

ICMA European Repo Council (ERC) Repo Margining Best Practices 2012

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ICMA ERC Repo Margining Best Practices 2012

1 Initial margin and haircut

Initial margins and haircuts may be used to adjust the value of collateral sold in a repurchase agreement in order to try to anticipate the loss of value that may be experienced if the collateral has to be liquidated following an event of a default by the counterparty.

An initial margin is defined as:

$$\left(\frac{\text{Market Value of collateral}}{\text{Purchase Price}} \right) 100$$

This means that initial margin is expressed relative to 100% and that an initial margin of 100% means no margin. In the GMRA, initial margin is called Margin Ratio (see section 2(z) of GMRA 2000 and 2(bb) of GMRA 2011).

A haircut is defined as:

$$\left(\frac{\text{Market Value of collateral} - \text{Purchase Price}}{\text{Purchase Price}} \right) 100$$

This means that a haircut is expressed as the percentage difference between the Market Value of collateral and the Purchase Price of the repo. In the GMRA, haircut is called Margin Percentage (see section 2(aa) of GMRA 2011).

The application of initial margins and haircuts in the calculation of margin calls is described in (2) below. It is important to understand that, because an initial margin is a percentage of the Purchase Price, while a haircut is a percentage of the Market Value of collateral, the arithmetic of initial margins and haircuts is slightly different. For example, an initial margin of 102% is not equivalent to a haircut of 2%, but to 1.961% (ie 100/102%).

A party should be able to accommodate requests to apply initial margin to some repo transactions and haircuts to other transactions with the same counterparty.

Initial margins and haircuts can be agreed in advance of trading and recorded in the legal agreement between parties (eg in Annex I of the GMRA), or can be agreed ad hoc at the point of trade and recorded in the confirmation. Once agreed for a particular transaction, the initial margin or haircut should be fixed for the term of that transaction.

Note that it may be necessary in the case of asset-backed securities to apply a Pool Factor to reduce the dirty price of the security in the event it has suffered a Pool Factor Distortion, that is, where the principal has been written down to reflect insufficiency of underlying asset values or cashflows (see 10(f)(ii)(A) of GMRA 2011).

2 Calculating a margin call

A margin call should be made when one party has a Net Exposure to the other (see section 4(c) of GMRA 2000 and 2011). A Net Exposure arises when the aggregate exposure of one party to another exceeds the aggregate exposure of the second party to the first. The aggregate exposure of each party is equal to the sum of the exposures on each transaction still outstanding with the other party (Transaction Exposure ---see section 2(ww) of GMRA 2000 and 2(xx) of GMRA 2011) plus any income due from the other party but unpaid (ie manufactured payments and interest payments) plus net margin still held by the first party.

Transaction Exposure is calculated by marking each transaction to market. The mark-to-market calculation depends on whether the transaction is subject to an initial margin or to a haircut.

In the interval between a margin call being made by one party and margin being delivered by the other, the calculation of Net Exposure should assume that margin will be delivered.

2.1 where the collateral is subject to an initial margin

$$\text{Transaction Exposure} = \left(\text{Repurchase Price} \frac{\text{initial margin}}{100} \right) - \text{Market Value of collateral}$$

$$\text{Repurchase Price} = \text{Purchase Price} \left(1 + \frac{\text{repo rate} \times \text{day count}}{100 \times \text{annual basis}} \right)$$

The Repurchase Price should be calculated for the day on which margin is due to be delivered (the margin delivery date). In other words, the day count for the repo rate should be the number of days up to but excluding the margin delivery date.

$$\text{Market Value of collateral} = \text{nominal value} \left(\frac{\text{clean price} + \frac{\text{coupon} \times \text{day count}}{\text{annual basis}}}{100} \right)$$

The Market Value of collateral securities should include accrued interest up to but excluding the margin delivery date.

Applying an initial margin to calculate the required collateral value

today	Thursday, 1 March 2012
purchase date	Monday, 5 March 2012
repurchase date	Monday, 12 March 2012
1-week repo rate	1.00% (A/360)
Purchase Price	EUR 25 million
collateral	2% DBR 4-Jan-2022 (A/A, note 2012 is a leap year)
clean price	101.79
days accrued	61
dirty price	102.123333333
initial margin	102%

$$\text{required Market Value of collateral} = 25,000,000 \times \frac{102}{100} = 25,500,000.00$$

Repurchase Price 25,504,958.32

Applying an initial margin to calculate the Purchase Price

today	Thursday, 1 March 2012
purchase date	Monday, 5 March 2012
repurchase date	Monday, 12 March 2012
1-week repo rate	1.00% (A/360)
collateral	2% DBR 4-Jan-2022 (A/A, note 2012 is a leap year)
collateral amount	EUR 25 million nominal
clean price	101.79
days accrued	61
dirty price	102.123333333
Market Value of collateral	25,530,833.33
initial margin	102%

$$\text{Purchase Price} = \frac{25,530,833.33}{\frac{102}{100}} = 25,030,228.75$$

Repurchase Price	25,035,095.73
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2.2 where the collateral is subject to a haircut

$$\text{Transaction Exposure} = \text{Repurchase Price} - \left(\text{Market Value of collateral} \left(1 - \frac{\text{haircut}}{100} \right) \right)$$

Repurchase Price and Market Value of collateral are calculated as in (2.1).

Applying a haircut to calculate the Purchase Price

today	Thursday, 1 March 2012
purchase date	Monday, 5 March 2012
repurchase date	Monday, 12 March 2012
1-week repo rate	1.00% (A/360)
collateral	2% DBR 4-Jan-2022 (A/A, note 2012 is a leap year)
collateral amount	EUR 25 million nominal
clean price	101.79
days accrued	61
dirty price	102.123333333
Market Value of collateral	25,530,833.33
haircut	2%

$$\text{Purchase Price} = 25,530,833.33 \left(1 - \frac{2}{100} \right) = 25,020,216.55$$

Repurchase Price	25,025,081.69
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Applying a haircut to calculate the required collateral value

today	Thursday, 1 March 2012
purchase date	Monday, 5 March 2012
repurchase date	Monday, 12 March 2012
1-week repo rate	1.00% (A/360)
Purchase Price	EUR 25 million
collateral	2% DBR 4-Jan-2022 (A/A, note 2012 is a leap year)
clean price	101.79
days accrued	61
dirty price	102.123333333
haircut	2%

$$\text{required Market Value of collateral} = \frac{25,000,000}{\left(1 - \frac{2}{100}\right)} = 25,510,204.08$$

Repurchase Price	25,515,164.39
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The day count and annual basis for the calculation of Repurchase Price follows the money market (ie deposit or forward FX) convention for the relevant currency (eg actual/360 for EUR, USD, CHF and JPY, and actual/365 for GBP).

The day count and annual basis for the calculation of the accrued interest in the Market Value of collateral follows the bond market convention for the relevant currency and security (eg actual/actual for all eurozone and most other government fixed-income securities).

3 What transactions are included in the calculation of Net Exposure?

3.1 general rule

The calculation of Net Exposure should include all transactions between two parties for which:

- the Purchase Date is today or earlier; and
- the Repurchase Date is today or later.

The inclusion of new or maturing transactions should be based on actual rather than assumed settlement. However, this practice requires firms to have the ability to confirm settlement before making or responding to a margin call.

Where firms cannot confirm settlement before making or responding to a margin call, then the above general rule should be applied literally. In other words, transactions should be included in the calculation of Net Exposure on both their Purchase Date and Repurchase Date. This means assuming settlement on the Purchase Date but not on the Repurchase Date.

The reason for this asymmetry of treatment is that settlement failures on the Repurchase Date are more common and are likely to have larger Transaction Exposures than new transactions.

Transactions which fail on their Purchase Date should be removed from the calculation of Net Exposure on next business day and not included until the failure has been remedied by the Seller or the transaction has been terminated by the Buyer.

Transactions which fail on their Repurchase Date should continue to be included in the calculation of Net Exposure until the failure has been remedied by the Buyer or the transaction has been terminated by the Seller, as the transaction will continue to have a Transaction Exposure.

Where margin is paid or delivered for value on T+1 and T+2, the inclusion of repos up until their Repurchase Date means that margin may be paid or delivered after the Repurchase Date. The alternative is not to margin for collateral price movements over the last one or two business days of a transaction, which is a greater risk than overextended collateralisation. Any excess margin delivered as a result of this practice will be eliminated by the next margin call. Paying or delivering margin for value on T+0 may not entirely eliminate this problem, as margin may still be paid or delivered on the day that the underlying Transaction Exposure disappears and is unlikely to then be returned until the next business day. However, T+0 margin will significantly reduce the problem.

What transactions to include in the calculation of Net Exposure

Today is Thursday, 1 March 2012. You wish to calculate Net Exposure and, if necessary, make a margin call on counterparty ABC. Consider the following outstanding repo transactions with ABC:

<u>transaction date</u>	<u>Purchase Date</u>	<u>Repurchase Date</u>	<u>type</u>	<u>include?</u>
	1-Dec-12	1-Mar-12	3M	yes
	2-Feb-12	2-Mar-12	1M	yes
	9-Feb-12	9-Mar-12	1M	yes
	16-Feb-12	23-Feb-12 (failed)	1W	yes
	27-Feb-12	5-Mar-12	1W	yes
	23-Mar-12	25-Jun-12	forward	no
27-Feb-12	28-Feb-12	6-Mar-12	1W	yes
29-Feb-12	1-Mar-12	2-Mar-12	ON	yes
1-Mar-12	2-Mar-12	5-Mar-12	TN	no
1-Mar-12	5-Mar-12	5-Apr-12	1M	no

The reason for not including transactions between their Transaction Date and Purchase Date is that, if the Seller does fail to deliver collateral on the Purchase Date, provided the Buyer has not paid the Purchase Price to the Seller, the Buyer will only have an interest rate risk, sometimes called a “net replacement cost”, rather than the type of credit risk to which a counterparty is exposed once an exchange of cash and collateral has actually taken place (the risk of losing principal). Such a risk should be hedged with interest rate risk management instruments rather than collateral.

3.2 forward repos

Following the general rule set out in the previous sub-section, forward repos should not be included in the calculation of Net Exposure (until they reach their Purchase Dates and cease to be forward transactions). This is because, until collateral and cash are exchanged on the forward Purchase Date, the only risk on the transaction that is posed by the possible default of one of the parties is that the non-defaulting party will have to arrange a replacement transaction at a worse repo rate or buy-back price. In other words, until the Purchase Date, the risk on a forward repo is an interest rate risk (similar to the counterparty risk on a derivative) rather than the type of credit risk to which a counterparty is exposed from the Purchase Date (the risk of losing principal). Such interest rate risk can be hedged.

By the Purchase Date of a forward repo, a Net Exposure is likely to arise because the required Market Value of the collateral (taking account of any initial margin or haircut) will almost certainly have diverged from the Purchase Price. Rather than by margining, this credit risk can be mitigated by the procedure set out in 2(b) of Annex I of GMRA 2000 and 2(c) of Annex I of the GMRA 2011, which allows parties, just prior to the Purchase Date, to adjust the Purchase Price or the number of Purchased Securities in order to eliminate any material difference between the Purchase Price and the required Market Value of the collateral.

4 What price is used to value collateral?

Collateral securities must be valued at their dirty or gross prices (ie including accrued interest), rather than their clean prices. The number of days used in the calculation of accrued interest should be calculated from and including the last coupon payment date up to but excluding the date on which margin is due to be delivered (the margin delivery date). This means that the Market Value of collateral securities should include accrued interest up to but excluding the margin delivery date.

Because the dirty or gross price of a collateral fixed-income security is used to calculate its Market Value, the payment of a coupon will reduce the Market Value of that security and may trigger a margin call. The same principle applies to equity collateral and payments of dividends. It is best practice to monitor forthcoming coupon or dividend payments.

To value each piece of collateral, the most common practice is to use the middle (clean) price quoted in the Appropriate Market for that security (see 2(c) of GMRA 2000 and 2(d) of GMRA 2011) at the close of business on the business day before the date of calculation and call, or a price dealt at about the same time. The middle price assumes that the Buyer and Seller are equally likely to default. Alternatively, the parties could agree to use the bid price, which would provide the maximum protection for the Buyer. The Market Value of collateral fixed-income securities should include accrued interest up to but excluding the margin delivery date.

In the event of exceptional intra-day collateral price movements, parties can agree to intra-day margin calls, which should use the latest available price.

Disagreement on the prices used in valuing collateral can be avoided if the sources are listed in the legal agreement between two parties. However, this is not always practicable. The most common current practice is for prices to be taken from the internal price database of the margin caller. This will record the prices at which deals have been executed and quotes received from the market.

If there is a disagreement about a price which has been proposed, and no price source has been specified in the legal agreement, the parties should agree a price or a price source, negotiating reasonably and in good faith.

In calculating the Repurchase Price or Buy-Back Price of a sell/buy-back, where the collateral is a fixed-income security, it is necessary to include the reinvestment income on any coupons paid during the term of the transaction. If the coupon is due to be paid during the term of the transaction and the coupon payment date falls on a non-business day, the Repurchase Price or Buy-Back Price should assume that the reinvestment of the coupon until the Repurchase Price or Buy-Back Price starts on the next business day.

5 How often should Net Exposure be calculated and margin called?

Net Exposure should be calculated at least every business day. In exceptional circumstances, it can be calculated intra-day.

Margin should be called whenever Net Exposure exceeds an acceptable threshold (see (9) below).

6 Margin thresholds and minimum transfer amounts

Parties to repurchase agreements (but not sell/buy-backs) often agree a minimum Net Exposure below which they will not call a margin from each other. Once the Net Exposure equals or exceeds this threshold, a margin is called which is sufficient to eliminate the entire Net Exposure. For this reason, the threshold is often called a *minimum transfer amount*.

A Net Exposure below the minimum transfer amount is an unsecured credit exposure and should be subject to the credit limit for repo.

Minimum transfer amounts should be agreed before trading starts. In practice, parties usually record mutually-agreed minimum transfer amounts in their legal agreements.

A party may prefer not to agree a minimum transfer amount with a counterparty and thereby commit itself to potentially extending unsecured credit. Instead, it may decide on a confidential minimum transfer amount that it will observe internally, but will not make that amount known to the counterparty. This will allow it to reduce or eliminate the minimum transfer amount in the event of concerns arising over the creditworthiness of the counterparty.

7 What is the deadline for making a margin call?

Margin calls should be made before 14:00 CET. All transactions listed in section 3 should be included. Margin calls made after 14:00 CET should be treated as though they had been made on the next business day.

If a party receiving a margin call wishes to provide securities in response to the margin call, it must select the issues and notify the other party of the selection before 16:00 CET. If the second party has a problem with the issues selected by the margin-giver, it should promptly inform the first party (see (8) below).

8 Where margin is given in the form of securities, what issues have to be accepted by the margin-taker?

Securities given as margin on repurchase agreements (but not sell/buy-backs) should be accepted if they are recognised as general collateral in the repo market or if they have characteristics the same as or better than the collateral being reversed in by the margin-taker. It is best practice to specify acceptable margin securities in the legal agreement between the parties. If this is not possible, the margin-taker should act reasonably and in good faith when offered margin securities.

9 Should initial margin or haircut be deducted from margin securities?

If an initial margin or haircut has been taken from a particular issue of securities used as collateral in a repo with a particular counterparty, it is logical to apply an initial margin or haircut to that same security if it is to be given as margin. However, the initial margin or haircut to be imposed on margin securities could be different from that imposed on the same securities when they were first repoed because of changing circumstances in the interval between the Purchase Date and the margin call.

10 What is the deadline for delivering margin?

Margin should be delivered within the deadline agreed between the parties. It is best practice to deliver cash margin on the same day as the call is made (T+0). It is also best practice to deliver margin securities on the same day as the call is made (T+0) but the most common practice currently is to deliver margin securities one or two days after the margin calls (T+1 and T+2).

11 Can margin securities be substituted?

Securities given as margin by one party to a repo can be substituted with the agreement of the other party, who should act reasonably and in good faith in response to such a request.

Parties often require substitute securities to be delivered before the original securities are released. Substitute securities and securities being substituted should be delivered in line with (10) above.

12 Interest payments on cash margin

Interest is due on cash margin, except where such margin is paid because of a failure by the Buyer to return certain collateral securities on the Repurchase Date (see 4(h)(i) of GMRA 2011).

Interest should be accrued on cash margin at a rate indexed to a reference rate agreed between the parties plus or minus an agreed spread. Common reference rates are overnight indexes such as EONIA for EUR, SONIA or RONIA for GBP and Fed Funds Effective for USD.

Interest accruing on cash margin up to but excluding the day on which margin called today is due to be delivered (the margin delivery date) should be included in the calculation of Net Exposure.

In the event of negative interest rates, the interest rate on cash margin should be set to zero.

13 How is “repricing” used to eliminate Net Exposures?

Net Exposures on sell/buy-backs and many repurchase agreements are not eliminated by means of margin. Instead, the transaction is terminated and simultaneously a new transaction is created for the remaining term in which either (1) the Purchase Price of the new transaction is set equal to the new Market Value of the securities or (2) the nominal value of the securities is changed to bring the Market Value at the new market price into line with the original Purchase Price (see 4(j) and 4(k) of the GMRA 2000 and 4(k) and 4(l) of the GMRA 2011). In method (1), the Repurchase Price of the terminated transaction (as of the termination date) and the Purchase Price of the new transaction should be set-off and paid net. In method (2), the amount of the collateral securities of the terminated transaction and the amount of the collateral securities of the new transaction should, if they are the same (see below), be set off and delivered net.

These methods are sometimes collectively called “repricing”. In the GMRA, however, the first method is called Repricing and the second method is called Adjustment.

Under the Repricing method, accrued repo interest is “cleaned up”, ie paid over to the Buyer by not including in the new Purchase Price.

Whereas margining is applied to transactions in aggregate, Repricing and Adjustment have to be applied to individual transactions. It is usual to reprice or adjust transactions in sequence, starting with the transaction with the highest Transaction Exposure, and continuing until Net Exposure is reduced to an acceptable level.

Under the GMRA, when a transaction is adjusted, the parties can agree to allow the substitution of the collateral.

The Repricing method is more common than the Adjustment method.

14 When is margin returned?

Cash margin and margin securities held by one party are not automatically returned to the other party unless the second party specifically requests the return of previous margin when making a margin call on the first party.

15 What happens if margin is not delivered?

Failure to deliver margin is an event of default. It is not however an automatic event of default, so the non-defaulting party is required to serve a Default Notice in order to trigger a default. If the non-defaulting party chooses not to serve a Default Notice, the defaulting party should endeavour to deliver margin at the earliest opportunity.

Delayed payments or deliveries of margin from one party should not be set off against margin calls made on the other party on subsequent days. To do so would encourage the unacceptable practice of trying to avoid a margin call by rolling that obligation forward to see if movements in market prices eliminate Transaction Exposures.

However, if a party making a margin call requests the return of margin securities delivered to the other party in response to a previous margin call, but the other party is unable to return those securities, despite its best endeavours because of circumstances beyond its control, the GMRA 2011 allows the undelivered margin securities to be substituted by means of payment of a Cash Equivalent Amount (see 4(h) of GMRA 2011).

16 Margin parameters to be agreed between parties before trading.

In order to reduce the scope for misunderstandings and margin disputes, it is best practice to agree the following parameters before trading:

- Price sources to be used to value collateral, either routinely or in the event of a margin dispute (section 4).
- Whether the middle or bid rate will be used in the valuation of collateral (section 4).
- In the case of sell/buy-backs, the rate at which manufactured payments will be reinvested until the Repurchase Date (section 4).
- Minimum transfer amounts (section 6).
- Security issues or classes of security that will be acceptable in margin transfers (section 8).
- Whether initial margin or haircuts will be applied to margin securities (section 9).
- Deadlines for delivering cash margin and margin securities (section 10).
- Interest rates on cash margin (section 12).
- In the case of sell/buy-backs, whether the Repricing or Adjustment method will be used instead of margining (section 13).

Annex: glossary of terms

Where terms are used in the GMRA, they are indicated by capital initials. Reference should always be made to the GMRA for the exact definition of these terms.

Adjustment	The method described in the <i>GMRA</i> to eliminate <i>Net Exposure</i> by terminating a repo and creating a Replacement Transaction for the same date with a new <i>Market Value</i> of collateral calculated at its current market price that is substantially the same as the unchanged <i>Purchase Price</i> (adjusted by an <i>initial margin</i> or <i>Haircut</i> , where one of these apply). In other words, the <i>Market Value</i> of the collateral is adjusted into line with the <i>Purchase Price</i> . The cashflows and collateral transfers of the terminated transaction and the Replacement Transaction are netted where possible, in effect, achieving a <i>Margin</i> transfer. Adjustment is an alternative to <i>margin maintenance</i> . It is designed for sell/buy-backs but can be applied to repurchase agreements.
Cash Equivalent Amount	This is a cash payment that can be called, under the terms of the <i>GMRA</i> 2011, by a party making a <i>Margin</i> call, which has requested the return of <i>Margin Securities</i> delivered to the other party in response to a previous <i>Margin</i> call, if the other party is unable to return those securities, despite its best endeavours, because of circumstances beyond its control. The Cash Equivalent Amount is intended to temporarily eliminate <i>Net Exposure</i> . See 4(h) of <i>GMRA</i> 2011.
GMRA	The Global Master Repurchase Agreement, which is the master agreement for repurchase agreements published by the ICMA. It can be extended to include sell/buy-backs by attaching the Buy/Sell-Back Annex. The latest edition was published in 2011 and superseded the 2000 edition, which itself superseded the 1995 edition.
Haircut	An agreed percentage discount applied to the <i>Market Value</i> of collateral to fix the <i>Purchase Price</i> at the start of a repo. A haircut is expressed as the percentage difference between <i>Market Value</i> and <i>Purchase Price</i> . In the <i>GMRA</i> 2011, a <i>Haircut</i> applied to the <i>Market Value</i> of collateral securities being delivered as <i>Margin</i> is called a <i>Margin Percentage</i> .
Independent Amount	The term for a <i>Haircut</i> used in ISDA documentation.
initial margin	An agreed premium applied to the <i>Purchase Price</i> to fix the <i>Market Value</i> of collateral at the start of a repo. An initial margin is expressed as the percentage of the <i>Market Value</i> compared to the <i>Purchase Price</i> . In the <i>GMRA</i> , an initial margin is called a <i>Margin Ratio</i> . An initial margin or <i>Margin Ratio</i> of 100% means no margin.
Margin	The term usually applied to a <i>margin maintenance</i> cash payment or transfer of collateral called and/or made in response to a <i>Margin</i> call to eliminate a <i>Net Exposure</i> .

margin maintenance	The right to call and the obligation to make cash payments or transfers of collateral in order to eliminate any <i>Net Exposures</i> that arise in a portfolio of repos between two parties.
Margin Percentage	The term used in the GMRA 2011 for a Haircut applied to the <i>Market Value</i> of collateral securities being delivered as <i>Margin</i> .
Margin Ratio	The term for an <i>initial margin</i> used in the GMRA.
margin threshold	The <i>Net Exposure</i> below which one party will not call a Margin from the other. Once the Net Exposure equals or exceeds this threshold, a Margin is called which is sufficient to eliminate the entire Net Exposure. For this reason, the threshold is often called a <i>minimum transfer amount</i> . Margin thresholds are usually agreed between parties and are therefore reciprocal. The margin threshold defines what is considered to be a material Net Exposure.
Market Value	The value of the collateral for the purposes of <i>margin maintenance</i> calculations. Under the GMRA, the calculation by default uses “a generally recognised source agreed to by the parties”.
minimum transfer amount	A more common name for a <i>margin threshold</i> . This term emphasises the point that, when <i>Net Exposure</i> reaches or breaches the margin threshold/minimum transfer amount, it should be eliminated.
Net Exposure	The credit exposure of one party to another on a portfolio of repos documented under the same master agreement. Under the <i>GMRA</i> , Net Exposure is the difference between (1) the aggregate of the <i>Transaction Exposures</i> of one party to the other plus the Net Income due to the first party but unpaid less the Net Margin held by the first party and (2) the aggregate of the <i>Transaction Exposures</i> of the other party to the first plus the Net Income due to the other party but unpaid less the Net Margin held by the other party. If (1) is greater than (2), the first party has a Net Exposure.
Purchase Price	The sum of money paid by the Buyer to the Seller at the start of a repo to buy the collateral. It is equal to the <i>Market Value</i> of the collateral less any <i>initial margin</i> or <i>Haircut</i> .
Repricing	The method described in the <i>GMRA</i> to eliminate <i>Net Exposure</i> by accelerating the Repurchase Date of a repo and entering into a Repriced Transaction for the same date with a new Purchase Price that is calculated by applying the current market price of the collateral to the original nominal value (adjusted by an <i>initial margin</i> or <i>Haircut</i> , where one of these apply). In other words, the Purchase Price is adjusted into line with the Market Value of the collateral. The cashflows and collateral transfers of the terminated transaction and the Repriced Transaction are netted where possible, in effect, achieving a Margin transfer. Repricing is an alternative to <i>margin maintenance</i> . It is designed for sell/buy-backs but can be applied to repurchase agreements. “Repricing” is commonly used as a generic term to describe both <i>Adjustment</i> and the above method.

Repurchase Price	The sum of money paid by the Seller to the Buyer at the end of a repo to buy back the collateral. It is equal to the <i>Purchase Price</i> plus a return for the use of the cash. This term also applies to the accrued value of the cash due to the Buyer on any day during the term of a repo, that is, the <i>Purchase Price</i> plus accrued return up to a particular date.
Transaction Exposure	This is the credit exposure of one party to another on an individual repo. Under the <i>GMRA</i> , Transaction Exposure is the difference between the <i>Repurchase Price</i> on the date of the calculation and the <i>Market Value</i> of the collateral on the same day.