## Appendix A - Example of Repurchase and Reverse Repurchase Transactions

## EXAMPLE REPO TRANSACTIONS

Example of a Trial Balance
as at February 29, 1992
dr (cr)

| Trade Date Basis |  |
| :--- | ---: |
| Securities purchased under agreements to resell | 78,276 |
| Securities owned, at market | 109,836 |
| Securities sold under repurchase agreements | $(109,629)$ |
| Securities sold, at market | $(26,042)$ |
| Payable to counterparty | $(52,138)$ |
| Trading profit and loss | $(304)$ |
| Long coupon income | $(208)$ |
| Short coupon expense | 140 |
| Reverse repo interest income | $(111)$ |
| Repo interest expense | 180 |
| Trial Balance | 0 |

February 14th transactions:
a. Buy 100M GOC 9.5\% 10/1/98 @ 105.571 (109.449 with accrued cpn interest of 3,878), s/d 2/21.

Month-end market @ 105.75.
b. Sell 75M GOC $8.5 \% 4 / 01 / 02 @ 100.750$ (104.220 with accrued cpn interest of 2,603), s/d 2/21.

Month-end market @ 100.55.
February 21st transactions:
c. $\quad$ Repo out 100M 9.5\% 10/01/98 for proceeds of original trade (109.449)
at a repo rate of $7.5 \%$ for $\mathbf{6 0}$ day term. Executed with an Acceptable Counterparty (AC).
d. $\quad$ Reverse in $75 \mathrm{M} 8.5 \%$ 4/01/02 for proceeds of original trade (104.22)
at reverse rate of $6.5 \%$. Roll overnight through month-end. Executed with a Regulated Entity.
February 25th transactions:
e. Buy 50M GOC $8.5 \%$ 4/01/02 @ 100.60 (104.276 with cpn), s/d 3/3.

Month-end market @ 100.55. (Trade date cover of short, 25M position.)
Month-end accruals and Mark to Market:

|  |  |  | Trade date |
| :---: | :---: | :---: | :---: |
| f. Realized and Unrealized Trading profits. | Proceeds (Cost) | Market | p\&1 |
| GOC 9.5\% 10/01/98 | $(105,571)$ | 105,750 | 179 |
| GOC 8.5\% 04/01/02 | 75,563 | $(75,413)$ | 150 |
|  | $(50,300)$ | 50,275 | (25) |
|  | $(80,308)$ | 80,612 | 304 |

g. Long coupon accrual. 100M 9.5\% 10/1/98 settled for 8 days.
$100,000 \times 9.5 \% \times 8 / 365=208$
h. Short coupon accrual. $75 \mathrm{M} 8.5 \% 4 / 01 / 02$ settled for 8 days.
$75,000 \times 8.5 \% \times 8 / 365=140$
i. Reverse repo interest income. Outstanding for 8 days.
$78,165 \times 6.5 \% \times 8 / 365=$
Reverse plus accrued =
78,276
j. Repo interest expense. Outstanding for 8 days.
$109,449 \times 7.5 \% \times 8 / 365=\quad 180$

Repo plus accrued $=\quad 109,629$

## SUMMARY T-ACCOUNT TRANSACTIONS AND MONTH-END BALANCES FEBRUARY 29, 1992

| Securities Purchased Under Agreement to Resell |  | Securities Sold Under Agreement To Repurchase |  | Payable to Counterparties |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| d 78,165 | 0 | 0 | 109,449 c | 0 | 50,300 e |
| i 111 | 0 | 0 | 180 j | 0 | 1,838 e |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 78,276 | 0 | 0 | 109,629 | 0 | 52,138 |
| Short Inventory Trade Date |  | Reverse Repo Interest Income |  | Repo Interest Expense |  |
|  |  |  |  |  |  |
| e 50,300 | 75,563 b | 0 | 111 i | j 180 | 0 |
| e 1,838 | 2,602 b | 0 | 0 | 0 | 0 |
| f $\quad 150$ | 25 f | 0 | 0 | 0 | 0 |
|  | 140 h | 0 | 0 | 0 | 0 |
|  |  | 0 | 0 | 0 | 0 |
| 0 | 26,042 | 0 | 111 | 180 | 0 |
| Short Coupon Interest Expense |  | Bank Account |  | Trading Profit and Loss |  |
| h 140 | 0 | b 78,165 | 109,449 a | f 25 | 179 f |
| 0 | 0 | c 109,449 | 78,165 d | 0 | 150 f |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 140 | 0 | 0 | 0 | 0 | 304 |

## REPO MARGIN CALCULATIONS

I. Inventory Margin (trade date)

|  | GOC 9.5\% | GOC 8.5\% |
| :--- | ---: | ---: |
|  | $10 / 01 / 98$ | $04 / 01 / 02$ |
| Position |  |  |
| Market Price | 100,000 | $\underline{(25,000)}$ |
|  | $\underline{105.75}$ | $\underline{100.55}$ |
| Margin Rate | 105,750 | $\underline{(25,138)}$ |
| Margin | $\underline{2 \%}$ | $\underline{1,006}$ |

II. Term Risk Margin

Term repo for 60 days
Pro-rate 52 days remaining at month-end to end of financing term/365 x repo balance liability x applicable margin rate $109,629 \times 1 \% \times 52 / 365=156$

Net margin offset is available to the extent the Dealer is short other government debt with a maturity less than one year.
III. 1 Counterparty Margin (assuming written repo agreement)
Counterparty
Repo balance payable

Market value plus coupon accrual of security received
$[75,000 \times 100.55 \%+(2,603+140)]$

VERSUS:

Market value plus coupon accrual
of security delivered
Reverse repo balance receivable Required margin

|  |  |
| :---: | :---: |
| Repo | Reverse Repo |
| Acceptable | Regulated Entity |
| 109,629 | N/A |
| N/A | 78,156 |
| 109,836 | N/A |
| N/A | 78,276 |
| 207 | 120 |

III. 2 Counterparty Margin (assuming NO written repo agreement - apply extended settlement date margin rule)

## Counterparty

Repo balance payable
Market value plus coupon accrual of security received $[75,000 \times 105.55 \%+(2,603+140)]$

VERSUS:

Market value plus coupon accrual of security delivered

+ Extended Settlment Margin (109,836 x 2\%)
Reverse repo balance receivable Required margin

| Repo |
| ---: |
| Acceptable |
| Counterparty term > |
| 30 days (margin) |
| 109,629 |
| N/A |
|  |
| 109,836 |
| 2,197 |
| $\mathrm{~N} / \mathrm{A}$ |
| 2,404 |


| Reverse Repo |
| ---: |
| Regulated Entity |
| term < 30 days |
| (market deficiency) |

$\mathrm{N} / \mathrm{A}$
78,156
$\mathrm{~N} / \mathrm{A}$
$\underline{78,276}$
120

