

# **European Repo Seminar**

## **Accounting Practices for Repo transactions**

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# Regulatory framework

- Massive regulatory efforts to harmonise accounting policies. However, in reality different accounting rules and disclosure information in banks' balance sheets.
- Balance sheet optimisation is a sensitive issue for big repo houses because of under scrutiny of senior management boards.
- Different methodologies (UK GAAP, US GAAP, etc and IFRS) co-exist.
- Presentation will focus on “International Financial Reporting Standards” –IFRS
- How does IFRS specifically impact Repos?
  - IAS 39 – Recognition and Measurement
  - IAS 32 – Disclosures & Presentation

## Back to Basics – A reverse repo & repo transactions

- Reverse repo transaction: **Securities** are borrowed/purchased from another party in exchange for **cash** subject to a simultaneous obligation to sell them in the future. The commercial substance means that the buyer of the securities extends a loan to the seller that is collateralised by the securities bought. The buyer will receive **interest** income.
- Repo transaction: **Securities** are transferred to another party in exchange for **cash** subject to a simultaneous agreement to buy them back in the future. In substance, the seller of the securities is taking a loan from the buyer (collateralised by the securities sold). The seller will pay **interest** expense.

Both types of transactions will have an impact on the asset purchased/sold; on the paid/received cash and finally on the paid or received repo interest on the security.

This impact will be reflected in two reporting tools: **Balance Sheet and P&L account.**

# Fundamental Accounting Definitions

- Under IFRS, Repos, Buy and Sell backs and SBL transactions are considered as **collateralised financing transactions**. The cash received or delivered in these transactions is reflected in the balance sheet with a corresponding receivable or obligation to return it. Cash is the key concept to understand how accounting procedures impact BS and P&L accounts.
  
- **IAS 39, § 51b**
  - a) **Recognition\* concept**: All financial assets and liabilities must be recognised on the balance sheet. Purchases and Sales must be accounted for using either the **trade date or settlement date accounting method**. Furthermore Assets and Liabilities must be initially measured at cost paid or received (Fair Value).
  
- **IAS39, § 36**
  - b) **Derecognition\*\* (Removal) concept** : Financial assets or liabilities **transferred** to another party with **attached risks and rewards of ownership** must be removed (derecognised) from the balance sheet. Financial assets are derecognised only in circumstances in which the buyer can freely sell or pledge the assets.

# Fundamental Accounting Definitions contd.

- **Time of recognition (IAS 39, rules § 15-37; application guidance § 34-50)**

Choice between the **Transaction date** and the **Settlement date** (IAS 39 §38).

Assets: either method may be used but must be applied consistently for all products (not only for Reverse repos).

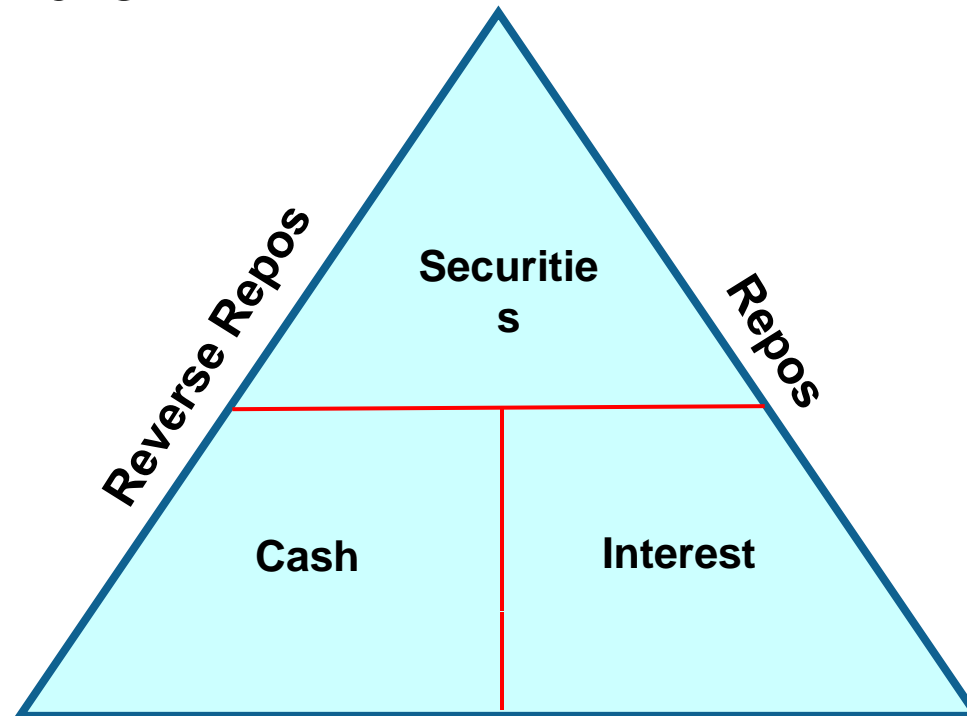
Liabilities: Transaction date only.

- **Measurement (IAS 39, § 43-47)**

- Choice between **Trading book** and **Banking book** measurement.

- Repo books can be accounted for at Fair Value (MTM) and/or at Amortised costs.

# Accounting Rationale



Recognition concept

Recognised vs. Derecognised

Measurement concept

Trading book vs. Banking book

Time of recognition

Trade date vs. Settlement date

Classification

Loans & Receivables	Fair Value through P or L	Held to Maturity	Available for Sale
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Valuation

Amortised Cost	Fair Value	Amortised Cost	Fair Value through Equity
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# IFRS implications (IAS 39, § 51 (a))

## – On balance sheet:

- Reverse repo: Bonds will be shown as an **asset (a receivable)** for the right to receive the cash lent in return for securities. The cash paid is recognised as “Deposits and advances to banks/customers”. **There is no movement of the securities on the balance sheet.**
- Repo: Bonds given as collateral remain on the BS (the seller retains the risks and rewards and recognises a liability to return the cash received, booked under “Due to Other Banks” or “Due to Customers”).

## – On P&L account (Repo Interests):

- Reverse repo: Interest income is recorded on the P&L under “Net interest income” on an accrual accounting basis.
- Repo: Interest expense is recorded on the P&L under “Net Interest expense” on an accrual accounting basis.

# IFRS Implications contd.

## P&L contd.

Transactions recorded in the Trading book” are measured at Fair Value while those recorded in the banking book are measured at amortised cost.

### ▪ Collateral movements (Margin Calls)

Any additional securities passed or received will be treated like those involved in the original transaction.

### ▪ Collateral substitutions

Collateral will continue with the original accounting treatment and will recognise the securities transferred as collateral.



# Accounting treatment for other collateralised financing forms

- **Open repos:** Accounting treatment is similar to repos with an agreed repurchase date.
- **Triparty repos:** Accounting treatment is similar to classic repos.
- **Forward repos:** The transaction until the repo trade is settled is qualified as a derivative, valued at Fair Value. It is then classified as a repo with the valuation depending on Banking or Trading books allocation.
- **Long-Term repos:** No IFRS ruling available but Fortis books them on the Trading book and measures it at Fair Value.
- **Equity repos:** No distinction between Fixed Income and Equity collateral as collateral is treated off balance sheet.

# Balance Sheet Optimisation

## – **Offsetting practices** (IFRS accounting rules in **IAS 32, § 42 – 50**).

These practices imply reducing the balance sheet total by netting assets and liabilities.

Under certain conditions, IFRS allows for offsetting and reporting the net amount in the balance sheet. There has to be a legally enforceable right to offset the amounts, and the intention must exist to settle on a net basis or simultaneously.

In practice, this means that in order to be allowed to offset, at least the counterparty, maturity date of the transactions and the currency must be the same. However, using different accounts for the settlement implies that there is no settlement on a net basis.

This can be achieved through the use of a CCP (LCH Clearnet, Eurex).

## – **Settlement date vs. Trade date accounting**

To neutralise balance sheet increases on reverse repos, the settlement date accounting report is preferred.

# ***APPENDIX***

# Key definitions

Definitions of IFRS notions can be found in IAS 39, §9

- **Fair Value:** The final amount for which an asset can be exchanged, or a liability settled.  
**Usually repo trades are recognised at the trade date.**
- **Amortised Cost:** The amount at which the financial asset or financial liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between the initial amount and the maturity amount, and minus any reduction (directly or through the use of an allowance account) for impairments .

**Usually repo trades are recognised at settlement date.** Reverse repos valued at amortised cost also have an additional split for those with an original maturity of maximum 3 months, since these advances are considered as "cash and cash equivalents".

**The following definitions are not recognised as IFRS rules:**

- **Trading book:** Includes all securities that a bank regularly buys and sells for trading purposes. These securities are valued at Fair Value (MTM).
- **Banking book:** Includes all securities that are not actively traded by a bank and are meant to be held until maturity. These securities are valued at amortised cost.

# Summary of Accounting Entries on Repos & Reverse Repos

	Repo Seller (Cash Borrower)	Repo Buyer (Cash Lender)
<b>Balance Sheet (security)</b>	<ul style="list-style-type: none"> <li>Securities ‘transferred out’ are retained on the balance sheet and the usual bond MTM is performed</li> </ul>	<ul style="list-style-type: none"> <li>Securities ‘transferred in’ are excluded (not recognised) from the balance sheet</li> <li>Any changes in MTM of security have no effect</li> </ul>
<b>Balance Sheet (cash)</b>	<ul style="list-style-type: none"> <li>Cash loan is entered as a Liability on the balance sheet</li> <li>This includes repo interest</li> </ul>	<ul style="list-style-type: none"> <li>Value of cash lent to the seller becomes a Receivable (asset)</li> </ul>
<b>P&amp;L (Banking book items)</b>	<ul style="list-style-type: none"> <li>Interest charged on “loan” is entered on an accrual basis as a “financing cost”</li> </ul>	<ul style="list-style-type: none"> <li>Interest earned on “loaned funds” is entered on an accrual basis during the term of the agreement</li> </ul>
<b>P&amp;L (Trading book items)</b>	<ul style="list-style-type: none"> <li>PV of future cash (out) flows is recalculated daily</li> <li>P&amp;L moves generated on a daily basis arising from a change in market value</li> </ul>	<ul style="list-style-type: none"> <li>PV of future cash (in) flows is recalculated daily</li> <li>P&amp;L moves generated on a daily basis arising from a change in market value</li> </ul>

**Example** (assuming the buyer is free to sell or pledge the securities)

TRANSFEROR'S Records			TRANSFeree'S Records (Bank)			
		<u>DR</u>	<u>CR</u>	<u>DR</u>	<u>CR</u>	
<i>At inception</i>	*Cash on hand	X		X		*Receivables under Reverse repo <i>At inception</i>
	*Repurchase agreement with banks		X		X	*Cash on hand
<i>During the Repo's transaction life</i>	*Interest expense	X		X		*Due from Banks <i>During the Repo's</i>
	*Repurchase agreement with banks		X		X	*Interest income <i>transaction life</i>
<i>Return of securities</i>	*Repurchase agreement with banks	X		X		*Cash on hand <i>Return of securities</i>
	*Cash on hand		X		X	*Due from Banks

# Banking Book vs. Trading Book

	Banking Book	Trading Book
Determinant	<ul style="list-style-type: none"> <li>▪ Loan or Long-Term investment</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Trading for Short-Term profit</b></li> <li>▪ Deal is with a financial institution</li> <li>▪ Exposure is marked-to-market daily</li> <li>▪ Margin calls are made</li> </ul>
Treatment	<ul style="list-style-type: none"> <li>▪ As for a Loan measured on an accrued basis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Marked-to-Market through Profit and Loss</li> </ul>
Advantages / Disadvantages	<ul style="list-style-type: none"> <li>▪ Capital requirement could be significant depending on counterparty risk</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced capital requirement</li> <li>▪ Allows repo market to grow without capital adequacy restraints</li> </ul>

Each bank's dealer will book the repo transaction according to the scope of the transaction given that multiple repo accounts co-exist and are measured according to Fair Value (MTM) and Amortised cost (accrued interest) methods.

# IFRS Financial Classifications

Financial institutions will present repo transactions in different ways. Either on the balance sheet or in a note to the financial statements.

Financial instruments under the scope of **IAS 39, § 9** are classified under the following categories:

- A) “Financial assets at Fair Value through profit and loss”; with two sub-categories:
  - 1. Trading (valid for both assets & liabilities)
  - 2. Fair Value through P&L (FV option possible for both assets and liabilities)
  
- B) “Loans and Receivables”
  
- C) “Held to maturity investments”
  
- D) “Available for sale”

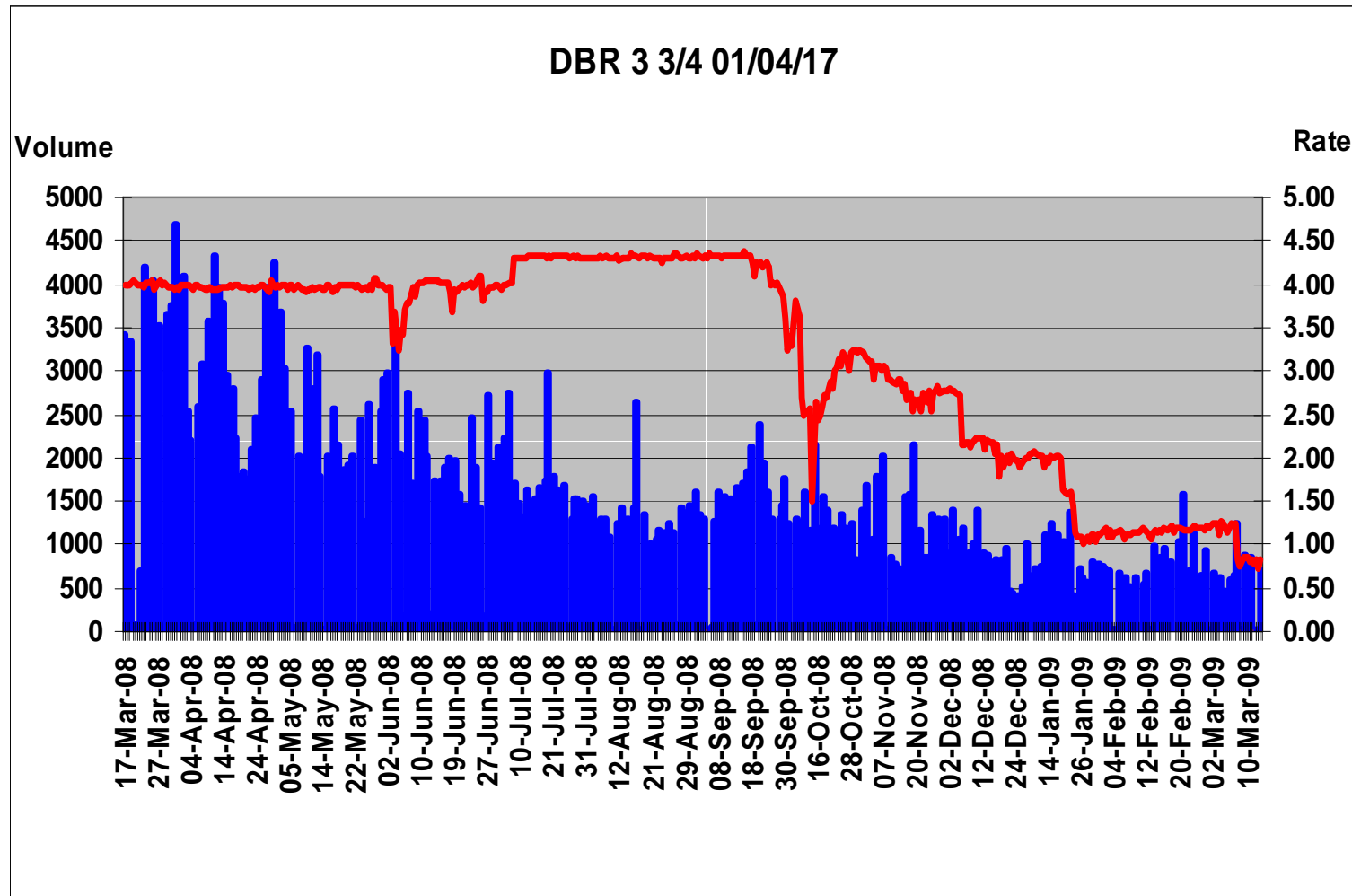


***PRICING SOURCES***  
***Vs.***  
***METHODOLOGIES***

OIS		GERMAN GC			FIXED			SPREAD			FLOATING			SPREAD	
EUR	TERM				BID	ASK	Last Traded	BID	ASK	Last Traded	BID	ASK	Last Traded	bp	
					0	0								0	
0.850	O/N	12-Mar	13-Mar-09		0.85	0.80	0.800	0.0	-5.0		0.0	-5.0		5.0	5.0
0.850	T/N	13-Mar	16-Mar-09		0.85	0.80	0.800	0.0	-5.0		0.0	-5.0		5.0	5.0
0.850	S/N	16-Mar	17-Mar-09		0.85	0.80		0.0	-5.0		0.0	-5.0		5.0	5.0
0.850	1W	16-Mar	23-Mar-09		0.85	0.80		0.0	-5.0		0.0	-5.0		5.0	5.0
0.854	2W	16-Mar	30-Mar-09		0.85	0.80		0.0	-5.0		0.0	-5.0		5.0	5.0
0.821	1M	16-Mar	16-Apr-09	0.0	0.85	0.80		3.0	-2.0		3.0	-2.0		5.0	5.0
0.774	2M	16-Mar	18-May-09	0.1	0.82	0.77		5.0	0.0		5.1	0.1		5.0	5.0
0.753	3M	16-Mar	16-Jun-09	0.1	0.80	0.75	0.790	5.0	0.0		5.1	0.1		5.0	5.0
0.743	4M	16-Mar	16-Jul-09	0.1	0.79	0.74		5.0	0.0		5.1	0.1		5.0	5.0
0.739	5M	16-Mar	17-Aug-09	0.1	0.79	0.74		5.0	0.0		5.1	0.1		5.0	5.0
0.747	6M	16-Mar	16-Sep-09	0.1	0.80	0.75		5.0	0.0		5.1	0.1		5.0	5.0
0.748	7M	16-Mar	16-Oct-09	0.2	0.80	0.75		5.0	0.0		5.2	0.2		5.0	5.0
0.768	8M	16-Mar	16-Nov-09	0.2	0.82	0.77		5.0	0.0		5.2	0.2		5.0	5.0
0.784	9M	16-Mar	16-Dec-09	0.2	0.83	0.78		5.0	0.0		5.2	0.2		5.0	5.0
0.803	10M	16-Mar	18-Jan-10	0.3	0.85	0.80		5.0	0.0		5.3	0.3		5.0	5.0
0.821	11M	16-Mar	16-Feb-10	0.3	0.87	0.82		5.0	0.0		5.3	0.3		5.0	5.0
0.841	12M	16-Mar	16-Mar-10	0.4	0.89	0.84		5.0	0.0		5.4	0.4		5.0	5.0

Forward / Special Period	+	START	END	COMPOUND	BID	ASK	Last Traded	BID	ASK	Last Traded	BID	ASK	Last Traded	SPREAD
0.8500	2	16-Mar	20-Mar-09	0.0	0.85	0.80		0.0	-5.0		0.0	-5.0		5.0
0.7516	2	16-Mar	20-Jun-09	0.1	0.80	0.75		5.0	0.0		5.1	0.1		5.0
0.7466	2	16-Mar	20-Sep-09	0.1	0.80	0.75		5.0	0.0		5.1	0.1		5.0
0.747		20-Mar	20-Jun-09	0.1	0.80	0.75		5.0	0.0		5.1	0.1		5.0
0.740		20-Jun	20-Sep-09	0.1	0.79	0.74		5.0	0.0		5.1	0.1		5.0
0.864		20-Sep	20-Dec-09	0.1	0.91	0.86		5.0	0.0		5.1	0.1		5.0

## S/N Traded Repo volume on ECN's



**During current crisis, applying a fair value valuation for repo transactions and repo rates is not always easy as there is not an official source of pricing.**

C-20th June 2008 Traded Repo volume on ECN's

