



# Compliance

interpretation bulletin

# Conformité

bulletin d'interprétation

## Revision of C-41 dated June 15, 1992

TO: CHIEF FINANCIAL OFFICERS - IDA MEMBER FIRMS  
PANEL AUDITORS - IDA JURISDICTION FIRMS

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C-77

### *ACCOUNTING AND MARGIN FOR REPURCHASE AND RESALE AGREEMENTS*

This summary is designed to highlight those areas concerning the accounting and margin calculations for repurchase and resale agreements.

#### 1. **What is the purpose of repurchase agreement transactions?**

Repurchase agreements or "repos" are one of the principal financing techniques used to finance debt inventory positions that primary and secondary dealers purchase at auction and through other trading activities.

Repurchase agreements are two-legged transactions that involve the "sale" of a security at a specified amount with a simultaneous agreement to "repurchase" the security at the same amount plus finance costs at a specified future date. An interest rate is negotiated and interest expense is accrued by the seller-borrower over the life of the contract.

#### 2. **What is the purpose of reverse repurchase agreement transactions?**

In a reverse repurchase agreement or "reverse repo", the purchaser of securities agrees to resell the securities, usually within a specified time, at a specified amount. This transaction is the opposite of a repurchase transaction. Instead of assuming the perspective of a seller-borrower, it takes the view of a buyer-lender.

Banks and other financial institutions mainly lend money to bond dealers and receive as collateral Treasury Bills or other Government debt securities as an integral part of their secured lending or reverse repo activities. However, brokers may also enter into reverse repos to meet delivery for a firm's short positions or assist institutional clients finance their investments.

#### 3. **What is a "matched book" transaction and how does it involve "playing the spread"?**

Many dealers enter into simultaneous repurchase and reverse repurchase agreements with different counterparties, using the same quantity of the underlying securities for the same time period. This "matched-book" transaction is an effort by a dealer to profit by obtaining a positive interest spread - that is, a higher rate on the reverse repurchase transaction than the rate paid on the repurchase transaction.

To the extent that the dates of maturity do not match, sometimes referred to as a "miss-

matched book", then the risk in a changing interest rate environment is that the expiration of one side of the transaction will force a new spread which may be disadvantageous due to the impact of market conditions. This is in effect a speculative position on the funding rate of the underlying securities and as with any unhedged position, losses will be incurred if interest rates go against the speculator.

**4. What is the pricing and interest rate mechanism for Repos and Reverse Repos?**

The cash transferred in a repo (i.e. the "sale" price) is generally the current market value of the securities including accrued interest serving as collateral, which may be reduced by a discount or margin. Buyer-lenders often require margins to protect themselves from a decline in market value of the collateral during the term of the agreement, since the actual market value of the collateral may be less than the collateral value assigned to the securities at inception. The size of the margin depends on many factors, including credit risk of the customer and market risk of the security. Margins generally range from 1% to 5% of the security's market value.

When the "repurchase" price is the same as the "sale" price, the interest or repo rate on the repo is generally specified in the agreement and paid separately. In other agreements, the repurchase amount may be higher than the initial sale amount and have no stated rate of interest. The interest factor or yield in these instances is built into the repurchase amount. For maturities of one day, the repo rate is generally slightly lower than money market call loan rates offered by the chartered banks. Maturities may range from as long as 30 to 90 days, and in some cases longer. These transaction with a fixed maturity are referred to as "term repos" or "term reverse repos". When the maturity date of the transaction is designed to conform to the maturity of the underlying security, this is known as "repo-to-maturity".

**5. How should "repo" transactions be reported for regulatory accounting purposes?**

The terms of virtually all repo and reverse repo agreements do not transfer the risks and the rewards of ownership of future economic benefits of the underlying securities to the buyer-lender at the time of transfer. One of the terms is that the interest charged by the buyer-lender on this transaction is calculated on the amount of the cash proceeds remitted to the seller-borrower. It is not equivalent to the interest earned on the face value of the securities themselves during the period held by the buyer-lender. Any coupon interest earned during this period is forwarded to the transferor (seller-borrower) who is considered to be the owner of the securities.

Although the legal form of this transaction is a sale and repurchase, in substance, the seller-borrower borrows the proceeds of the sale from the buyer-lender for a brief period and in turn transfers an equivalent amount of securities (collateral) to the transferee. The transferor agrees at the time of transfer to repurchase the securities at a predetermined amount, not the market price. Had the market price been used and the gain or loss accrued to the transferee (buyer-lender), this would support the argument for treating the transfer as a sale. However, since this is not the case, repo and reverse repo transactions must be accounted for as financings.

For regulatory reporting purposes, a repurchase agreement is not accounted for as a sale, even though the confirmation sent to the contra-party will read that the transaction is a sale subject to an agreement to repurchase the same or substantially identical securities. Securities owned that are sold by the broker or dealer subject to a repurchase agreement are treated as collateral for financing transactions (similar to a call loan) and

not as sales of trading or inventory positions. Therefore, for securities owned, they should continue to be reported as inventory, of the firm at market value, with the amount of the repurchase agreement reflected as a liability. Financing costs should be accrued over the life of the contract.

A reverse repurchase agreement is the purchase of a security at a specified amount with an agreement to resell the same or substantially identical security at a definite amount at a specific future date. For financial reporting purposes, the transaction involving the same or substantially identical securities is treated as a receivable collateralized by the security purchased, not as part of the buyer's trading or inventory account. **See Appendix A for detailed examples of repurchase and reverse repurchase accounting entries and margin calculations.**

**6. What is the purpose for written agreements for Repos and Reverse Repos?**

Any legal recourse for a Repurchase or Reverse Repurchase financing transaction would be better defined if the transaction is supported by a written agreement. It is recommended that as a minimum, any such agreement contain provisions which allow parties to maintain the required margins and default remedies. These provisions in a Repo or Reverse Repo agreement provide protection to either party to act immediately in the event of adverse market movements for securities pledged as collateral and sets out an agreed upon course of action in the event of default by either party. The Capital Markets Committee of the IDA has developed a master industry Repurchase/Reverse Repurchase Transaction Agreement for Member firms to use. **See Appendix B for Master Repurchase/Reverse Repurchase Agreement sanctioned by the IDA.**

The master repurchase/reverse repurchase agreement further provides that all repo transactions with the same counterparty conducted under the auspices of the agreement constitute a single business and contractual relationship. This entitles the member firm and the counterparty to the repo transactions to net obligations of all such transactions against each other in the event of default by either party. For regulatory accounting and margining, this provision in the agreement would allow member firms to net the margin requirements and money balances for all outstanding repo and reverse repo transactions with the same counterparty.

**7. What are the risks and margin requirements for Repos and Reverse Repos?**

a) Market Risk and Inventory Margin

All securities are subject to market risk in that their market prices are subject to change. Security holdings of member firms are marked to market and unrealized gains and losses in respect to these holdings are accounted for in the profit and loss calculations of the firm. To the extent that a firm enters into a financing transaction by selling securities owned, subject to repurchase at a predetermined amount and not the prevailing market price in the future, does not absolve the firm from market risk as it remains the beneficial owner of the securities. Securities owned that are used as collateral in a repo financing transaction remain subject to market price changes and must continue to be accounted for as securities owned by the member and margined according to the rates prescribed in IDA Regulation 100.

In the case of securities borrowed and used as collateral in a repurchase transaction, the firm is not the beneficial owner of the securities and is thereby not subject to market risk for any principal position. The same applies to securities purchased subject to resale, or

reverse repos. On a trade date basis, the firm has no principal security position and is considered "flat" the security. As there is no principal security position subject to market risk, no inventory margin is required.

b) Term Risk and Margin

Term risk relates to the risk associated with a firm locking into a financing position at a fixed interest rate for a specified term. Entering into a financing transaction for a predetermined fixed period of time without the ability to adjust the financing interest rate during the term is analogous to owning or selling short an interest bearing security having the same term to maturity and being exposed to interest rate movements until maturity.

New IDA Regulation 100.17 effective January 1, 1994 deals with the concept of term risk for repurchase/reverse repurchase transactions by equating the term and amount of cash payable or receivable on the financing transaction to the margin otherwise required in owning or selling short Canadian sovereign debt of the same amount and maturity. Term risk margin applies only to financing transactions with a fixed interest rate and term greater than five business days. For example, if a financing transaction having a remaining term of 28 days and a repo balance payable in the amount of \$480,500, the term risk margin required for the repo would be calculated as \$369 [ $480,500 \times 1\% \times 28/365$ ].

In order to recognize the hedging of term risk, such as in a "matched book" repo/reverse repo transaction, term risk margin offsets for the repo balance payable and reverse repo balance receivable are calculated on a basis consistent with the margin offset rules allowed for long and short government debt securities having the same market value and margin rate category which allows the netting of the margin.

Margin calculated for term risk should be disclosed as part of margin required for securities owned and sold short on Schedule 2 of the JRFQ&R.

c) Counterparty Risk and Margin

Counterparty risk is the risk associated in the event that a borrower may not repay the loan. There is a risk that a buyer-lender who has sold or otherwise transferred the securities to third parties will not have sufficient resources at the maturity of the agreement to regain possession of the securities. There is also a risk that the seller-borrower will not have sufficient funds to repay the loan (repurchase the securities).

Amendments to Instructions to Schedules 1, 5 and 7 of Form #1 (JRFQ&R) effective October 1, 1994 sets out the counterparty margin requirements for all financing transactions. These margin rules differentiate between a repo transaction that is supported by a written repurchase/reverse repurchase agreement and one that is not. A written agreement must set out the legal remedies in the event of default and the right of margin maintenance should the price of the collateral increase or decrease thereby resulting in over/undercollateralization of the loan. This protection is recognized in the following table of counterparty margin rules for repo financing transactions:

<b>Written Repurchase/Reverse</b>	<b>NO Written Repurchase/Reverse Repurchase</b>
Repurchase Agreement	Agreement
	<b>Calendar days after regular settlement</b>

**(Note 1)**

Counterparty		30 days or less	Greater than 30 days
Acceptable Institution	No margin	Margin (unless confirmed within 15 business days from trade date in which no margin is required)	
Acceptable Counterparty	Market deficiency	Market (Note 2)	deficiency Margin
Regulated Entity	Market deficiency	Market (Note 2)	Margin
Other	Margin	Market (Note 2)	deficiency 200% of margin (to a maximum of the market value of the underlying securities)

Note 1: Regular settlement means the settlement dates or delivery date generally accepted according to industry practice for the relevant security in the market in which the transaction occurs. For the purposes of this regulation, extended settlement shall mean a transaction in respect of which the arranged settlement date is a date after regular settlement. Margin is calculated from the date of regular settlement.

Note 2: Any transaction which has not been confirmed by an Acceptable Counterparty or Regulated Entity within 15 business days of the trade shall be margined.

Questions concerning this notice may be directed to Louis P. Piergeti, Director of Compliance at (416) 364-6133.

**PLEASE DISTRIBUTE TO ALL INTERESTED PARTIES IN YOUR FIRM**

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**Example Repo Transactions (Attachment)**