (including T/N trades) should remain as previously negotiated.
- All trades previously negotiated on a spread to cash basis will be reset on the date of a change to the official cash rate and should reflect the cash rate target published as at 9.30am.

3.19. Specific Market Practices

3.19.1 Access to and use of AOFM, State Govt and RBA Securities Lending Facilities

3.19.2 All parties dealing on-screen and via brokers are expected to have access to the AOFM and State Government facilities (as described in 3.15 and 3.16 of these Repo Conventions) either directly or under a bilateral agreement with an eligible party to access these facilities.

3.19.3 Market best practice requires that a party dealing on-screen and via brokers will either directly access these facilities or engage an eligible party on its behalf to access these facilities whenever is it apparent that its settlement obligation is compromised in any way, and that settlement failure is likely.

3.19.4 To aid market functioning, the Reserve Bank stands ready to lend securities that it owns against cash or eligible collateral on a reverse enquiry basis. Refer Addendum 1 for additional information.

3.20. Collateral Management Services

Subject to bilateral agreement, the Repo Committee recommends that the following collateral schedule and haircut guidelines be applied:

Schedule	Haircut
Tier 1- AFMA GC1, however excl. t/notes, linkers	RBA Schedule
Tier 2- Current tier 1 in brokers, incl. t/notes, linkers	RBA Schedule
Tier 3- RBA basket –open market operations	RBA Schedule

4. Confirmations

It is market practice to send Confirmations by an electronic communication system that assists efficient and reliable processing of transactions as the preferred method over other forms of written communication such as email (subject to applicable law and bilateral agreement).
Refer to the AFMA Common Confirmation and Settlement Standards.

4.1. Obligation of Dealers

AFMA member dealers are subject to the AFMA Code of Conduct.

Price discrepancies should be discussed and corrected by 2:30pm wherever possible. If a settlement failure is imminent it is the obligation of the failing entity to exercise due diligence to settle the transaction and source securities via {a} the market or {b} Reserve Bank of Australia Securities Lending Facility (refer to Addendum 1), AOFM securities lending facility (refer Section 3.20) or {c} via State Government Securities Lending Facilities (refer Section 3.21) where possible.

4.2. Documentation

Currently The 2011 TBMA/ISMA Global Master Repurchase Agreement, with the AFMA recommended replacement of Annex 1 (available by subscription to the AFMA Guide to Australian OTC Transactions section 2.2), is the recommended market standard.

5. Settlements

Refer to the AFMA Common Confirmation and Settlement Standards.

5.1. Settlement Failures

5.1.1. Avoiding and Curing Fails

Failure to settle risks the reputation of the organisation and may bring the market into disrepute. Partial settlement is encouraged, however, the other counterparty retains the discretion to accept or reject a partial settlement.

It is better market practice for the party obligated to deliver securities (the seller) to immediately inform the other counterparty of any circumstance which threatens the settlement process as soon as known and as soon as practical, so that, in the event the seller or its settlement agent subsequently cannot deliver, the parties can endeavour to cover the short position in the underlying security or make alternative arrangements that are agreeable to both counterparties. It is stressed that the party obligated to deliver securities may not delegate or take other steps to avoid its responsibility to fulfil its contract with the counterparty, including assigning blame for any failure to its settlement agent. In the event of difficulties that arise towards end of day (after 3:00pm AEST) both counterparties are expected to make all reasonable efforts to arrange alternatives.

To reiterate: It is the obligation of the failing party to exercise due diligence to settle. If the failing party is offered bonds/securities to cover a fail then it is obliged to cover the fail by borrowing the offered bonds/securities.

Dealers are expected to at all times be aware of the supply characteristics of any particular line of bonds/securities, and particularly be aware if a line is in short supply. If the repo rate on a particular line of bonds/securities falls, this is an indication of illiquidity and dealers should ensure that they have adequate bonds/securities available for future settlements. Dealers should not repo bonds/securities unless they believe that they can deliver those bonds/securities at settlement.

It is incumbent on market participants to take the steps necessary to mitigate settlement failure. In particular, and as a matter of best practice, the party contractually obliged to deliver securities is obliged to take the necessary steps to borrow stock immediately it becomes apparent that settlement failure is likely, and to initiate this process within a timeframe that avoids broader market disruptions and failures.

5.1.2. Managing the Dealer / Client relationship

A client's unfamiliarity with the procedural aspects of the Australian Repo market has the potential to increase settlement risk. Dealers are encouraged to inform clients of settlement risk in order to reduce this risk, particularly in circumstances where the dealer becomes aware of an impending settlement failure of its client.

5.2. Settlement Failure Compensation Claims

When the counterparties to a transaction cannot settle for any reason, the impacted party is entitled to claim use of funds at the market rate, together with any other associated costs, or as mutually agreed under the terms of the documentation governing reciprocal purchase agreements between the parties.

When settlement failure occurs, the deal will settle on the following Business Day with no rate adjustment (original settlement price). If settlement continues to fail the settlement price does not alter except in circumstances where there is bilateral agreement.

In the event of costs are incurred due to a failed settlement, the party being failed should formalise a claim detailing all costs incurred and basis of claim. All such claims are expected to be formally acknowledged and responded to within 7 Business Days of receipt of a claim letter.

Addendum 1: Access to Securities Lending Facilities

1. Reserve Bank of Australia Securities Lending Facility

To aid market functioning, the Reserve Bank stands ready to lend securities that it owns against cash or eligible collateral on a reverse enquiry basis.

The Reserve Bank will also consider proposals to sell government bonds that it owns outright against an offsetting (duration-neutral) purchase of government bonds, although accepting such a proposal will be entirely at the discretion of the Reserve Bank, and the Reserve Bank will typically charge a spread relative to mid-market rates. The Reserve Bank publishes details of its outright holdings of government bonds in Statistical Table A3.1.

RBA has 'market notices' pages (RBAO9 on Bloomberg, RBA40 on Refinitiv) and on its website outlining these restrictions, and the fees that may apply to borrow these bonds.

2. AOFM Securities Lending Facility

The Reserve Bank also operates a Securities Lending Facility on behalf of the Australian Office of Financial Management (AOFM), and is the point of contact for accessing this facility.

3. Accessing the Facilities

To access the RBA and AOFM facilities, participants are to contact the RBA dealing room and request to borrow the bonds.

Addendum 2: Settlement of Market Repo Transactions in Austraclear

On 20 April 2020 Austraclear published a market notice advising all Austraclear participants that from **23rd November 2021,** all Market Repos are to be settled using the dedicated repo module in Austraclear.

https://asxonline.com/content/asxonline/public/notices/2020/apr/0338.20.04.html
https://www.asxonline.com/content/asxonline/public/notices/2019/dec/1433.19.12.html