

INTERNATIONAL SECURITIES MARKET ASSOCIATION

Minutes of the European repo council's general meeting held on March 17, 2005 in Zurich

Location: Marriott Zürich Hotel

Neumühlequai 42 CH-8035 Zurich

Time: 14.30 - 17.00

The following members of the European repo committee were present:

Mr. Ulf Bacher, Dresdner Bank AG, Frankfurt

Mr. Jean Begonin, Credit Suisse First Boston (Europe) Limited, London

Mr. Stefano Bellani, J. P. Morgan Securities Ltd., London

Mr. Francesco Cafagna, Goldman Sachs International, London

Mr. Eduard Cia, Bayerische Hypo- und Vereinsbank AG, Munich

Mr. Cameron Dunn, Merrill Lynch International (MLI), London

Mr. Godfried De Vidts (Chairman), Fortis Bank, Brussels

Ms. Bassma El-Amir, Deutsche Bank AG, London branch

Mr. Johan Evenepoel, Dexia Bank Belgium NV/AS, Brussels

Mr. Grigorios Markouizos, Citigroup Global Markets Ltd., London

Mr. Andrea Masciovecchio, Banca Intesa S.p.A., Milan

Mr. Edward McAleer, Morgan Stanley & Co. International Ltd., London

Mr. David McClean, Nomura International plc, London

Mr. Michael Murray, Confederación Española de Cajas de Ahorros (CECA), Madrid

Mr. Simon Parkins, BNP Paribas, London

Mr. Ashraf Rizvi, UBS AG, London branch

Mr. Nicolas Truong, Société Générale S.A., Paris

Apologies:

 $Ms.\ Clarice\ Calderoni,\ UniCredit\ Banca\ Mobiliare\ S.p.A.,\ Milan$

Mr. Oscar Huettner, Barclays Capital Securities Limited, London

Also present:

Mr. Stuart Berry, Bank of England, London

Mr. Richard Comotto, University of Reading, Reading

Mr. John Edwards, ICAP, London

Mr. Olivier Grimonpont, Euroclear, Brussels

Mr. Thomas Jordan, Swiss National Bank, Zurich¹

Mr. Klaus Löber, European Central Bank, Frankfurt

Mr. Andreas Wolf, Clearstream, Frankfurt

Mr. John Langton, Chief Executive and Secretary General, ISMA, Zurich ²

Ms. Barbara Pung, Associate Counsel, ISMA, Zurich

The following member firms were represented at the meeting:

ABN AMRO Bank N.V., Amsterdam

Banca Intesa S.p.A., Milan

Banco Bilbao Vizcaya Argentaria, S.A., Madrid

Banco Santander Central Hispano S.A., Madrid

Bank Austria Creditanstalt AG, Vienna

Banque et Caisse d'Epargne de l'Etat, Luxembourg

Bayerische Hypo- und Vereinsbank AG, Munich

BNP Paribas. Paris

Caja de Madrid, Madrid

Citigroup Global Markets Limited, London

Commerzbank AG, Frankfurt

Confederación Española de Cajas de Ahorros (CECA), Madrid

Credit Suisse First Boston (Europe) Limited, London

Daiwa Securities SMBC Europe Limited, London

Deutsche Bank AG, London branch

Dexia Bank Belgium NV/SA, Brussels

Dresdner Bank AG, Frankfurt

DZ Bank AG Deutsche Zentral-Genossenschaftsbank, Frankfurt

Fortis Bank, Brussels

GESMOSA-GBI, Agencia de Valores, S.A., Madrid

Goldman Sachs International, London

HBOS Treasury Services plc, London

J.P. Morgan Securities Ltd., London

KBC Bank N.V., Brussels

Landesbank Baden-Württemberg, Stuttgart

Lehman Brothers International (Europe), London

Merrill Lynch International, London

Morgan Stanley & Co. International Ltd., London

Nomura International plc, London

Société Générale S.A., Paris

The Royal Bank of Scotland plc, London

 $^{\rm 1}$ present only for the presentation under agenda item 17 $^{\rm 2}$ present only for agenda item 1

UBS AG, London branch, London WestLB AG, Dusseldorf

The following member firms were not represented at the meeting:

Aurel Leven Securities, Paris

Banca Caboto S.p.A., Milan

Banca d'Intermediazione Mobiliare IMI S.p.A., Milan

Banca Monte dei Paschi di Siena S.p.A., Milan

Banca Nazionale del Lavoro S.p.A., Rome

Bank Julius Bär & Co. AG, Zurich

Barclays Capital Securities Limited, London

Bayerische Landesbank Girozentrale, Munich

Bear, Stearns International Limited, London

CALYON, Paris

Canadian Imperial Bank of Commerce (CIBC), London branch

CCF, Paris

Danske Bank A/S, Copenhagen

HSBC Bank plc, London

ING Bank N.V., Amsterdam

ING Belgium SA/NV, Brussels

IXIS Corporate & Investment Bank, Paris

Kredietbank S.A. Luxembourgeoise, Luxembourg

Lloyds TSB Bank plc, London

Man Financial Limited, London

Mitsubishi Securities International plc, London

Mizuho International PLC, London

MPS Finance Banca Mobiliare S.p.A., Siena

NIB Capital Bank N.V., The Hague

Raiffeisen Zentralbank Oesterreich AG, Vienna

Royal Bank of Canada Europe Limited, London

UniCredit Banca Mobiliare S.p.A., Milan

1. Opening of the meeting by the chairman of the European repo committee (ERC committee)

The chairman and ISMA's chief executive first welcome the council members, observers and guests and thank the Swiss National Bank for hosting today's meeting.

Subsequently, the chairman updates the council on the issues the ERC committee discussed during the recent months and which include:

- proposed changes to the collateral framework of the European Central Bank, the Bank of England and the Swiss National Bank;
- discussions within the Committee on Payment and Settlement Systems (CPSS) concerning crossborder collateralisation;

- the effects of the changes in the Greek settlement system;
- the classification of Central Counterparties (CCPs);
- the new recommendations for CCPs by the International Organisation of Securities Commissions (IOSCO) and the CPSS;
- the Securities Operations Committee's project aimed at reducing operational risk;
- the promotion of the use of the GMRA in Russia;
- discussions with Monte Titoli concerning improvements to be made to the new settlement system Express II;
- the 4th professional ISMA/ACI repo seminar, which will in part focus on the use of triparty repos and which will be held on November 15/16, 2005 in Milan.

2. Approval of the minutes of the ERC general meeting held on October 21, 2004 and dated November 10, 2004

The minutes of the ERC general meeting held in London on October 21, 2004 and dated November 10, 2004 are unanimously approved.

3. Euribor/Eurepo fixing - Eonia Swap Index Project

The chairman gives a slide presentation on Euribor/Eurepo fixing – Eonia Swap Index Project.

A copy of the chairman's presentation is attached hereto as attachment 1.

4. Update on GMRA related and other matters

Ms. Pung provides the council with an update report in relation to the following matters:

4.1 Legal opinions

4.1.1 Update legal opinions being obtained jointly by ISMA and TBMA

ISMA is currently obtaining update legal opinions on the GMRA in 36 jurisdictions. In 18 jurisdictions, i.e. Austria, Belgium, Canada, England, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, Poland, Portugal, Spain, Switzerland and the United States ISMA is conducting this exercise jointly with TBMA (attachment 2: slide presentation /

slide 1: list showing all legal opinions obtained jointly by ISMA and TBMA; slide 2: list showing all legal opinions obtained by ISMA alone).

As in previous years, ISMA intends to publish the update opinions again by the end of March 2005.

4.1.2 <u>Update legal opinions being obtained by ISMA alone</u>

For Abu Dhabi, Australia, Bahamas, Bahrain, Bermuda, British Virgin Islands, Cayman Islands, Denmark, Hong Kong, Kuwait, the Netherlands Antilles, New Zealand, Saudi Arabia, Singapore, South Africa, Sweden, Thailand and Turkey legal opinions are being updated by ISMA alone.

Update opinions for these countries are intended to be published by the end of March 2005 as well.

4.1.3 New legal opinions being sought jointly by ISMA and TBMA

Jointly with TBMA, ISMA intends to publish new legal opinions for Hungary and Norway together with the update legal opinions by the end of March 2005.

Initial drafts of a new opinion for both Cyprus as well as the People's Republic of China were recently submitted to the relevant working group of the ISMA/TBMA Joint Opinion Committee (JOC) for review (attachment 2: slide presentation / slide 1).

4.1.4 New legal opinions sought by ISMA alone

ISMA recently received initial draft opinions for Estonia, Latvia, Lithuania, Malta, and Scotland, which are currently being reviewed. For Brazil, the Philippines, South Korea and Taiwan ISMA instructed local counsel to prepare a draft opinion for ISMA's review (attachment 2: slide presentation / slide 2).

TBMA have yet to confirm whether they will join ISMA in seeking opinions for each of these jurisdictions.

4.1.5 <u>Scope of the update and new opinions: Integration of core provision opinions (CPOs)</u>

Similar to the Financial Services Authority (FSA) in the UK, the BaFin (the German Financial Supervisory Authority) requires the provision of netting opinions for the GMRA. Together with each netting opinion it also requires the provision of a CPO confirming that the conclusions reached in the netting opinion for the relevant jurisdiction would not be affected by the inclusion of alterations to certain provisions of the GMRA.

In December 2004 ISMA agreed with the Association of German Banks that the CPOs obtained by the Association for its members in 2004 in Belgium, Canada, Cayman Islands, France, Germany, England, Ireland, Japan,

Luxembourg, the Netherlands, Singapore, Switzerland and the United States will be integrated into ISMA's 2005 update opinions.

In the context of this agreement, ISMA and the Association of German Banks also agreed that the Association shall bear the fees billed by local counsel in the 13 jurisdictions listed above for updating the CPO sections in 2005 and thereafter one quarter of the fees billed for the subsequent annual updates.

For the sake of uniformity and consistency, ISMA decided to incorporate CPOs at its own cost into all the other opinions on the GMRA currently being updated or sought for the first time.

4.1.6 New opinions for Croatia, the Czech Republic, Slovakia, Slovenia and Mexico?

In relation to Croatia, the Czech Republic, Slovakia and Slovenia, ISMA is monitoring legal developments with a view to ascertaining at what stage a clean opinion can reasonably be expected for each of these jurisdictions.

In relation to Mexico, ISMA is currently clarifying whether a clean opinion for this jurisdiction can be obtained. In the affirmative, and subject to an acceptable cost cap, ISMA will consider seeking an opinion for Mexico (attachment 2: slide presentation / slide 3 list of the jurisdictions where the enforceability of the GMRA is being monitored).

4.1.7 Types of parties to the GMRA covered by the legal opinions

At the request of the European repo committee ISMA instructed Freshfields to clarify which types of parties are currently covered by the legal opinions for each of the 48 jurisdictions where ISMA already has obtained legal opinions to date or is currently obtaining new opinions and to provide a cost estimate for the addition of additional types of parties (such as insurance companies) to the opinions in the context of the 2006 updating exercise. Freshfields is about to finalise its review shortly.

Ms. Pung will discuss Freshfields' findings internally and with the ERC committee.

Ms. Pung notes that the extension of the opinions to cover additional parties (such as insurance companies, hedge funds and mutual funds) will result in substantial additional costs.

4.2 Annexes to the GMRA

In August 2004 the Australian Financial Markets Association (AFMA) incorporated into its "Guide to OTC Documents" an AFMA annex in relation to the 2000 version of the GMRA. ISMA will make the AFMA annex available to its members shortly.

From AFMA, ISMA understands that the Reserve Bank of Australia plans to publish an updated RITS annex for use with the GMRA 2000 in the near future.

4.3 Promotion of the GMRA

ISMA recently made a Russian translation available to the Russian National Securities Market Association (NSMA) in order to assist local market participants and regulators to familiarise themselves with the GMRA.

In response to a delegate's question, Ms. Pung confirms that, for the time being, ISMA continues to seek opinions covering both the GMRA 1995 as well as the GMRA 2000.

5. <u>Elections</u>

The chairman introduces the following 22 candidates standing for election at today's meeting to fill the 19 vacancies on the ERC committee:

Ulf Bacher Dresdner Bank AG, Frankfurt

Anthony Baldwin Daiwa Securities SMBC Europe

Limited, London

Jean Marie Begonin Credit Suisse First Boston (Europe)

Limited, London

Stefano Bellani J. P. Morgan Securities Ltd., London

Sylvain Bojic Société Générale S.A., Paris

Francesco Cafagna Goldman Sachs International,

London

Michael Chadwick HBOS Treasury Services plc,

London

Eduard Cia Bayerische Hypo- und Vereinsbank

AG. Munich

Jaime Comunión Artieda Caja de Madrid, Madrid

Godfried De Vidts Fortis Bank, Brussels

Edward Donald ABN AMRO Bank N.V., London

branch

Cameron Dunn Merrill Lynch International (MLI),

London

Dominick Emmanuelli Barclays Capital Securities Ltd.,

London

Johan Evenepoel Dexia Bank Belgium NV/SA,

Brussels

Andrea Masciovecchio Banca Intesa S.p.A., Milan

Grigorios Markouizos Citigroup Global Markets Limited,

London

Edward McAleer Morgan Stanley & Co. International

Ltd., London

Michael Murray Confederación Española de Cajas de

Ahorros (CECA), Madrid

David McClean Nomura International plc, London

David Nicholls Deutsche Bank AG, London branch

Simon Parkins BNP Paribas, London branch

Ashraf Rizvi UBS AG, London branch

Subsequently, Ms. Pung explains the election procedure pursuant to ISMA rule 1014, and refers the council to the detailed instructions on the ballot form, which was sent to each council member on February 18, 2005.

Thereafter, the ERC council member representatives attending the meeting cast their votes by using the ballot form, which is again distributed at the meeting.

6. <u>International repo committee recommendation regarding fails in negative interest rate repos</u>

With reference to the new recommendation regarding fails in negative interest rate repos incorporated in subsection G of section 1000 of the January 2005 edition of ISMA's rule book, which was sent to all ISMA members with a respective circular on December 10, 2004 and became effective on January 1, 2005, Mr. Ulf Bacher, Dresdner Bank AG gives a slide presentation entitled: "Management of fails in negative interest rate repos".

A copy of Mr. Bacher's presentation is attached hereto as attachment 3.

7. Recommendation for the fixing of rates for Eonia based repos

Mr. Parkins, BNP Paribas gives a slide presentation on the fixing of rates for Eonia based repos.

A copy of Mr. Parkins' presentation is attached hereto as attachment 4.

8. Overnight and intra-day borrowing: Evolution of securities lending and borrowing infrastructure

Mr. Grimonpont, Euroclear gives a slide presentation on overnight and intraday borrowing entitled: "Improved Settlement and Securities Lending and Borrowing infrastructure".

A copy of Mr. Grimonpont's presentation is attached hereto as attachment 5.

In addition to the items scheduled for discussion at today's meeting, and upon the chairman's request, Mr. Wolf of Clearstream gives a slide presentation entitled: "Settlement Initiatives in Europe".

A copy of Mr. Wolf's presentation is attached hereto as attachment 6.

9. Reform of the Bank of England's operations in the sterling money markets

Mr. Berry, Bank of England gives a slide presentation entitled: "Reform of the Bank of England's Operations in the Sterling Money Markets".

A copy of Mr. Berry's presentation is attached hereto as attachment 7.

10. Progress in the clearing and settlement project

Mr. Löber, European Central Bank, Directorate General Legal Services gives a slide presentation entitled: "Progress of the EU clearing and settlement project (CESAME, legal, tax)".

A copy of Mr. Löber's presentation is attached hereto as attachment 8.

11. Results of ISMA's 8th semi-annual European repo market survey of December 2004

Mr. Comotto, ISMA Centre, University of Reading gives a slide presentation on the results of ISMA's 8th semi-annual European repo market survey of December 2004.

A copy of Mr. Comotto's presentation is attached hereto as attachment 9.

12. <u>Comparative analysis of the ISMA European repo survey and the ECB money market data.</u>

Mr. Evenepoel, Dexia Bank Belgium NV/AS gives a slide presentation entitled: "Comparative analysis of the ISMA European repo survey and the ECB money market data".

A copy of Mr. Evenepoel's presentation is attached hereto as attachment 10.

13. Results of the elections to the European repo committee

Based on the ballot held, the chairman announces the results of the elections to and the new composition of the ERC committee as follows:

Ulf Bacher Dresdner Bank AG, Frankfurt

Jean Marie Begonin Credit Suisse First Boston (Europe)

Limited, London

Stefano Bellani J. P. Morgan Securities Ltd., London

Francesco Cafagna Goldman Sachs International, London

Eduard Cia Bayerische Hypo- und Vereinsbank AG,

Munich

Jaime Comunión Artieda Caja de Madrid, Madrid

Godfried De Vidts Fortis Bank, Brussels

Edward Donald ABN AMRO Bank N.V., London branch

Cameron Dunn Merrill Lynch International (MLI), London

Dominick Emmanuelli Barclays Capital Securities Ltd., London

Johan Evenepoel Dexia Bank Belgium NV/SA, Brussels

Andrea Masciovecchio Banca Intesa S.p.A., Milan

Grigorios Markouizos Citigroup Global Markets Limited, London

Edward McAleer Morgan Stanley & Co. International Ltd.,

London

Michael Murray Confederación Española de Cajas de

Ahorros (CECA), Madrid

David McClean Nomura International plc, London

David Nicholls Deutsche Bank AG, London branch

Simon Parkins BNP Paribas, London branch

Ashraf Rizvi UBS AG, London branch

The term of office of each of the above ERC committee members will expire at the annual general meeting of the ERC council to be held in spring 2006.

14. Access to Central Bank liquidity

Mr. Jordan, Swiss National Bank gives a slide presentation on access to Central Bank liquidity.

A copy of Mr. Jordan's presentation is attached hereto as attachment 11.

15. <u>ICAP Electronic Brokering - "Brokertec Repo"</u>

Mr. Edwards, ICAP gives a slide presentation on ICAP Electronic Brokering – "Brokertec Repo".

A copy of Mr. Edward's presentation is attached hereto as attachment 12.

16. Next meeting

The next general meeting of the European repo council will be held on September 21, 2005 in Luxembourg. The meeting will be hosted by Clearstream.

The exact venue will be confirmed in due course.

April 5, 2005 BP/ys

The Chairman: Godfried De Vidts

The Secretary: Barbara Pung

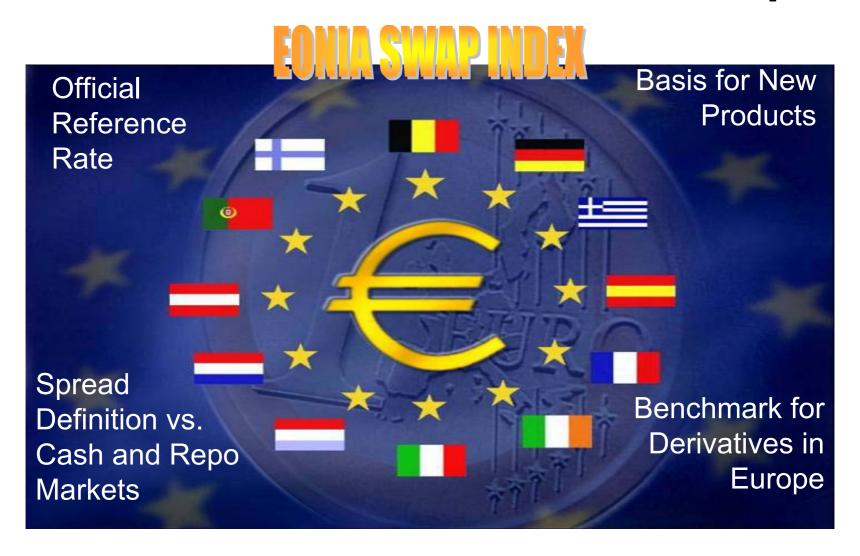


European Repo Council March 17, 2005 Zurich

Recent market events/issues

- ECB-BOE-SNB collateral framework
- Cross border collateral: CPSS discussions
- Greek issue of fines for fails
- CCP discussions re classification
- Securities Operations Committee: reducing operational risk
- Repo developments in Russia : contact established
- Italy Express II: ERC involved
- 4th professional repo market course : Milan with focus on use of triparty
- Next meeting: September 21 st Luxembourg

EURIBOR - ACI Derivatives Group



Specification EONIA SWAP INDEX

- Mid Market Rate of EONIA SWAP quotations from prime banks
- Fixed daily at 16.30 CET (clear time gap to EURIBOR + EUREPO)
- Index will be quoted for spot value (T+2) on an act/360 day count convention and is displayed on three decimal places
- Planned maturities are 1, 2 and 3 weeks as well as 1 to 12 months
- Named "INDEX" rather than "fixing"
- Procedures will be in line with the existing fixings for EURIBOR + EUREPO

Advantages of an EONIA SWAP INDEX

Development of new markets and products

- Reference rate for long term swaps
- Creating a forward starting OIS market (FRA like)
- Creating and adding volume to basis swap markets

Benchmarking Tool

- > Benchmark for derivative markets
- > Creating spread definitions vs. EURIBOR and EUREPO indices

Controlling Tool

- > Valuation basis for EONIA Swaps
- > Providing accepted official data for market conformity checks

Calculation of EONIA SWAP INDEX 1

• At 16:30 (CET) the EONIA SWAP INDEX will be fixed by 'MONEYLINE TELERATE'

Contribution of data

- ➢ Between 16:10 and 16:20 on each Target Day every panel bank will be required to input their data to MONEYLINE TELERATE
- > From 16:20 to 16:30 at the latest panel banks can correct their quotations
- ➤ The index will be calculated eliminating the highest and lowest 15% of all the quotes collected

Calculation of EONIA SWAP INDEX 2

Fallback rules

- ➤ If one or more panel bank does not provide its data until 16:30 after a reminder, the calculation will be done without the missing data
- > If more than 50% of panel banks fail to provide their data,
 - the calculation is delayed at latest to 16:40 or until 50% have quoted
 - at 16:40 the calculation will start if 10 or more panel banks have provided their data

The panel of the EONIA SWAP INDEX

The number of panel banks will be both

- > High enough to reflect faithfully the diversity of the EONIA Swap market
- Low enough to ensure an efficient manageable panel

Criteria to qualify

- > Active player in the Euro derivatives markets
- > Be able to handle good volumes in EONIA Swaps
- ➤ Panel banks must be first class credit standing, high ethical standards and enjoying an excellent reputation
- > Applying banks must disclose all relevant information

Panel banks will be periodically reviewed by the Steering Committee to ensure that the selected panel always reflects EONIA Swap market activities.

Obligations of panel banks

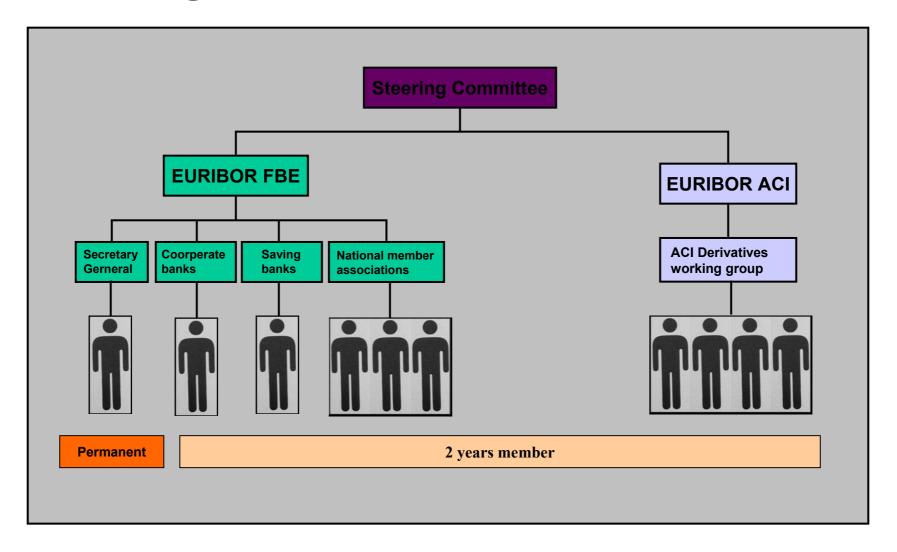
Panel banks must quote EONIA SWAP INDEX

- ➤ For the complete range of maturities as indicated by the Steering Committee
- > On time as indicated by the screen service provider
- > Daily except on Saturdays, Sundays and Target holidays
- > Accurately with three decimal places

Additional Obligations

- ➤ Take all other measures that may be required by Steering Committee or the screen service provider in the future
- > Subject themselves unconditionally to the 'Code of Conduct'
- Promote the index as much as possible and refrain from any activity damaging EONIA SWAP INDEX

Steering Committee



Tasks and rights of the Steering Committee

Tasks

- > Handle new applications for a seat on the panel
- > Review periodically whether the number of panel banks is still appropriate with the market developments
- > Control whether the panel banks fulfill their obligations
- > Indicating the maturities for which EONIA SWAP INDEX must be quoted

Rights

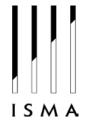
- ➤ Request panel banks to demonstrate and prove that their market activities still qualified them for a seat on the panel
- > Penalize panel banks if they ignore warnings of the committee
- ➤ May remove panel banks from the panel if the criteria are not longer met

Before the Steering Committee takes a decision, it gives the parties concerned the opportunity to expose their opinion.

Current status of the project

- FBE decision on Sep17, 2004 accepting the proposal of Euribor-ACI to implement an Eonia Swap Index
- Business plan was developed
- Website 'www.eoniaswap.org' is currently constructed
- Euribor-ACI Derivatives group has submitted their Panel suggestion to the FBE

Conference June 30 th, 2005 in Frankfurt



Attachment 2 ERC General Meeting March 17, 2005

Slide 1

European Repo Council General Meeting, March 17, 2005

GMRA

1. List of legal opinions being obtained / sought jointly by ISMA and TBMA

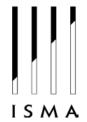
Update legal opinions

1.	Austria	10.	Italy
2.	Belgium	11.	Japan
3.	Canada	12.	Luxembourg
4.	England	13.	Netherlands
5.	Finland	14.	Poland
6.	France	15.	Portugal
7.	Germany	16.	Spain
8.	Greece	17.	Switzerland
9.	Ireland	18.	USA

New legal opinions

- 1. Greece
- 2. Cyprus
- 3. Hungary
- 4. Norway





European Repo Council General Meeting, March 17, 2005

GMRA

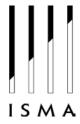
2. List of legal opinions being obtained by ISMA on its own

Update legal opinions

10. Kuwait
11. Netherlands Antilles
12. New Zealand
13. Saudi Arabia
14. Singapore
15. South Africa
16. Sweden
17. Thailand
18. Turkey

New legal opinions

w legal opinions	
1. Brazil	6. The Philippines
2. Estonia	7. Scotland
3. Latvia	8. South Korea
4. Lithuania	9. Taiwan
5. Malta	



Slide 3

European Repo Council General Meeting, March 17, 2005

GMRA

3. List of jurisdictions where the enforceability of the GMRA is being reviewed

- 1. Croatia
- 2. Czech Republic
- 3. Israel
- 4. Mexico
- 5. Romania
- 6. Russia
- 7. Slovakia
- 8. Slovenia



Management of fails in negative interest rate repos

Ulf Bacher

Global Head of STP/T Principal Trading

ERC General meeting

17th March 2005

Free Lunches in Repo Markets?

A Repo with a negative Interest Rate ...



... can be a free lunch and a beer...

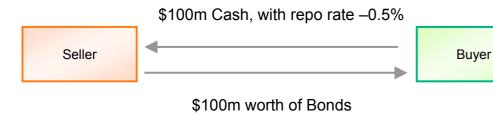


... for an opportunistic market player

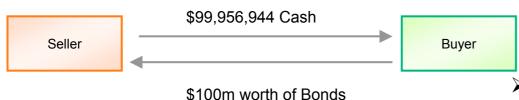


An Example - Why do negative interest rates differ?

Trade inception - August 25th



Trade maturity - September 25th



At termination, under negative interest rate repo, less cash will be paid back by the 'seller' than the 'buyer' originally paid at trade inception

➤ Positive Repo Rate:

- As cash and repo leg are paired-off at the end-leg of the repo, the seller will have to pay the positive interest rate even if he fails to deliver.
- ➤ This poses an *in-build incentive* to deliver into the repo and *behave accordingly*.

➤ Negative Repo Rate:

> However, if the repo rate is negative, the seller will receive interest rate – even without the intention to deliver the bonds.

> Consequences:

- ➤ Adverse market behaviour and wrong incentivization for market participants.
- ➤ Opportunistic market participants arbitrage the regulatory/contractual gap.
- Creation of *market uncertainty* in negative repo rates environments. *Adverse selection*. Liquidity drain.

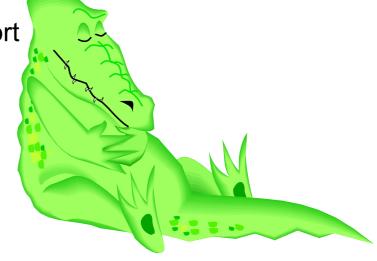
 Dresdner Kleinwort Wasserstein

The Party is over - We need to act

 The ERC cannot support a market standard that actually encourages a fail-friendly or even fail-supportive market environment.

 Incentives of the market participants have to be aligned with a proper market behaviour.

 The ERC has to define a rule-set that will support a "regular market" and discourage actively the opportunistic market participant



Possible solutions

 Penalties: The imposition of a financial penalty against the seller of the bonds in the case that the trade fails because the seller is short or has made an operational error.

Advantages:

- · Enforces good delivery
- Creates market discipline
- Aligned to the wishes of some market authorities
- Leverages the precedent observed in other markets such as the Futures market

Disadvantages:

- Has the potential to massively increase market illiquidity
- Will result in increased costs of financing transactions
- Will interfere in the orderly running of the repomarket
- 2) Early termination: Trade will be automatically terminated at the first fail date, where the seller is at fault.

Advantages:

- Allows the counterparty which requires use of the bonds to source from elsewhere without continuing to pay a negative interest rate
- •Prevents abuse of the system and aids the operation of an orderly market

Disadvantages:

- •Settlement can only be confirmed on the next business day after contractual settlement – as a minimum this will leave a negative interest cost to the buyer for 1 day
- •May generate a decrease in market liquidity as a result of the fail being part of a 'chain'

Possible solutions

3) Revert to zero rate from negative rate: If the seller is at fault the repo rate is zero for the period of the failure. Once the opening leg is settled the negative rate becomes effective for the remaining period of the trade.

Advantages:

- Negates economic impact of failure to non defaulting counterparty.
- Actually encourages liquidity, those with liquidity are encouraged to trade.

Disadvantages:

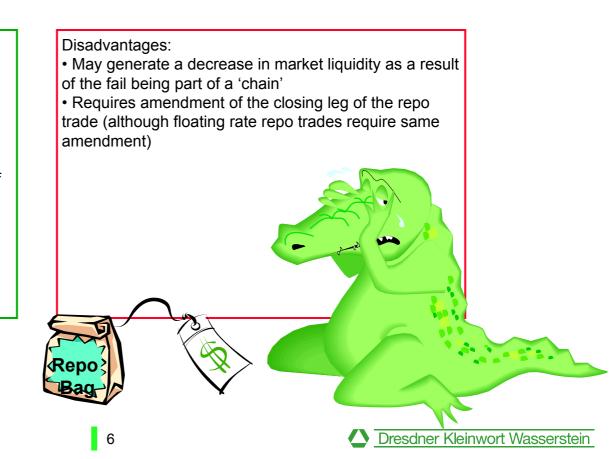
- May not be a strong enough penalty to enforce market discipline on its own.
- Requires amendment of closing leg cash (although floating rate repo requires amendment already).

Recommendation

If the seller fails to deliver then the buyer has the option to early terminate the transaction and this option continues for every day that the trade fails and the seller is at fault. In addition, for every day that the trade fails the repo rate is zero.

Advantages:

- Negates economic impact of failure to non defaulting counterparty
- Actually encourages liquidity, those with liquidity are encouraged to trade
- Allows the negative interest rate repo market to continue
- Allows the counterparty which requires use of the bonds to source from elsewhere without continuing to pay a negative interest rate
- •Prevents abuse of the system and aids the operation of an orderly market
- Avoids cancelling transaction



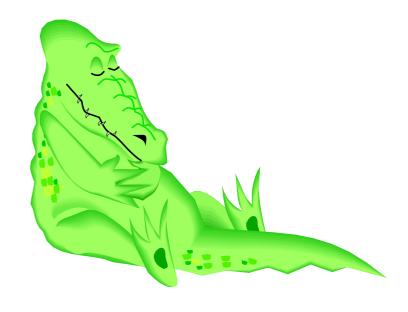
The approved solution

At its meeting on December 10, 2004 the board approved the following recommendation:

Market participants who wish to enter into a repo transaction in which the rate of interest payable by the seller on the purchase price will be negative, should agree that if the repo seller fails to deliver the purchased securities on the purchase date then

- the buyer may terminate the transaction (and this right should continue for every day that the seller fails to deliver) and
- for every day that the seller fails to deliver the purchased securities the repo rate should be zero.

This is effective as of January 1, 2005 and is incorporated in subsection G of section 1000 in ISMA's rules and recommendations.



The wording of the new recommendation

The international committee recommends that market participants who wish to enter into a repo transaction (whether a repurchase transaction or a buy/sell back transaction) in which the rate of interest payable by the seller on the purchase price will be negative agree that if the repo seller fails to deliver the purchased securities on the purchase date then –

- (i) the buyer may terminate the transaction (and this right should continue for every day that the seller fails to deliver); and
- (ii) for every day that the seller fails to deliver the purchased securities the repo rate should be zero

(the "International Repo Committee recommendation for negative interest rates").

Where market participants have entered into the PSA/ISMA Global Master Repurchase Agreement (1995 version) or the TBMA/ISMA Global Master Repurchase Agreement (2000 version) (each the GMRA) the GMRA should be amended to incorporate the provisions set below. Users of the GMRA may incorporate the provisions into the GMRA itself as a supplemental term in part 2 of Annex I or, alternatively, on a transaction-by-transaction basis by incorporating the provisions into the confirmation of relevant transactions.

The wording of the new recommendation

Where the provisions are incorporated into a confirmation, they can be included in full or be incorporated by reference by the use of a phrase such as "negative interest rates: International Repo Committee recommendation shall apply".

"The parties agree that the following provisions shall apply in relation to any transaction in respect of which the Pricing Rate is negative.

- (a) The definition of "Pricing Rate" in paragraph 2 [(ee)]* [(jj)]** is amended by adding the phrase "(which may be a negative number)" after "percentage rate".
- (b) Paragraph 10 [(e)]* [(g)]** is amended by adding the following at the end of that paragraph –

"If the Pricing Rate agreed for the Transaction in question is negative, the Pricing Rate for that Transaction shall be deemed to be zero for as long as such failure continues.""

- * GMRA 1995
- ** GMRA 2000



EONIA Based Repo

Simon Parkins Head of Repo Trading, BNP Paribas





Contents

Background	0	
Example	04	
Proposal	05	
Recommendations	06	





Background

Historical Market Practice on EONIA based repo

- Settlement at the 'ICSD's' has evolved into utilising the "settlement date minus 2" EONIA issued rate as the last reference rate
 - i.e where a closing leg is settling on the 5th the EONIA rate issued at 7.00 CET on the 3rd will be used for the 3rd and 4th's repo interest calculation.

Settlement Issues

 Currently settlement amounts are being calculated using potentially materially different EONIA rates





Example

- Dealer X buys EUR100m bonds vs EUR100m cash from customer A at Eonia plus 10 in a ICSD
- ■Dealer X sells EUR100m bonds vs EUR100m cash from customer B at Eonia less 0 in Euroclear France
- ■Expected P&L is EUR1,944

Day	7-Feb-05	8-Feb-05	9-Feb-05	10-Feb-05	11-Feb-05	14-Feb-05
Daycount	1	1	1	1	3	
Eonia Fix	2.07	2.07	2.07	2.07	2.36	Settle Cash
Repo Interest on Sale at Eonia Flat	5,750	5,750	5,750	5,750	19,694	100,042,694
(in Euroclear France)						
Repo Interest on Buy at Eonia + 10	6,028	6,028	6,028	6,028	18,083	100,042,194
(ICSD)						
					P&L	- 500





Proposal

- To incorporate the SD-1 issued Eonia rate into the closing leg of repos settling via ICSD's
 - Achieved via two potential routes dependent on individual firm's ability and approach to settlement messaging to the ICSD

Option 1

- Following EONIA fixings on SD-1, re-calculate settlement proceeds and send instructions to ICSD for pre-matching in order to meet overnight settlement batch (OSB)
- Utilising OSB will maintain consistency with current process

Option 2

- Should settlement instruction transmission to the ICSD for prematching fail to occur on the evening of SD-1
- Settlement will take place in the various 'automatic' daytime settlement windows at the ICSD's.





Recommendations

- It is not desirable to continue with the present situation as settlement amounts are currently being calculated using potentially materially different EONIA rates
- A correction will bring EONIA based trades settling in the ICSDs into line with the correct treatment applied to these trades settling within the French domestic system thus removing this risk anomaly
- Recognising where and how the bulk of the ICSD settlement currently takes place and endeavouring to achieve minimal market disruption, option 1 is the preferred and recommended best practice



Improved Settlement and Securities Lending and Borrowing Infrastructure



Settlement infrastructure

Continues to evolve towards
 less risk
 lower costs

- Improve interoperability between settlement systems
 - synchronisation of settlement timings
 - multiple turnaround capability
- **Encourage earlier settlement**
 - reduction of gridlock risk
 - earlier confirmation of funding needs
 - more time repairs and adjustments
 - additional same-day trading opportunities
- Use securities borrowing to expedite settlement
 - to facilitate fails and chains
 - to further improve interoperability between settlement systems

Securities lending and borrowing is key to increase settlement efficiency*

- Securities lending reduces risk of failed settlement
- Securities lending increases efficiency and cost effectiveness of cross-border transactions
- Securities lending arrangements should meet the requirement of the particular market
- Right economic incentives encourage broad participation to automatic lending and borrowing facility

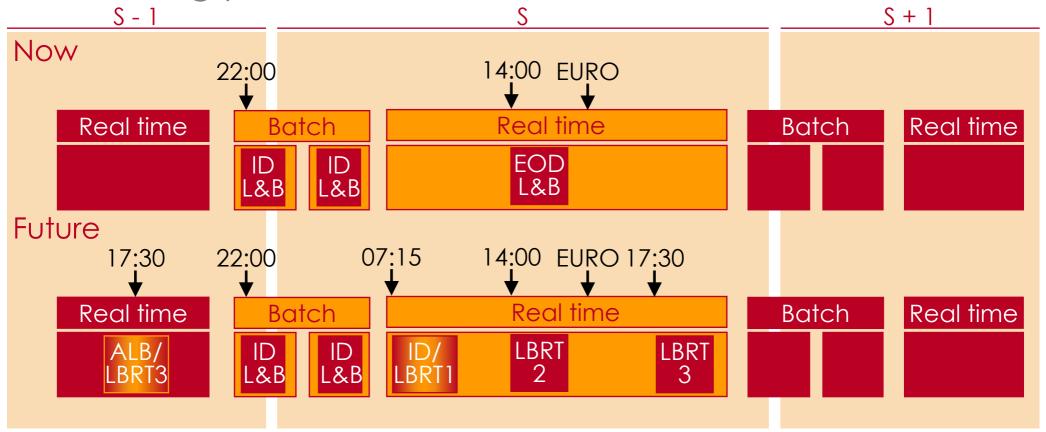
^{*} Excerpt from Standard 5 on securities lending, ECB-CESR

Settlement infrastructure: Few recent and ongoing changes



Securities lending and borrowing programme

Processing platform



- Flexibility in terms of markets
- Flexibility in terms of processing mode: ALB or EOD
- Improved pricing for borrowers and lenders

Lending and borrowing infrastructure Changes

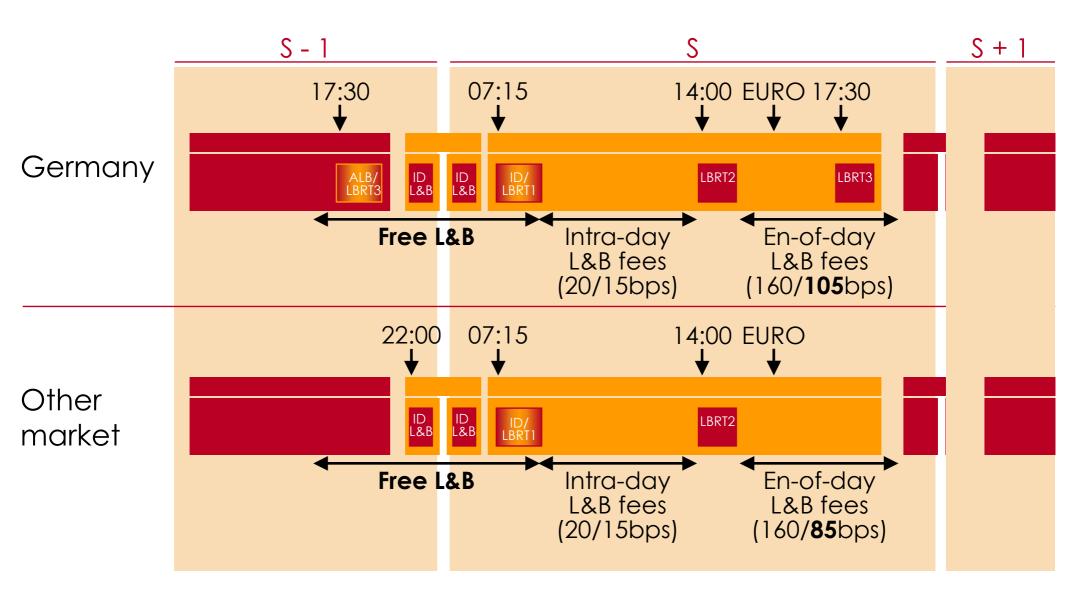
Anticipated lending and borrowing process

- Generates new borrowings on S-1 at 17:30 for A/P cross-border deliveries
- Initially for Germany only
- Will be used for other markets as an ALB or end-of-day reimbursement capability

Early morning intra-day lending and borrowing process

- Generates new borrowings and reimbursements on S at 7:15 for all markets
- Allows to reimburse borrowings covered by receipts of securities from all markets including the feedback from new real-time-standard process

Pricing illustration



Lending and borrowing pricing Changes

Anticipated lending and borrowing process

- Limited value for borrowers
- Limited impact on lenders
- → No borrowing charge, but higher lending rate of 20bps for lenders in end-of-day process (and end-of-day borrowing rate unchanged vav today) to remunerate for the availability of the pool

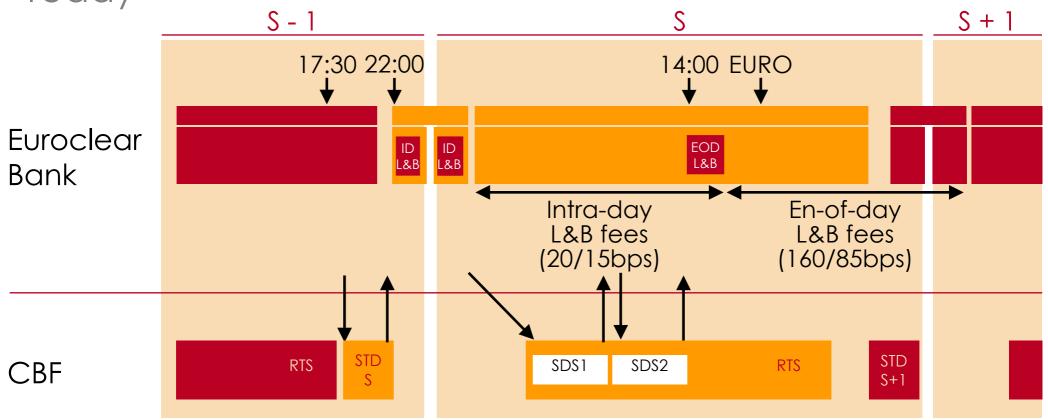
Current intra-day fees

 Will be charged as of the early morning intra-day lending and borrowing process (07:15)

Creation of an extended overnight process from ALB to early morning intra-day lending and borrowing process

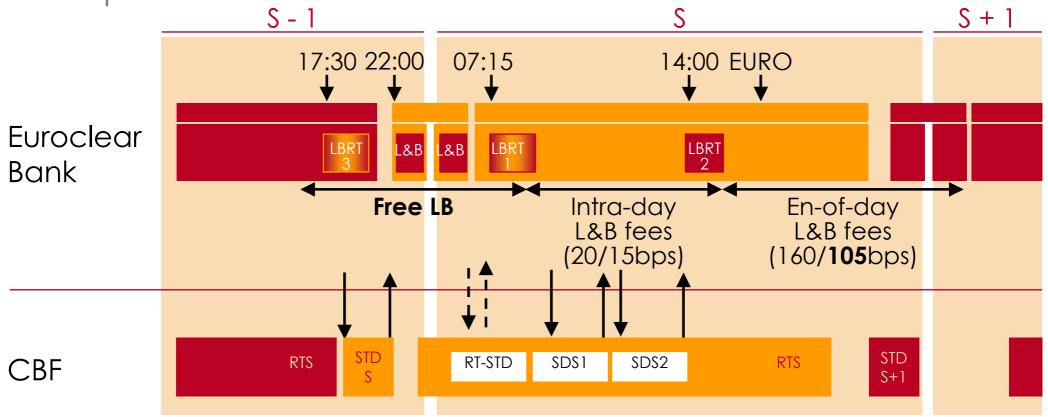
Applied to German securities

Today



Applied to German securities

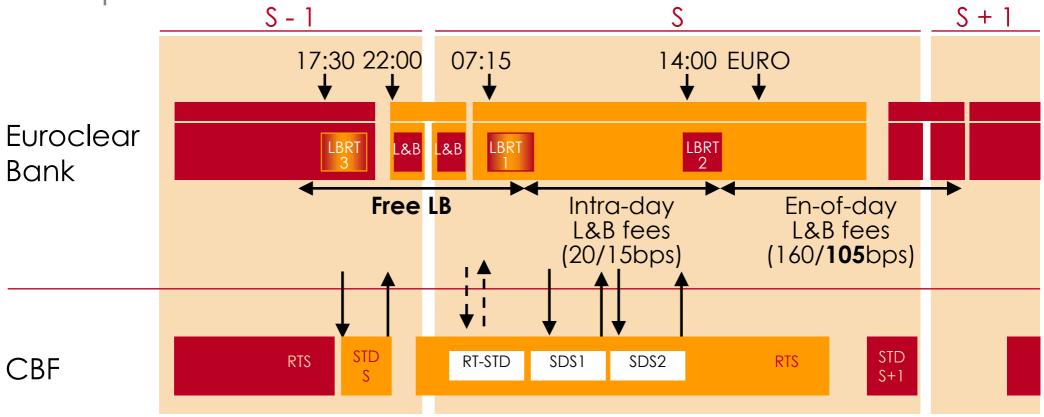
11 April 2005



- Based on existing flows, 70% of 'old RABL' are reimbursed prior to 07:00
- With NGSM II we should expect even more reimbursement
- Daily turnover = EUR 365 billion, 90% internal, 6% CBF, 4% CBL

Applied to German securities

11 April 2005



We adapted our infrastructure to best leverage developments in the local market with 2 main objectives:

- Increase settlement efficiency

- Decrease costs for borrowers

Benefits of changes to lending and borrowing

Pricing and infrastructure



Benefits for borrowers

- Flexible infrastructure and pricing adapted to specificity of each market
- Improved settlement efficiency and interoperability with local markets
- → Lower borrowing (and reporting) costs
- Ability to improve P/L with same-day financing
- No borrowing anymore in overnight S-1 for top priority external deliveries to Germany

Benefits for lenders



- New infrastructure and pricing preserves demand
- Preserved lending returns
- Increased lending opportunities
- Ability to improve returns through better synchronization with street lending activity
- → Reduce communication costs

More information

- Newsletters
 - > 2004-N-076 dated 20 September 2004 'Reporting impact'
 - ➤ 2004-N-008 dated 17 January 2005 'New infrastructure'



euroclear



Attachment 6

ERC General Meeting March 17, 2005

Settlement Initiatives in Europe

February 2005

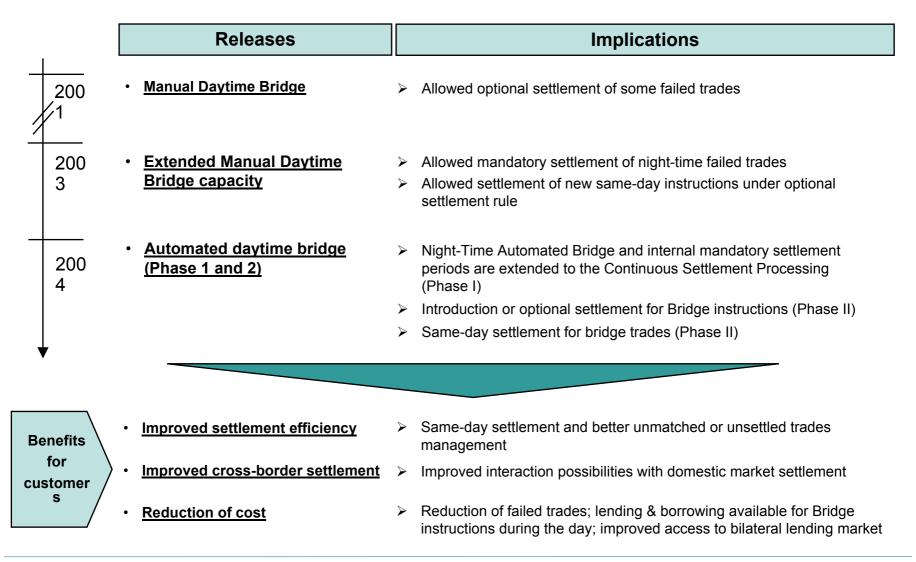
Agenda

- (1) Review of major changes in the European settlement landscape in last years
- (2) Recent history of Bridge settlement
- (3) The new Real-Time Standard cycle in Clearstream
 - a) Illustration of the process
 - b) Benefits for the customers and their counterparts
- (4) Implications of Clearstream Settlement Initiative
- (5) A view into the future

Review of major changes in the European settlement landscape in last years

	Releases	Implications
200	Spain: completion of the incorporation of debt securities into the CADE system	 Single platform for the registration, clearing and settlement of Spanish domestic fixed income, both public and private
200	New German Settlement Model (NGSM) Phase 1	Reduction of unwinding risk and improving of liquidity tools
3	• Merger between LCH and Clearnet	 Decreased counterparty risk for customers operating simultaneously across different European (cash) markets
200	Italy: launch of the new settlement platform Express II	Extended settlement possibilities as well as immediate availability of purchased securities and cash proceeds early in the morning
·	 Automated daytime bridge (Phase 1 and 2) 	Improved interaction and settlement efficiency between CBL and Euroclear Bank through extended settlement periods and greater exception management possibilities
200	<u>CBF/CBL: Real-time Standard</u> <u>Processing (March 2005)</u>	> Improving data exchange overnight in cross-border settlement
	CBL: Extension of processing day to 18:00 + Improved cash & settl. deadlines (July 2005)	Improved settlement and cash deadlines allow customers to be much more flexible with instructing towards market deadlines. CBL deadline for CBF settlements improves to 18.00 on SD -1.

Recent history of Bridge Settlement Focus: DAYTIME efficiency



In 2005: Focus NIGHTTIME efficiency - "CBF Real-Time Standard" Incorporation of night-time settlement results of ICSDs clearstream

Current Release of New German Settlement Model (since November 2003)

19:00
Night-time

Daytime

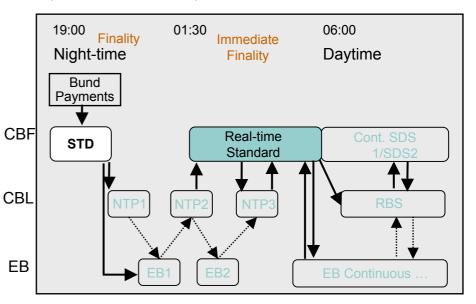
Cont. SDS
1/SDS2

NTP1
NTP2
NTP3

RBS

EB1
EB2
EB Continuous ...

Next Release of New German Settlement Model (Launch March 2005)



Benefits of Real-Time Standard ('RTS') cycle:

- Additional night-time settlement run (including settlement reporting) and further CBL/ EB-CBF file transfer exchange will be introduced
- Earlier finality on settlement leads to higher settlement turnover and therefore higher efficiency
- Less financing costs as lending transactions can be closed earlier and settlement proceeds are provided

In 2005: CBF Real-Time Standard cycle increases settlement efficiency



Goals and Scope

- A real-time settlement process with immediate finality for instructions after STD box from 1:30 until 5:30 (enhancement of existing STD) is added.
- This leads to an increase of securities transactions during night-time processing.
- Re-use of received cash and securities is allowed and the counterparty access to ICSD customers is now possible also during the night.
- Real-time Standard is based on the New German Settlement Model ('NGSM') concept.

Benefits

- Increased settlement efficiency for OTC instructions
- Additional data exchange with CBL / EB's night-time processing

Implementation

Production launch is scheduled for March 14, 2005

CBF Real-Time Standard cycle delivers many benefits for customers and their counterparts

- Financing costs significantly reduced for CBL/CBF customers and their counterparts
- Cross-border settlement more efficient for all parties, regardless of settlement location
- Deadline extensions
- Further data exchanges (RT-Std) at night-time between CBF/EOC/CBL
- Multiple Cash Sourcing for German and International parties with bank status
- Cash Optimisation across NCBs

- Liquidity in Bunds settlement is significantly improved
- The request by market participants and the ERC to improve the settlement liquidity on Bunds has been satisfied by Clearstream
- True competition is in the interest of all market participants

Reform of the Bank of England's Operations in the Sterling Money Markets

Stuart Berry Bank of England

The purpose of the Bank's official operations in sterling money markets

- Two purposes:-
 - Implement the MPC's interest rate decision
 - Meet the banking system's liquidity need its demand for sterling central bank money - in routine and stressed conditions
- In doing so:-
 - influences liquidity conditions in the sterling money markets
 - the incentives for banks to manage their liquidity prudently and actively

Objectives

- Flat money market yield curve, consistent with official policy rate, out to next decision date
- Efficient, safe and flexible framework for banking system liquidity management both in competitive money markets and, where appropriate, using central bank money in routine and stressed/extraordinary conditions
- Simple, straightforward, transparent framework
- Competitive and fair sterling money markets

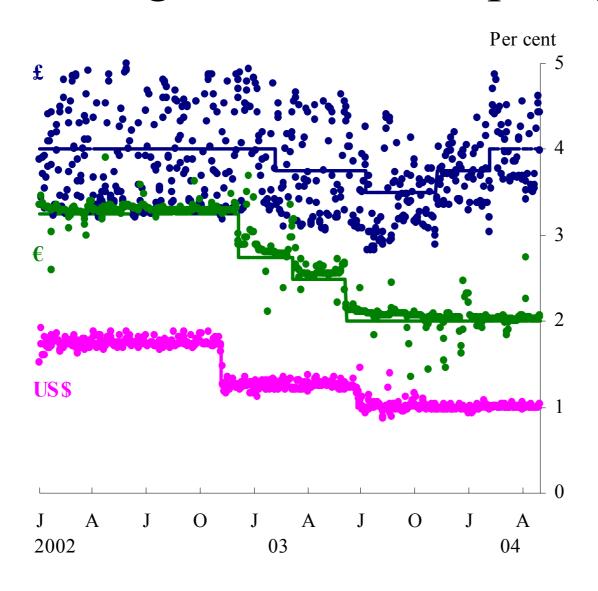
Current system

- Banks must balance accounts every evening
- We lend just sufficient money to allow them to do that every day in two week OMOs at repo rate
- Overnight deposit facility at repo less
 100bp; overnight lending at repo plus
 100bp

Reasons for change (I)

- Overnight rates more volatile than desirable
 - Wide channel for overnight rates set by the corridor on the Bank's overnight facilities
 - 'Pivoting' ahead of policy decision dates
 because the Bank lends at the policy rate at two week maturities

Overnight interest and policy rates



Reasons for change (II)

- Complexity
 - the terms on which we offer settlement accounts lead to
 - the Bank operating up to four times each day and usually operating on two or three occasions, as the forecast of the system's liquidity need is updated
 - complex end of day arrangements, as banks seek to balance their books

Reasons for change (III)

- Fewer liquidity management options in sterling given limited access to central bank money (no standing facilities, no reserve accounts) only deal with 12 settlement banks and 17 OMO counterparties (with some overlap)
- Other banks dependent on their bankers or the money market
- As a crisis management backstop, all banks should have access to central bank if necessary, we can intermediate flows of funds standing facilities

Proposed new system (I)

- Voluntary reserves
 - Monthly averaging (MPC decision dates)
 - Remunerated at repo rate
 - No compulsion so central bank money on demand but will set ceilings
 - Settlement banks plus other banks and building societies

Proposed new system (II)

- Standing facilities
 - Unlimited access
 - Plus and minus 100bp on most days; plus or minus 25bp on rate-setting day

• OMOs

- Weekly one week maturity
- Plus overnight maturity on final day

Setting official interest rates

- Market rates set by terms on which Bank will borrow and lend overnight reserve averaging plus standing facilities
- Market rates should trade near policy rate if
 - Bank always squares its books at policy rate
 via OMOs and/or remunerated reserves
 - And expected to be successful by market
 - No free 'options' at maturities beyond next decision date – so no 'pivoting'

Banking system liquidity management

- Narrow corridor on widely available standing facilities
 - Business continuity advantage: enables Bank to intermediate inter-bank flows of funds if money market breaks down
 - Can narrow channel to zero pp around repo rate in those circumstances
 - Provides a penal insurance policy for banks
 - Wide access all CRD paying institutions

Banking system liquidity management

Remunerated reserves

- A new high quality liquid asset remunerated central bank balances.
- Give settlement banks the option to leave cash deposits with the Bank rather than collateral securities in order to finance intra-day borrowing in the RTGS payments system (simpler, especially for timed payments)
- If the reserves target is a range rather than a point,
 enables simpler end of day on final day of maintenance
 period

Banking system liquidity management

- Propose voluntary, contractual reserves rather than requirements
 - Banks contract to hold a certain level of reserves at start of each maintenance period based on Bank's terms
 - Feedback suggests remunerated reserves would be an attractive liquid asset, hence ceilings

OMOs

- Aim is to 'get the quantities right'
- Don't need to lend every day because reserves adjust during the maintenance period
- No need to address pivoting

Long-term repos

Interim Reform

- Bank's preparations unlikely to be complete before end 2005
- Banking system preparations?
- Hence interim reform from 14 March:-
 - Narrower corridor (±25bp) on existing overnight facilities
 - Indexed repos to eliminate pivoting

Conclusions

- Reviewed objectives
- Introducing:-
 - widely available standing facilities with narrow corridor on rate-setting day
 - contractual, remunerated reserves (with ceilings)
 - fewer OMOs
 - period-average maintenance requirement

Reform of the Bank of England's Operations in the Sterling Money Markets

Stuart Berry Bank of England



Klaus Löber
Principal Legal Counsel
klaus.loeber@ecb.int

The Commission's second communication

The second communication on clearing and settlement in the EU of the European Commission of 28 April 2004

Considerations:

- "Cross-border Clearing and Settlement is generally considered as potentially less safe, less efficient, and more expensive than the purely domestic one"
- "Inefficiencies are due to a lack of global technical standards, the existence of differing business practices and inconsistent fiscal, legal and regulatory underpinnings"

The Commission's second communication

The aims of the Commission's clearing and settlement initiative:

- the liberalisation and integration of the existing securities
 clearing and settlement infrastructure (comprehensive access
 rights and the removal of existing barriers)
- the continued application of competition policy to address restrictive market practices (access, pricing) and to monitor further industry consolidation
- the adoption of a *common regulatory and supervisory framework* that ensures financial stability and investor protection, leading to the mutual recognition of systems
- the implementation of appropriate governance arrangements

The Commission's second communication

Proposed measures:

- Setting up of an *Advisory and Monitoring group* (CESAME) to tackle all Giovannini Barriers for which the private sector has sole or joint responsibility and to promote the overall integration and liberalisation project
- Proposing a Directive on Clearing and Settlement for a secure legal framework to provide securities clearing and settlement services throughout the EU on the basis of common requirements
- Addressing legal and tax issues by setting up expert groups to consider the legal and fiscal compliance related barriers to integration
- Ensuring the effective implementation of competition law

Public consultation

81 responses to the public consultation on the consultation:

Country authorities Governments

Central banks Securities regulators

ICSDs CSDs

CCPs Exchanges

Issuers Banks

Securities firms Industry associations

Law firms/institutes Service providers

Publication of the responses on the CESAME website

Clearing and Settlement Advisory and Monitoring Expert Group (CESAME)

- Composition:
 - Chair: Commission
 - Principal Adviser: Alberto Giovannini
 - 21 private sector participants (11 banks, including 3 investment banks and 2 global custodians, 1 ICSD, 5 CSDs, 1 exchange, 2 CCPs, 1 issuer)
 - 4 public sector observers (CESR, ECB, BoE and NBP)

- Three meetings so far (July and October 2004, March 2005)
- Two further meetings planned for 2005

Clearing and Settlement Advisory and Monitoring Expert Group (CESAME)

- Task to coordinate between private and public sector activities
- Provision, on request, of advice on specific technical issues
- Monitoring of progress of private sector initiatives
- Liaising with other groups (legal and tax expert groups, G-30,
 Unidroit, etc.)

Clearing and Settlement Advisory and Monitoring Expert Group (CESAME)

- Barrier 7 (settlement deadlines and operating hours/days) and Barrier 4 (intra-day settlement):
 ECSDA report on standards, currently under consultation with the industry in view of need for effective implementation
- Barrier 1 (differences in information technology and interfaces):
 Consultation SWIFT Paper on a proposal for the removal of
 Barrier 1
- Barrier 3 (corporate actions):
 ECSDA, EBF/ECSAs, ESF and EALIC work to harmonise corporate actions processes (e.g. cash dividends, interest payments, redemptions, etc.)
- Barrier 8 (securities issuance practice): to be solved, IPMA report on the issuance of ISIN numbers by numbering agencies (ANNA)

Legal and tax experts groups

The Commission set up two groups of legal and tax experts to consider the legal and fiscal compliance related barriers to integration

- to evaluate the situation, and
- if needed, to suggest methods of harmonisation of national law and/or procedures
- The legal certainty group was established in January 2005, the fiscal compliance group will have its first meeting in March 2005
- Members are selected on the basis of personal expertise from private practice, academia and public sector
- Core secretarial functions will be provided by the Commission

Legal and tax experts groups

- The legal certainty group will address:
 - the creation of a harmonised EU-wide framework for the treatment of interests in securities held with an intermediary
 - differences in national legal provisions concerning corporate action processing
 - restrictions relating to the issuer's ability to choose the location of its securities
- The fiscal compliance group will address:
 - withholding tax procedures disadvantaging foreign intermediaries
 - tax collection functionalities

Directive on Clearing and Settlement

Potential coverage:

- comprehensive rights of access and choice
- common regulatory/supervisory framework
- appropriate governance arrangements (to avoid anticompetitive practices and to safeguard against risk)

- High level principles to be developed in conformity with the Lamfalussy approach
- CESR/ESCB standards might form the basis of level 2 implementing measures to be developed in accordance with the enabling provisions of the Directive

Directive on Clearing and Settlement

Conduct of an impact assesment by the Commission:

- Assessment of the cost and benefit implications of potential legislation as regards the economic, environmental and social impact
- The economic assessment includes i.a.:
 - the market, trade and investment flows;
 - the direct and indirect costs for businesses;
 - the impact on innovation;
 - the administrative requirements on businesses or
 - the impact on third countries and international relations

In parallel work on common terminolgy ("definitions")

Further steps

- Preparation of the impact assessment throughout 2005
- Possible proposition of a framework Directive within the first quarter of 2006, to be accompanied by the adoption of the impact assessment
- Proposals by the legal certainty and fiscal compliance group within 2006



ERC General Meeting

March 17, 2005 Zurich

ISMA 8th European Repo Survey



European Repo Market Survey December 2004

Conducted by the ISMA Centre



Richard Comotto



Survey overview

- Outstanding value of contracts at close on December 8, 2004
- 76 responses (from 69 groups)
- respondents headquartered in: 16 European countries North America
 Japan



Headline figure

- Estimated gross total = EUR 5,000 billion
- June 2004 = EUR 4,561 billion
- December 2003 = EUR 3,788 billion
- June 2003 = EUR 4,050 billion
- December 2002 = EUR 3,377 billion

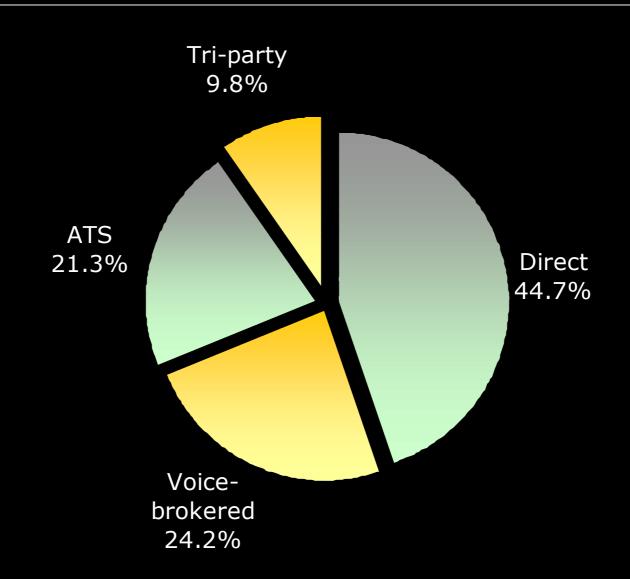


Participants in successive surveys

- 30 respondents in all surveys
 December 2003-December 2004=22.3%
 - December 2003-June 2004 (H1)=15.5%
 - June 2004-December 2004 (H2)=5.9%
- 65 respondents in December 2003 & 2004
 December 2003-December 2004=31.6%
- 71 respondents in June & December 2004 June 2004-December 2004 (H2) = 10.9%

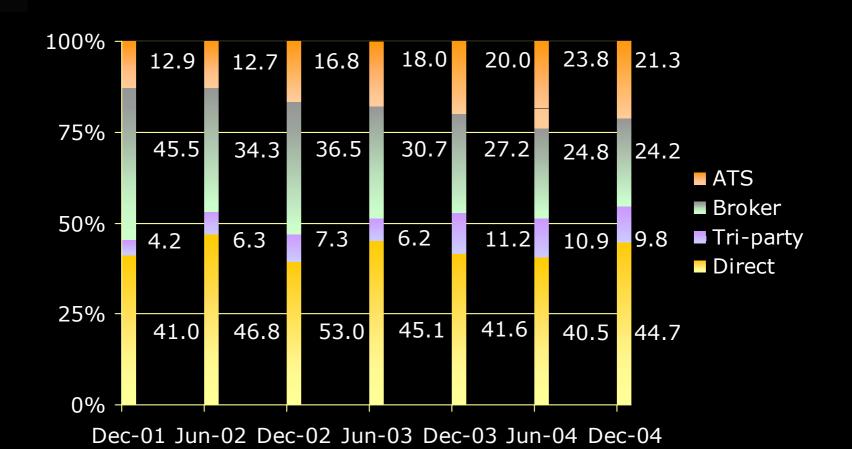


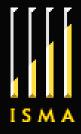
Counterparty analysis



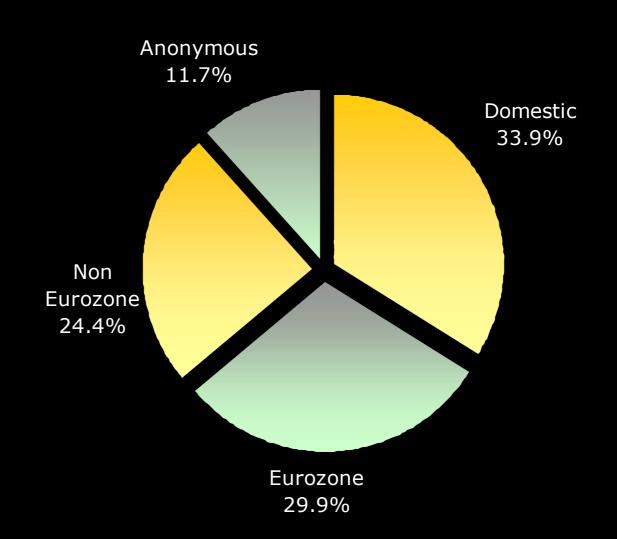


Counterparty analysis



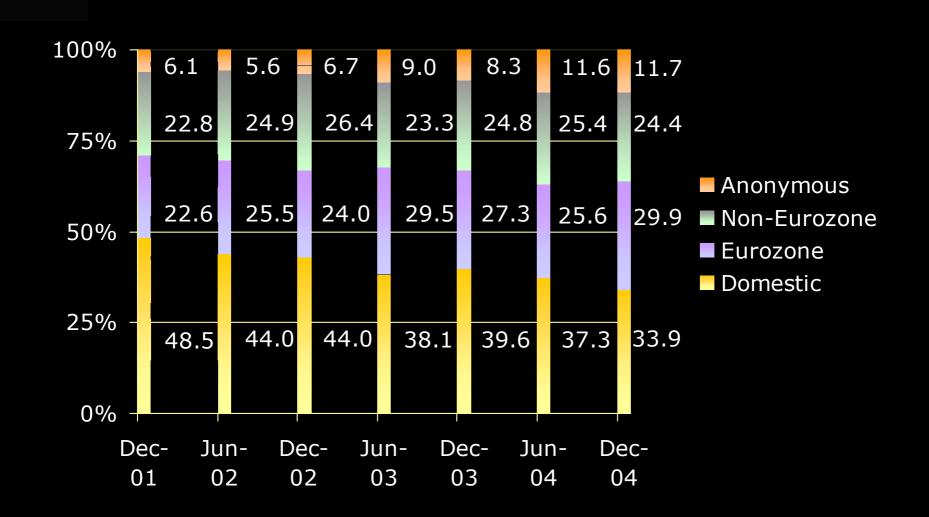


Geographical analysis



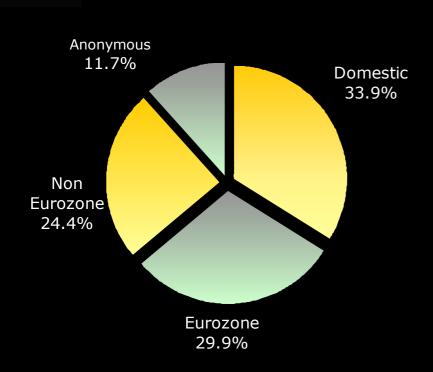


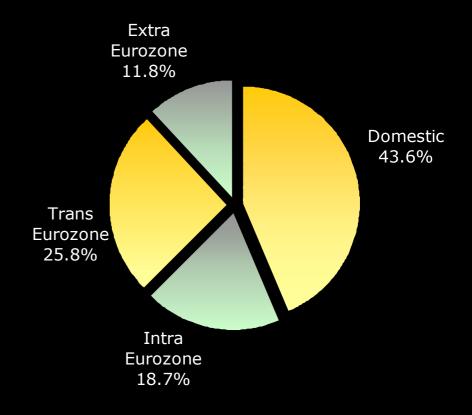
Geographical analysis





Geographical analysis v brokers



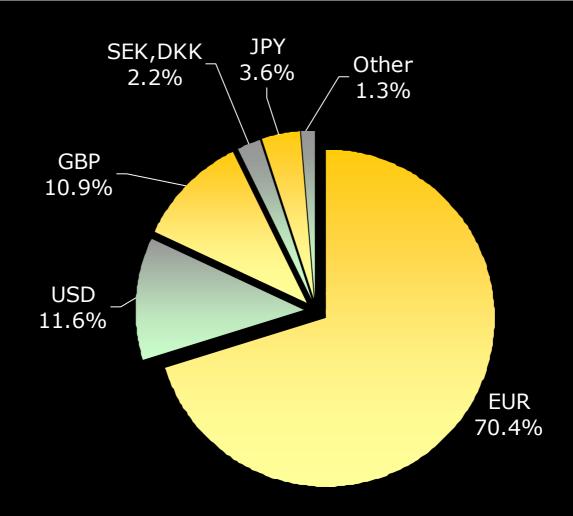


ISMA

WMBA

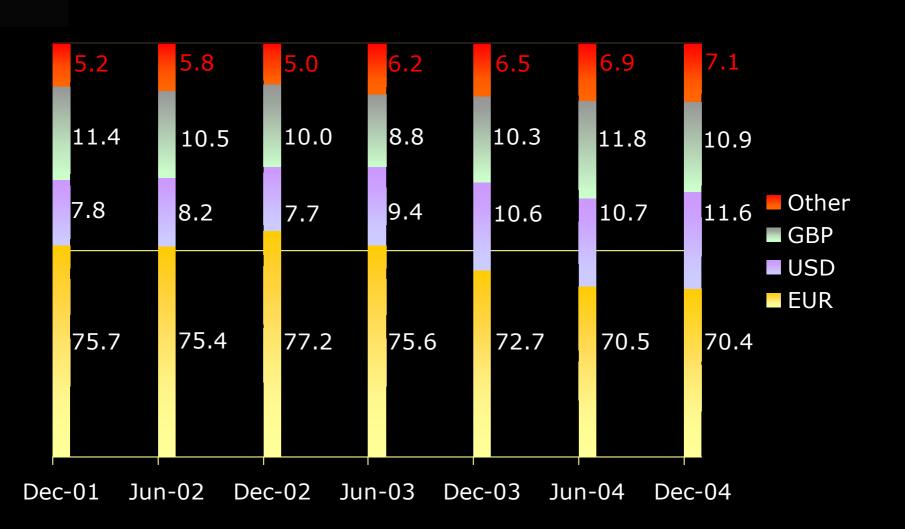


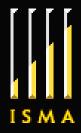
Currency analysis



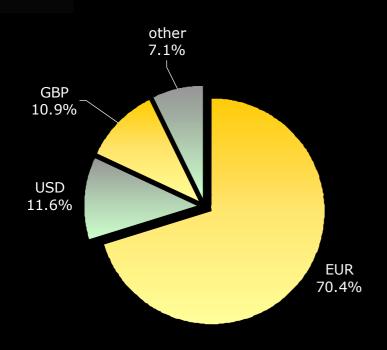


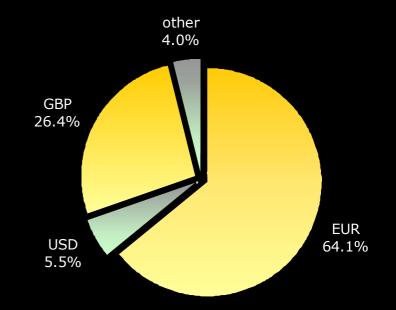
Currency analysis





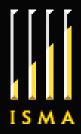
Currency analysis v brokers



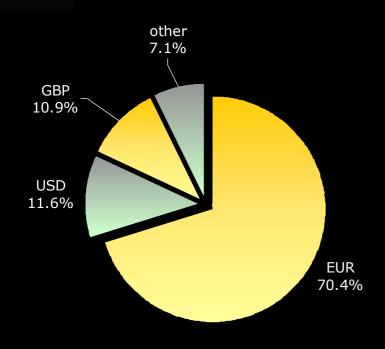


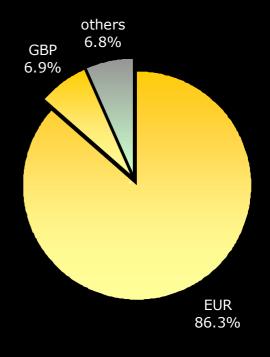
ISMA

WMBA



Currency analysis V ATS



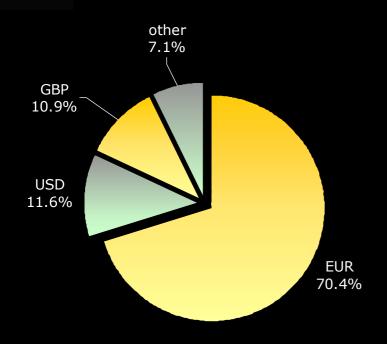


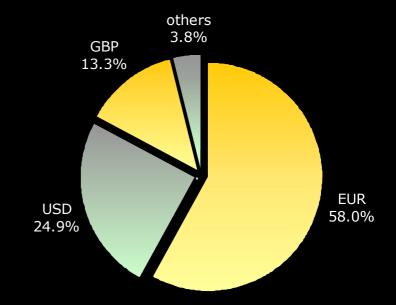
ISMA

ATS



Currency analysis v tri-party repo



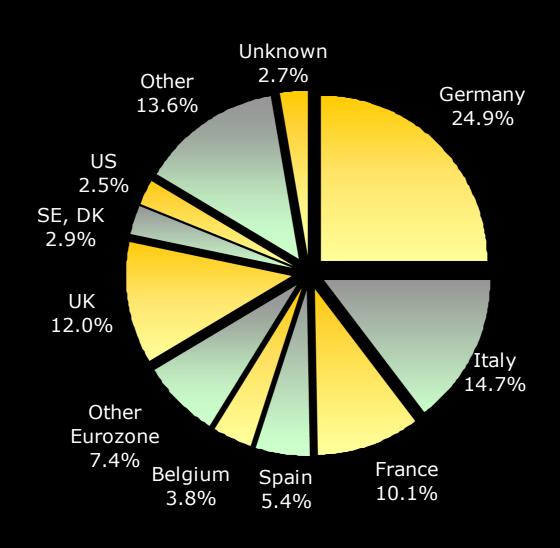


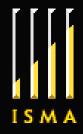
ISMA

tri-party repo

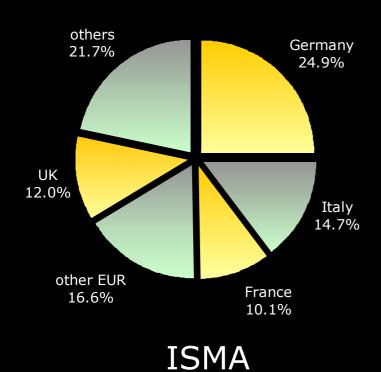


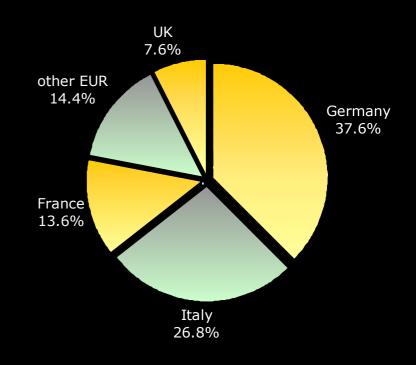
Collateral analysis



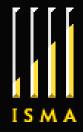


Collateral analysis v ATS

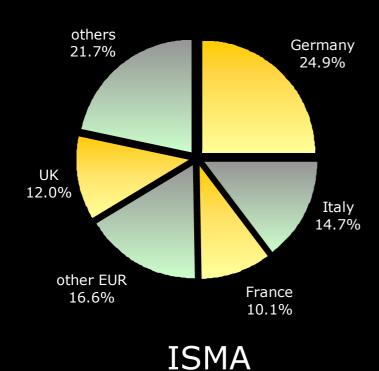


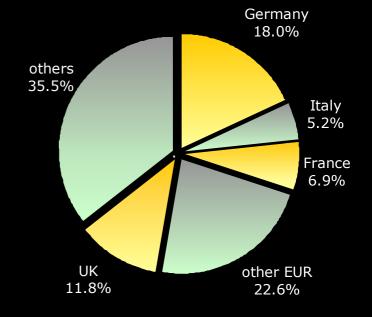


ATS



Collateral analysis v tri-party repo

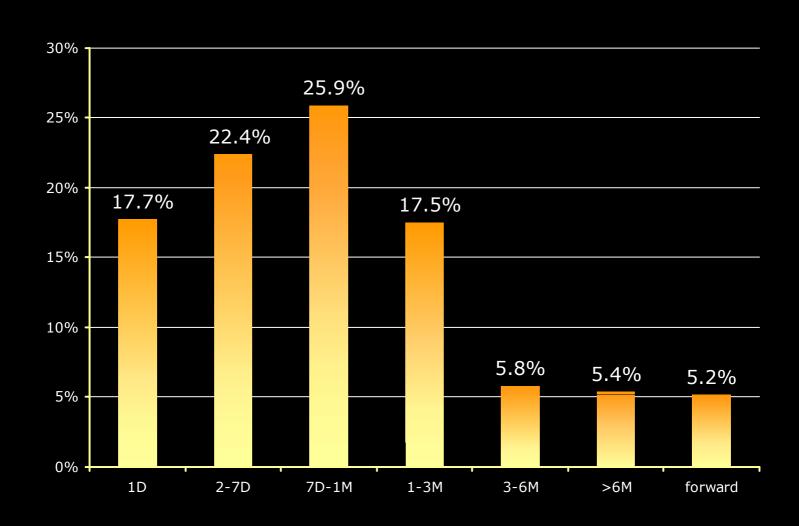




tri-party repo

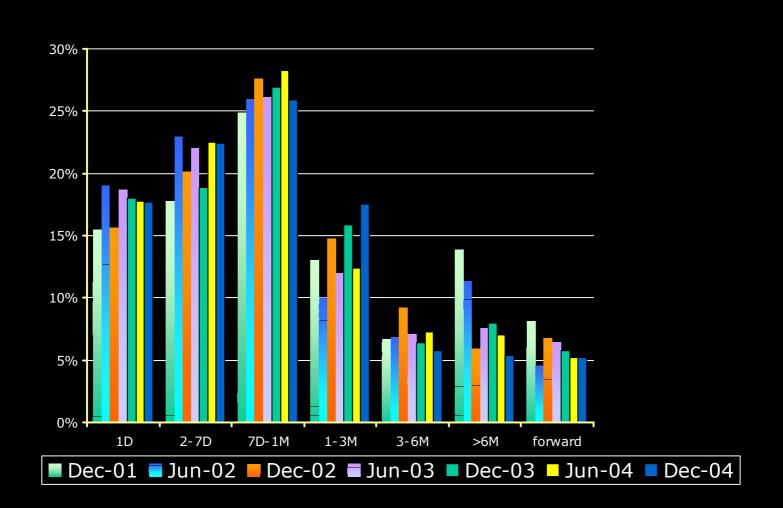


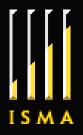
Maturity analysis



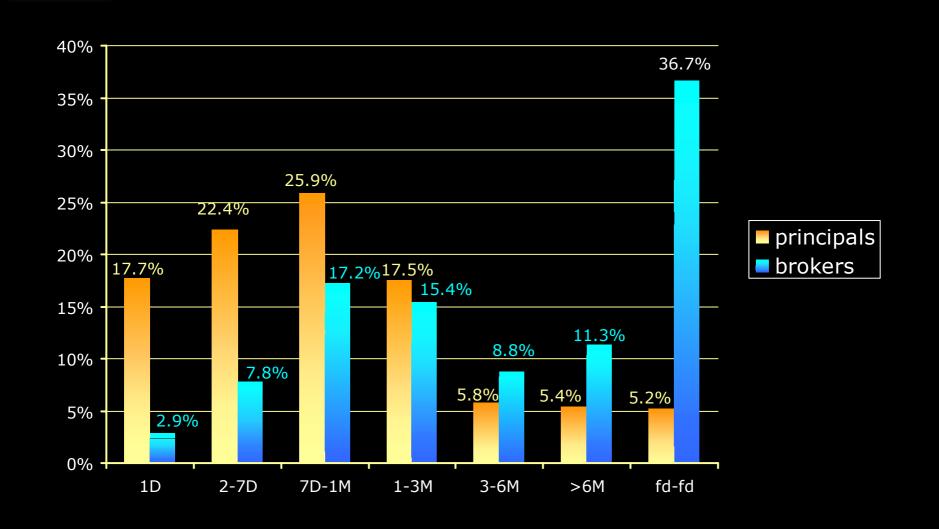


Maturity analysis



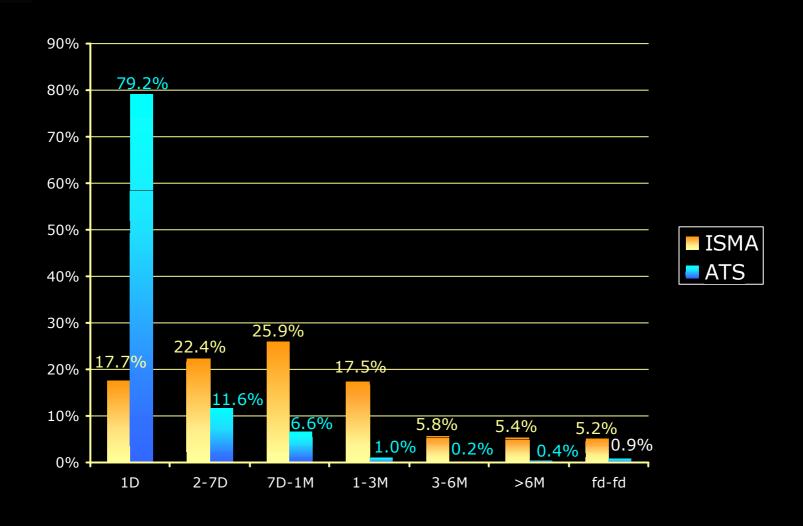


Maturity analysis v brokers



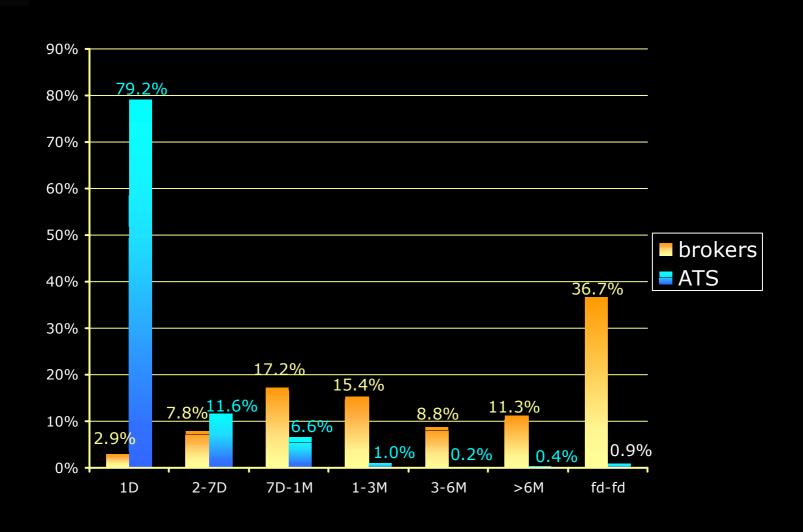


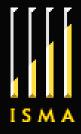
Maturity analysis V ATS



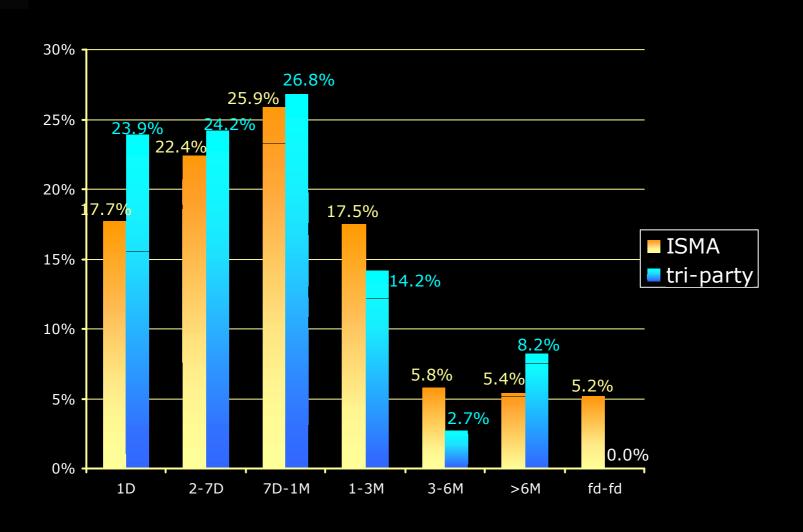


Maturity analysis: brokers v ATS



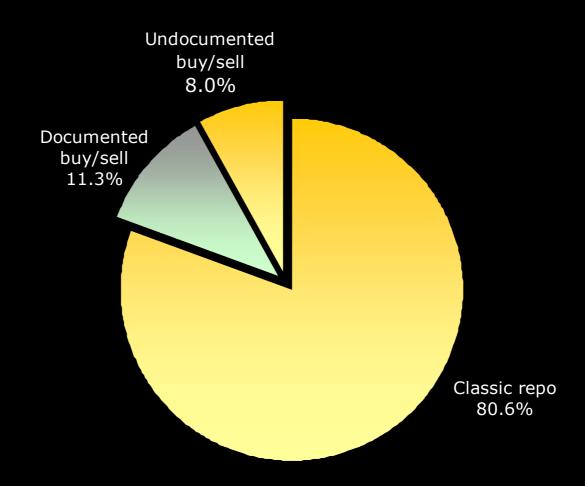


Maturity analysis v tri-party repo



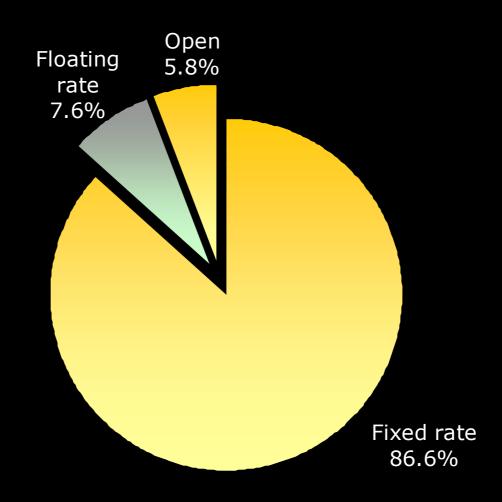


Contract analysis



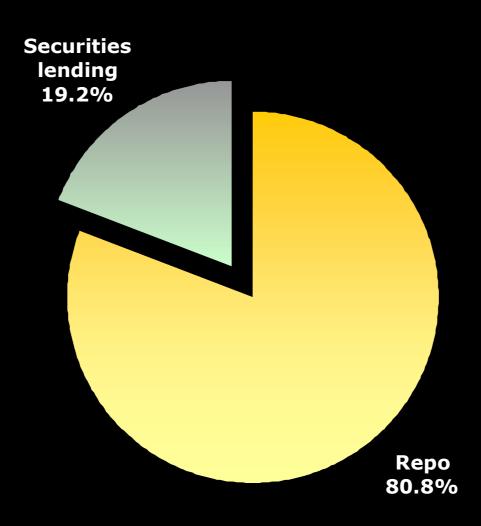


Repo rate analysis



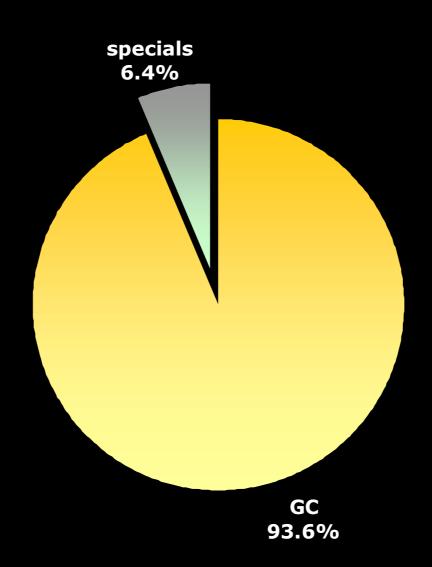


Product analysis





Specials (WMBA)





European repo market survey

Next Survey June 9, 2005

ISMA European Repo Council – general meeting

A comparative analysis of the ISMA European Repo Survey and the ECB Money Market Data

Johan Evenepoel, Dexia Bank

March 17, 2005

Data sources: ECB Surveys, ISMA Surveys
Clearstream Banking, Euroclear Bank

1. Survey methodology

	ISMA survey	ECB survey
Metric	Outstanding (i. e. stock)	Turnover (i.e. flow); specifically, daily
rieurc	Outstanding (i. e. stock)	average turnover
		average curnover
Periodicity	Semi-annual	Yearly
Location of	All F	All 15 EU countries
respondents	All European countries	All 13 EU countries
Type of	All financial institutions (e.g. includes	Credit institutions only
institution	national debt and other public agencies)	Credit ilisumdolis olliy
institution	Transactions with all counterparties except	Interhank transactions only (i.e. evolutes
1	central banks	transactions with customers)
Currencies	The total figure is broken down into:	EUR only
Currenes	EUR	zon om/
	GBP	
	USD	
	SEK, DKK	
	JPY	
	Other	
1	The total figure is broken down into:	
1	cross-currency	
	other (same currency)	
Maturities	Measures remaining term to maturity	Measures original term to maturity
1	Aggregates one-day transactions	One-day transactions are broken down
		into: O/N
1		T/N
		S/N
	Other transactions are broken down into:	Other transactions are broken down into:
	(1) 2-7 days	(I) 2-7 days
	I week to I month	I week to I month
	I month to 3 months	I month to 3 months
	3 months to 6 months	3 months to 6 months
	over 6 months	6 months to I year
1	forward-forwards	over I year
I		(no forward-forward category)
I		For each maturity band, a weighted
		average maturity is calculated
Collateral	The total figure is broken down into:	
l	fixed income	
l	equities	
l	<u>'</u>	

1. Survey methodology

1	Fixed income is broken down into 15 EU	The total figure is broken down into:
	countries and the US; in the case of	
	collateral issued in other countries, it is	
	analysed by OECD membership or region.	
	Each EU country is further broken down	
	into:	
	Government	
	Other.	
	"Other" German collateral is sub-analysed	
	into:	
	Pfandbrief	
	other.	
Counterparties	The total figure is broken down into:	The total figure is broken down into:
Counterparties	Direct	domestic
	via voice broker	euro area
	via ATS.	other
	Each category is further broken down into:	other
	Domestic	
	cross-border eurozone	
	cross-border non-eurozone	
	ATS is also further broken down into:	The secol forces is accounted to be decaded
		The total figure is separately broken down into:
	anonymous via a CCP.	direct
		1
	type/location sub-categories.	via voice broker via ATS ("electronic broker")
T	All to a self-control of the basis and a self-control of the b	
Type of	All types of repo, classic and sell/buybacks.	All types of repo and securities lending
Type of transaction	Securities lending against any type of	All types of repo and securities lending
	Securities lending against any type of collateral which is conducted from repo	All types of repo and securities lending
	Securities lending against any type of collateral which is conducted from repo desks is measured separately.	All types of repo and securities lending
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into:	All types of repo and securities lending
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo	All types of repo and securities lending
	Securities lending against any type of collateral which is conducted from repodesks is measured separately. The total figure is broken down into: classic repodocumented sell/buy-backs	All types of repo and securities lending
	Securities lending against any type of collateral which is conducted from repodesks is measured separately. The total figure is broken down into: classic repodocumented sell/buy-backs undocumented sell/buy-backs	All types of repo and securities lending against cash collateral
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo documented sell/buy-backs undocumented sell/buy-backs Each sub-category is broken down into	All types of repo and securities lending against cash collateral Each sub-category is broken down into
	Securities lending against any type of collateral which is conducted from repodesks is measured separately. The total figure is broken down into: classic repodocumented sell/buy-backs undocumented sell/buy-backs	All types of repo and securities lending against cash collateral Each sub-category is broken down into repo and reverse repo, except for analysis
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo documented sell/buy-backs undocumented sell/buy-backs Each sub-category is broken down into	All types of repo and securities lending against cash collateral Each sub-category is broken down into repo and reverse repo, except for analysis as:
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	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo documented sell/buy-backs undocumented sell/buy-backs Each sub-category is broken down into repo and reverse repo The total figure is broken down into: fixed rate	All types of repo and securities lending against cash collateral Each sub-category is broken down into repo and reverse repo, except for analysis as: location of counterparty type of counterparty type of counterparty Each maturity band is further broken down into:
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo documented sell/buy-backs undocumented sell/buy-backs Each sub-category is broken down into repo and reverse repo The total figure is broken down into: fixed rate floating rate	All types of repo and securities lending against cash collateral Each sub-category is broken down into repo and reverse repo, except for analysis as: location of counterparty type of counterparty Each maturity band is further broken down into: floating rate ("indexed")
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo documented sell/buy-backs undocumented sell/buy-backs Each sub-category is broken down into repo and reverse repo The total figure is broken down into: fixed rate	All types of repo and securities lending against cash collateral Each sub-category is broken down into repo and reverse repo, except for analysis as: location of counterparty type of counterparty Each maturity band is further broken down into: floating rate ("indexed") other (fixed rate and open).
	Securities lending against any type of collateral which is conducted from repo desks is measured separately. The total figure is broken down into: classic repo documented sell/buy-backs undocumented sell/buy-backs Each sub-category is broken down into repo and reverse repo The total figure is broken down into: fixed rate floating rate	All types of repo and securities lending against cash collateral Each sub-category is broken down into repo and reverse repo, except for analysis as: location of counterparty type of counterparty Each maturity band is further broken down into: floating rate ("indexed") other (fixed rate and open). There are therefore 9 maturity/rate sub-
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Clearstream Banking and Euroclear Bank also use the ISMA 'snapshot' methodology and focus on remaining maturity

2. Respondents

ECB: 2003/2004: 94 banks

 $2001 \rightarrow 2004$: 78 banks

ISMA Jun 02: 86

Dec 02: 82 (-14 + 7 joined)

Jun 03: 84 (-12 + 1 joined/rejoined previous)

Dec 03: 76 (-18 + 10 joined/rejoined previous)

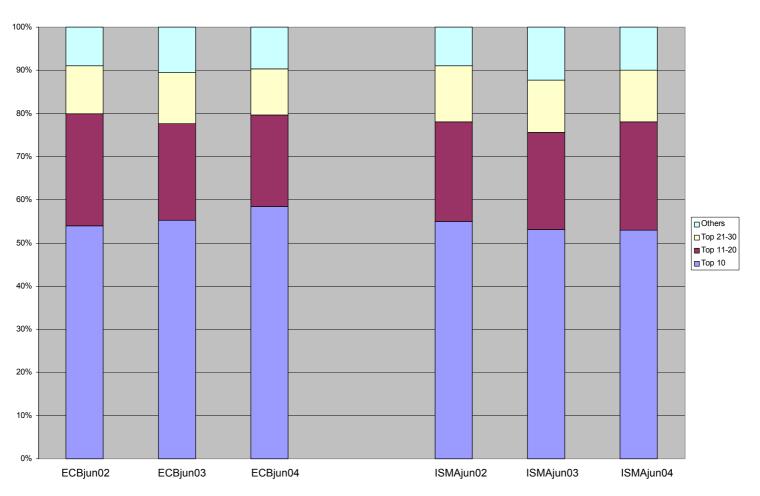
Jun 04: 81 (-9 + 14 joined/rejoined previous)

2003: approx 50% of the ECB panel banks are member of the ISMA panel banks

2004: 68 % of the ECB panel banks are member of the ISMA panel banks

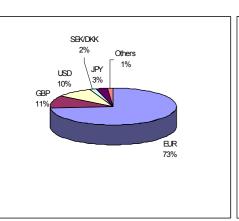
2. Respondents

Concentration analysis

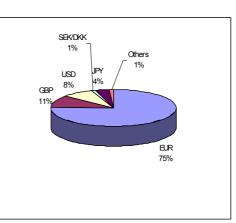


3. Currency analysis

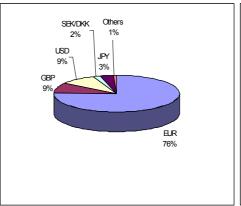
ISMA 2001



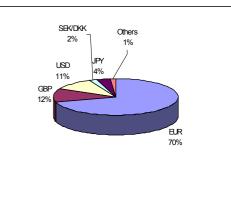
ISMA 2002



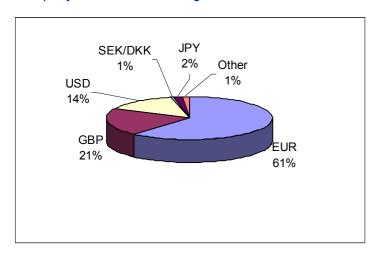
ISMA 2003



ISMA 2004

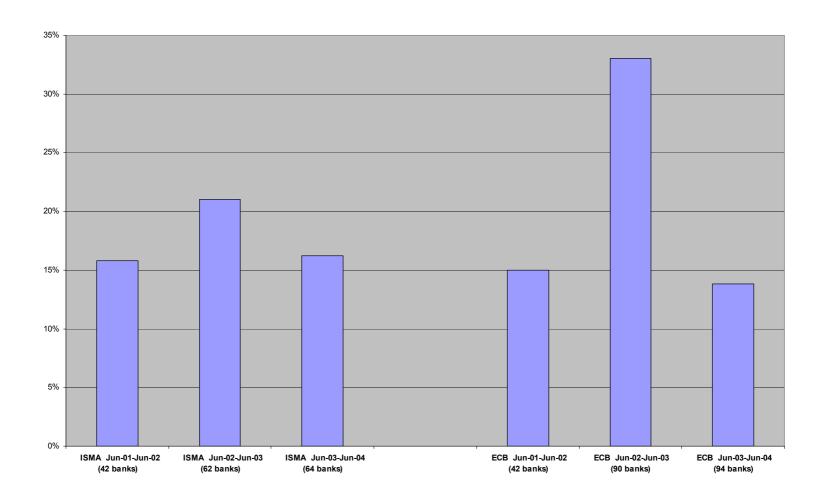


Triparty Clearstream Banking + Euroclear Bank 2004



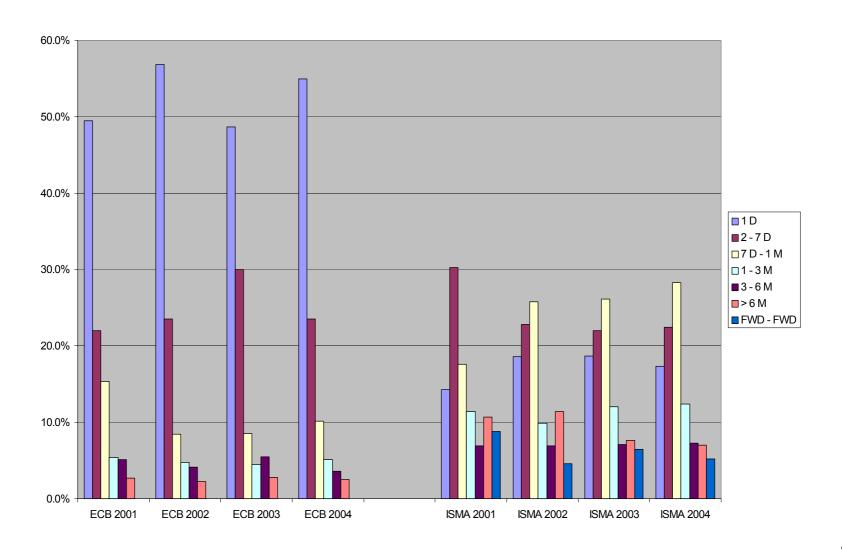
4. Annual growth

Annual growth



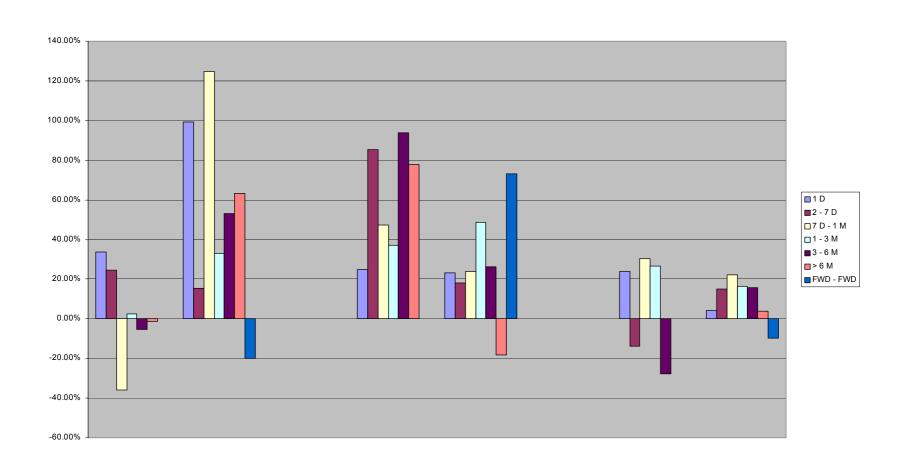
5. Maturity analysis

Overall comparison ECB / ISMA



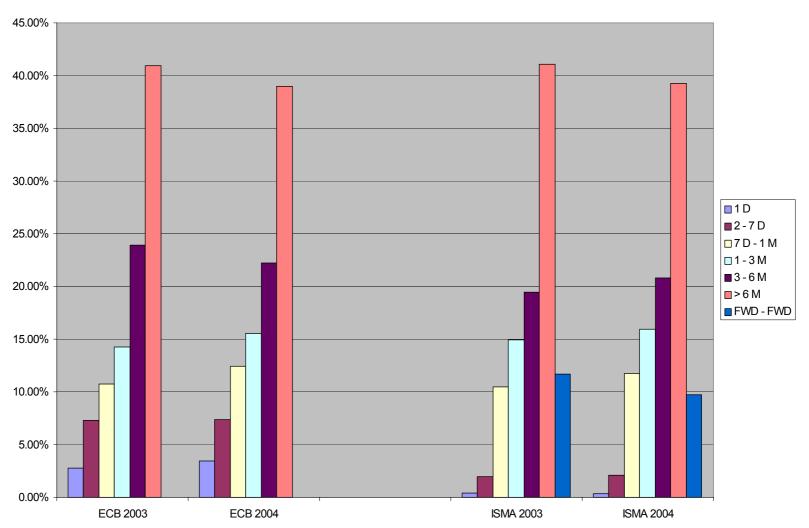
5. Maturity analysis

Annual growth 2001 – 2004 in absolute terms



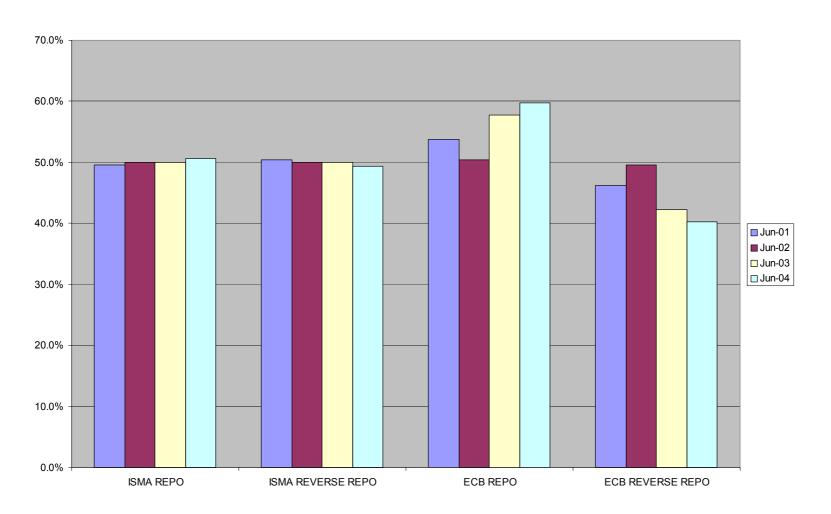
5. Maturity analysis

Maturity analysis – annual, weighted



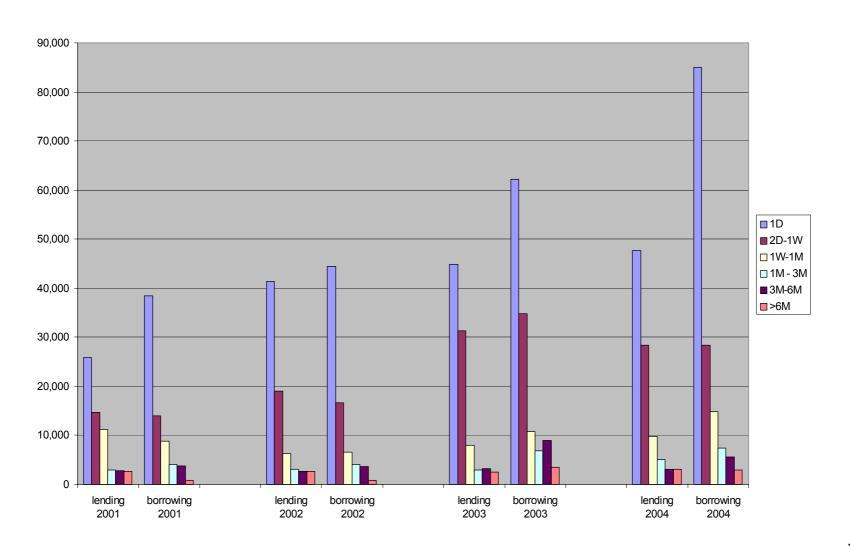
6. Repo versus Reverse repo

ECB - maturity breakdown



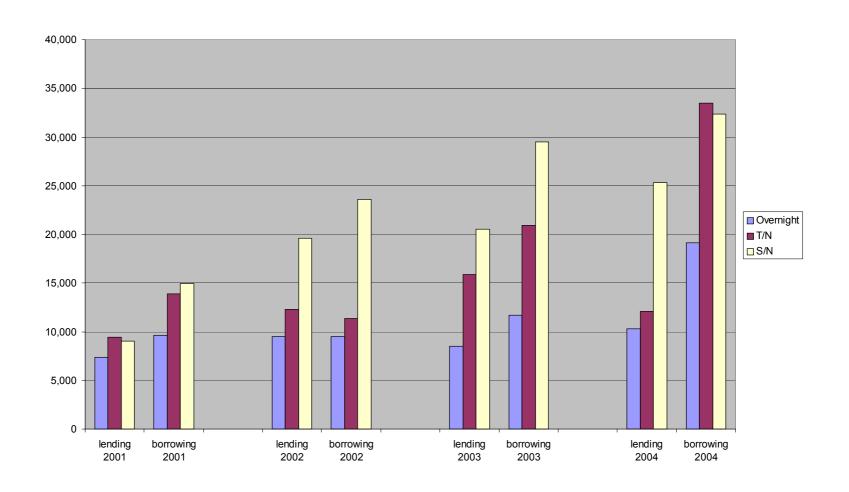
6. Repo versus Reverse repo

ECB - maturity breakdown



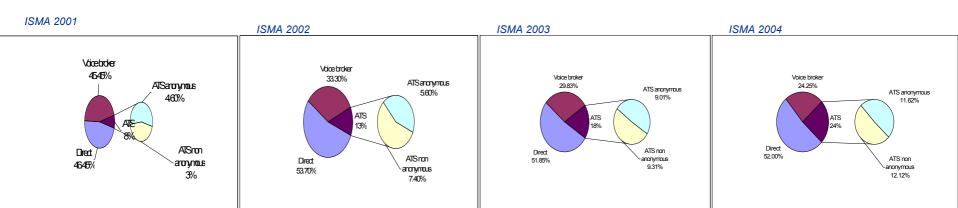
6. Repo versus Reverse repo

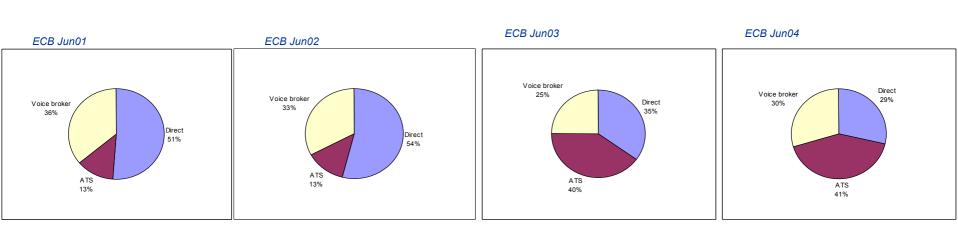
ECB - maturity breakdown - 1day



7. Counterparty analysis

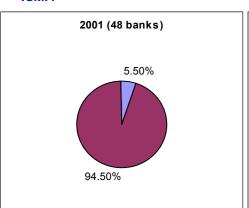
Direct versus Voice-Broker versus ATS

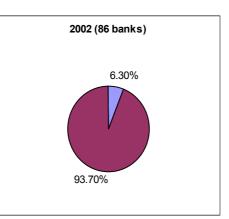


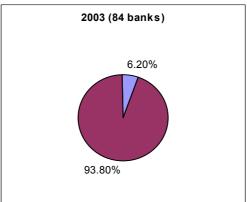


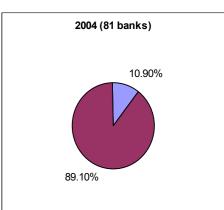
7. Counterparty analysis - triparty repo

ISMA

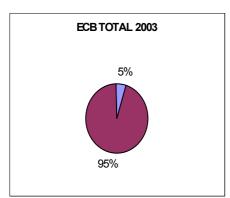


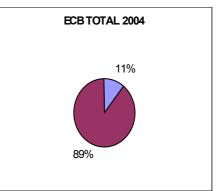


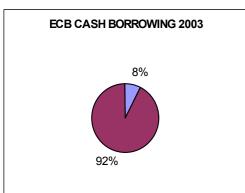


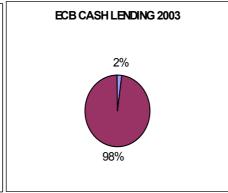


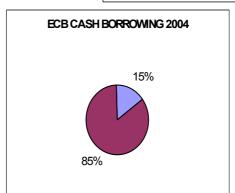
ECB

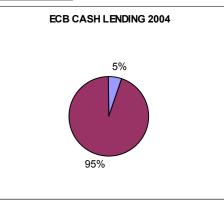






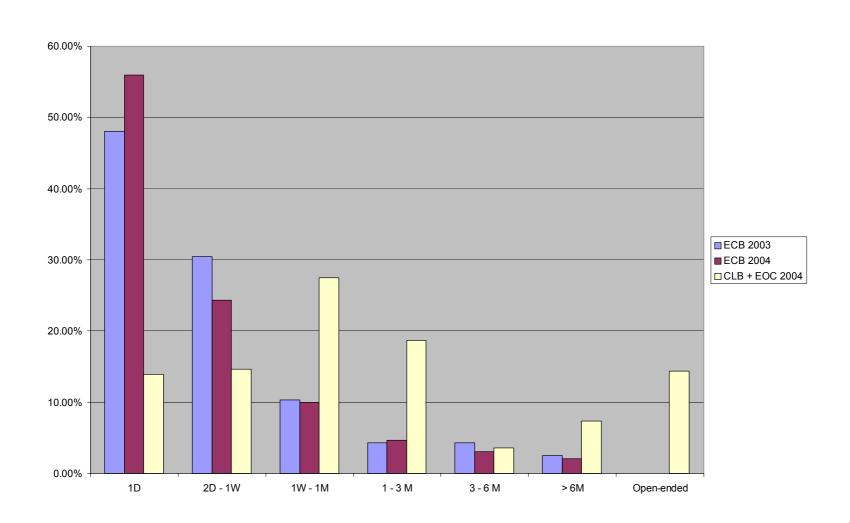






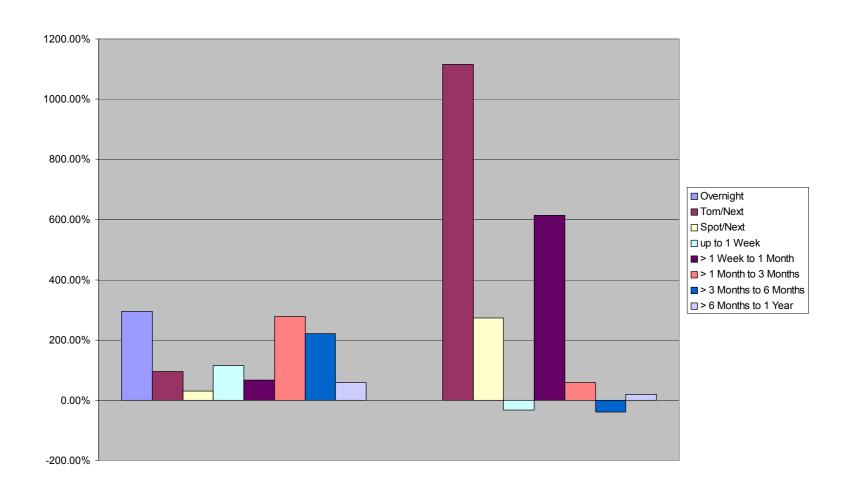
7. Counterparty analysis – triparty repo

ECB 2003 – 2004 Clearstream Banking and Euroclear Bank, 2004, maturity breakdown

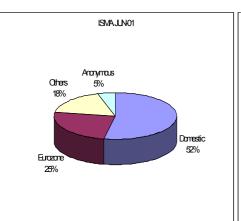


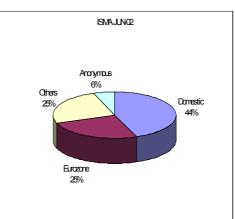
7. Counterparty analysis

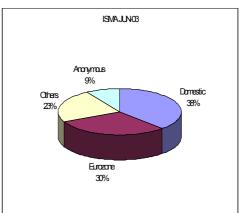
ECB Triparty growth 2003 - 2004

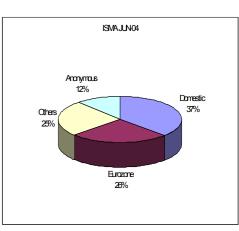


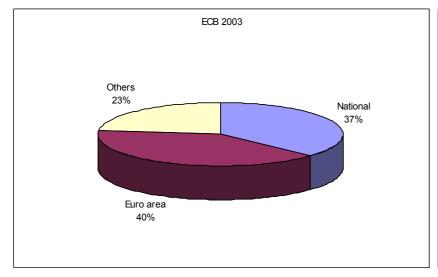
7. Counterparty analysis – cross border business

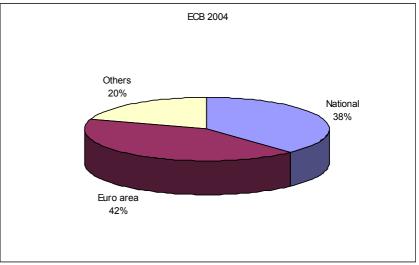






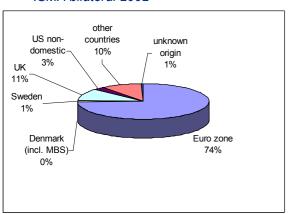




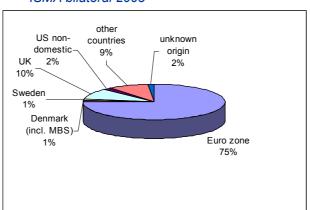


8. Collateral analysis

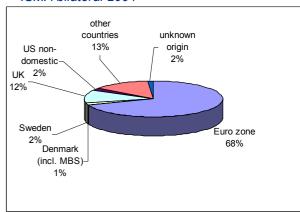
ISMA bilateral 2002



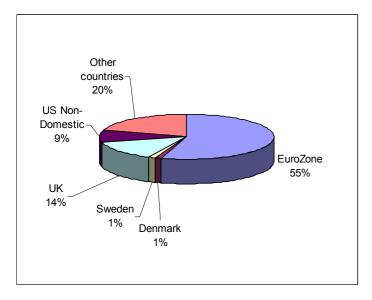
ISMA bilateral 2003



ISMA bilateral 2004

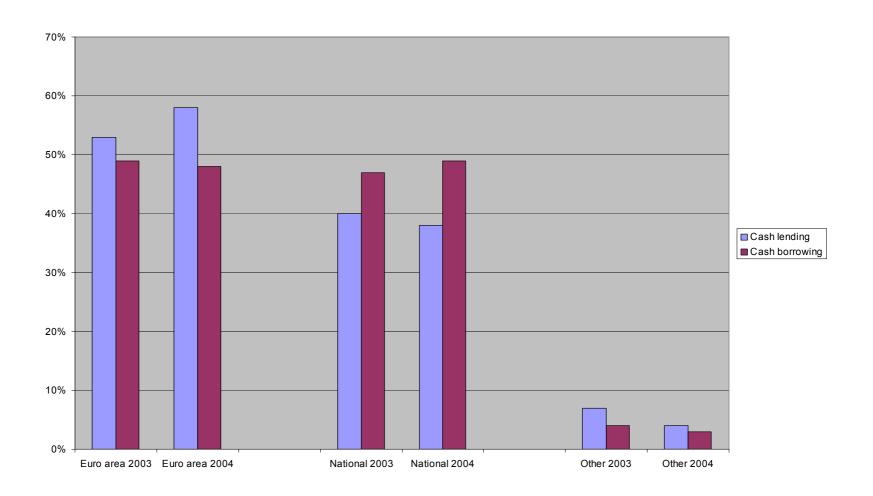


Triparty Clearstream Banking + Euroclear Bank 2004



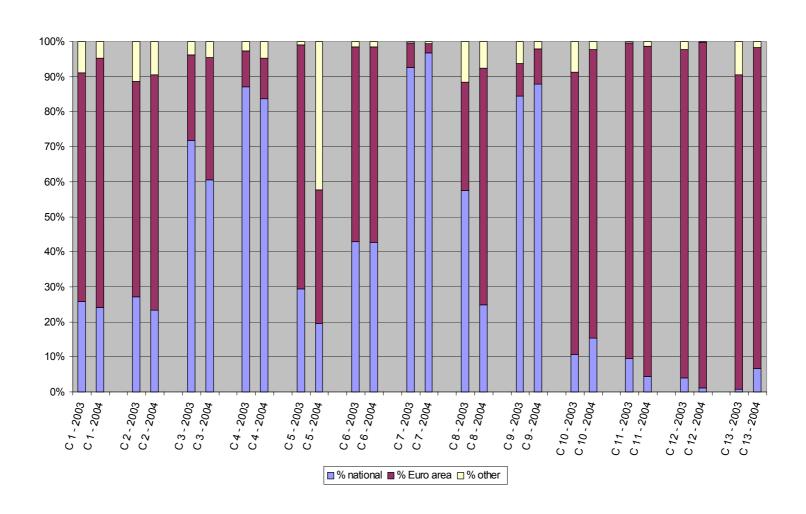
8. Collateral analysis

ECB bilateral repo



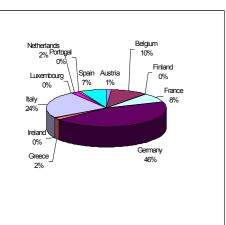
8. Collateral analysis

ECB: collateral per country

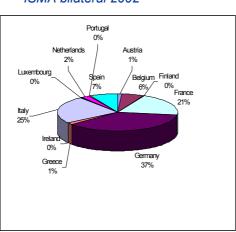


8. Collateral analysis

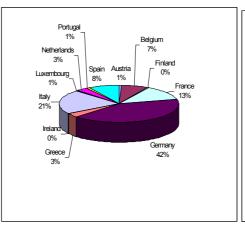
ISMA bilateral 2001



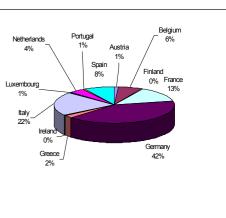
ISMA bilateral 2002



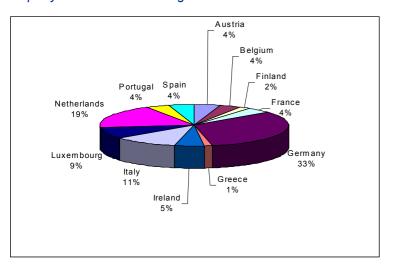
ISMA bilateral 2003



ISMA bilateral 2004

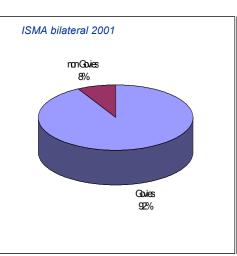


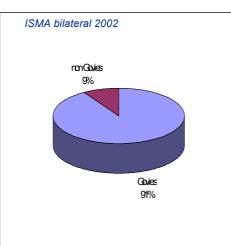
Triparty Clearstream Banking + Euroclear Bank 2004

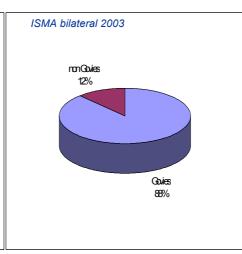


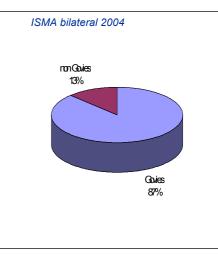
8. Collateral analysis

Government bonds in repo

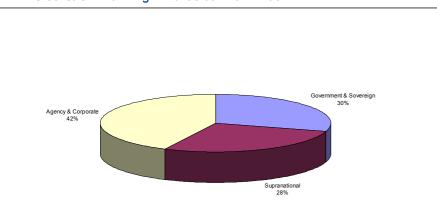






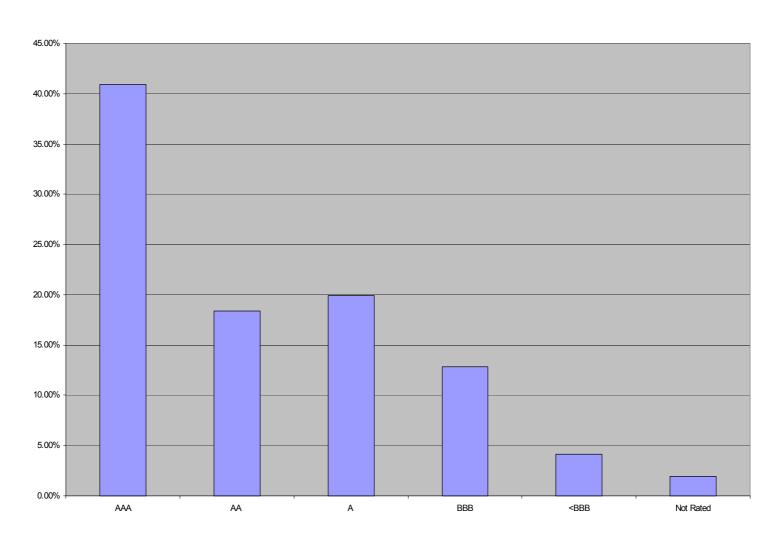


Clearstrem Banking + Euroclear Bank 2004



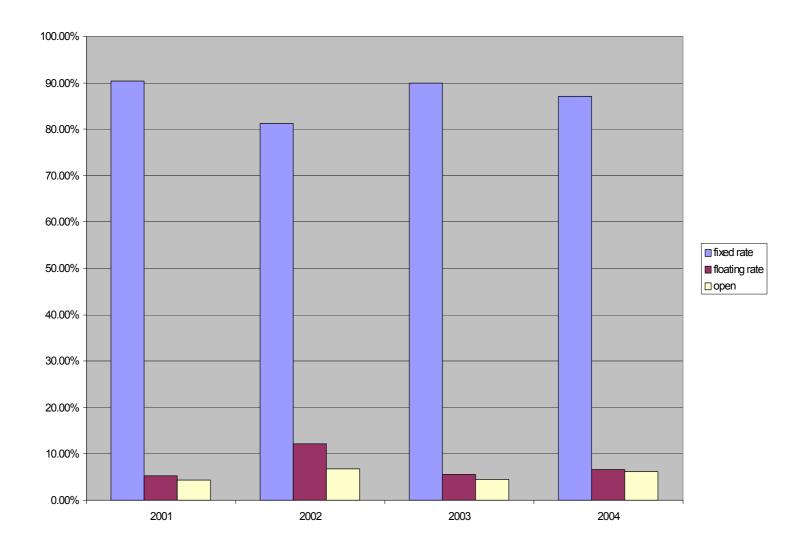
8. Collateral analysis

Triparty Clearstream Banking + Euroclear Bank 2004: rating underlying securities



9. Repo rate analysis

ISMA



Access to Central Bank Liquidity

Thomas J. Jordan

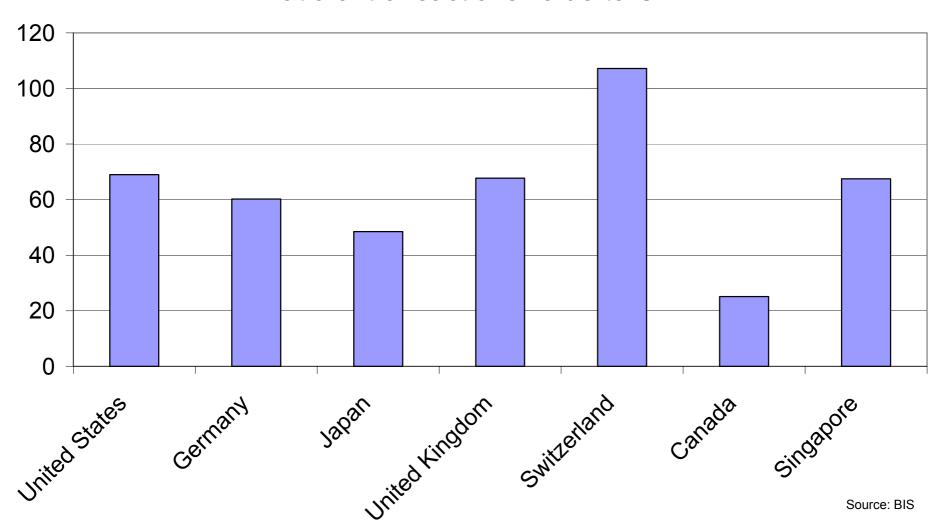
Alternate Member of the Governing Board

European Repo Council – General Meeting 17 March 2005

Swiss National Bank

International Importance of the Swiss Franc

Ratio of transactions value to GDP



Structure of Swiss Franc Money Market

- FX swaps USD/CHF (SNB estimate)
- Deposits(SNB estimate)
- Repo transactions (February 2005, SIS)

approx. CHF 900 bn

approx. CHF 100 bn

CHF 57 bn

Repo Strategy of the SNB I

Aim

Promotion of repo transactions in the Swiss franc money market

Reasons

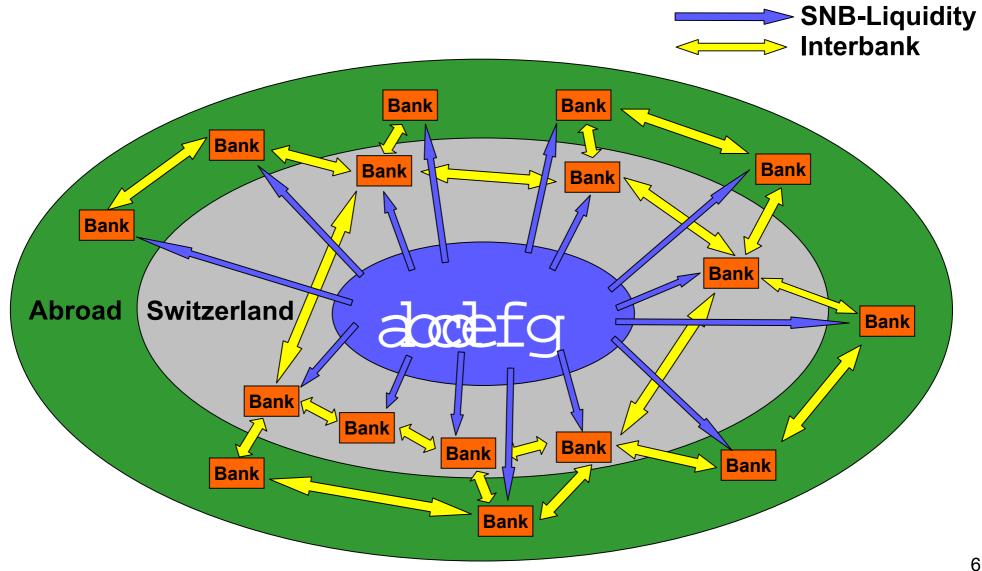
- Minimizing credit, liquidity, and settlement risks
- Increased transparency and efficiency
- Increased competition among banks
- □ Enhanced stability of the financial system

Repo Strategy of the SNB II

Measures

- Repo should become the standard transaction for the liquidity management in the Swiss franc money market
- Repo will be the only access to SNB liquidity
- SNB provides equal access to banks in Switzerland and abroad
- SNB will enlarge the repo collateral baskets

Swiss Franc Money Market



SNB Liquidity

Main financing operations (repo-auctions)

- Interval: flexible (usually daily at 9 a.m.)
- Maturity: flexible (usually 1 week)
- Price: flexible (depends on market price and level of 3M-Libor)
- Allotment: auction with proportional cut

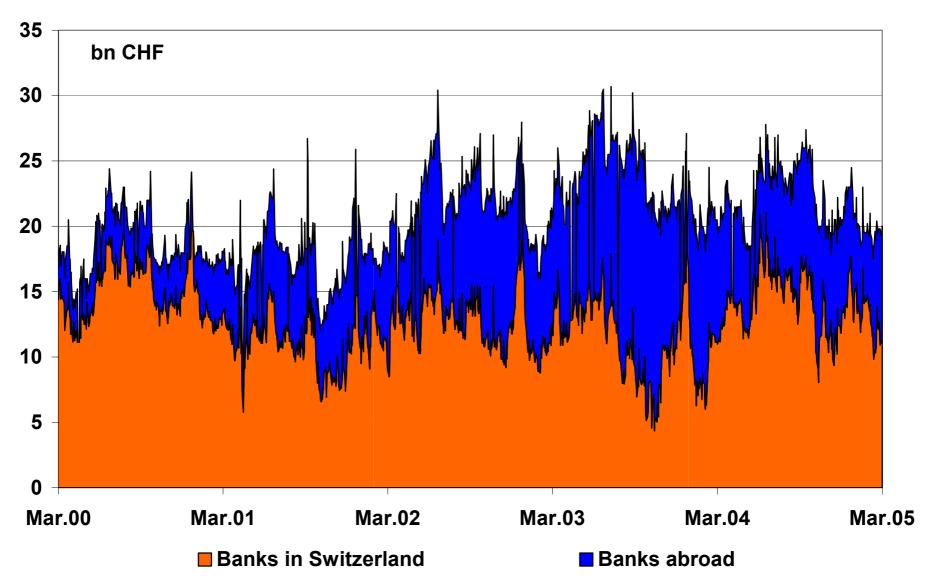
Intraday facility

- SNB provides intraday free liquidity through repos
- Collateral coverage of 110%

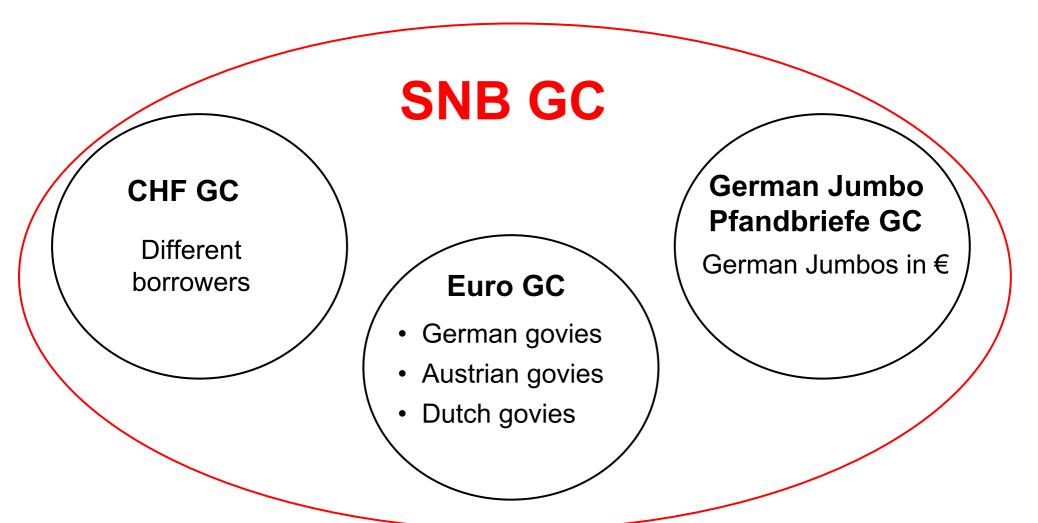
Special-rate repo

- Instrument available for banks in case of liquidity shortage
- Collateral coverage of 110%
- Interest rate: Repo-ON-Index (SNB) + 200 BP

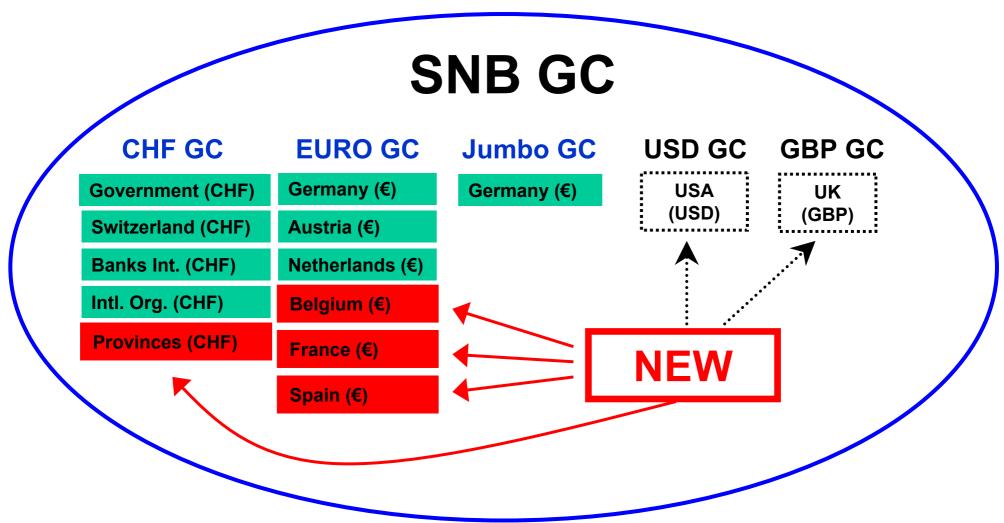
SNB Repos



Swiss Franc Repo Baskets



Enlargement of the Collateral Baskets 2005

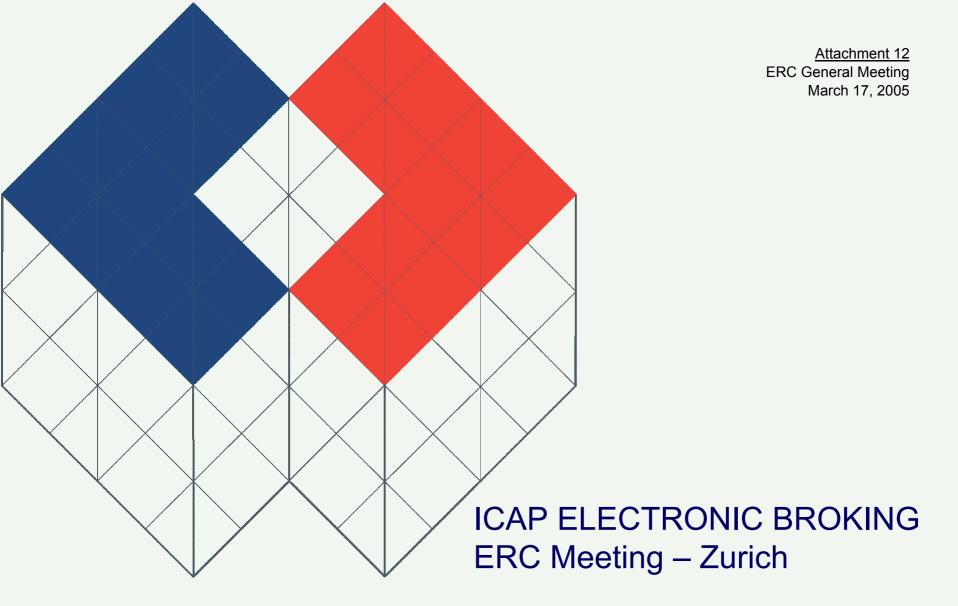


Advantages of Participating in the Swiss Franc Repo Market for Banks Abroad

- Direct access to SNB liquidity
- Extended access to the Swiss franc money market
- Direct access to the Swiss Interbank Clearing (SIC) system (self-clearer)
- Use of most efficient trading-, settlement- and clearing- system with minimal risks

Conclusions

- Repo should become the standard transaction for the liquidity management in the Swiss franc money market
- SNB provides equal access to banks in Switzerland and abroad
- The Swiss franc repo system is completely integrated (straight through processing) and efficient





John Edwards 17 March 2005

ICAP Electronic Platforms

Business Lines

BrokerTec	ETC	Fracross	I-Swap
• EU Repo	 US Treasuries 	 FRA-Matching 	Eonia
 EU Cash and Basis 	 USD Supras 	• EUR, GBP, USD	 Swaps
• UK Gilts	• Euro Bonds	• AUD,SEK, CHF,	 Fwd Swaps
 US Treasuries 	• i-Forwards	CZK, PLN, HUF	• FRAs
USD Supras	 Brady Bonds 		• IMM Swaps
• US Repo	 Rand mkts 		
 Credit Derivatives 			



BrokerTec – Electronic Trading

- 5 Year old proven global electronic trading platform
- Over 850 Traders in Europe
- Fixed Income products in the EU, US & Asia
- Over 300 Customers worldwide
- 23 hours trading facility available
- Average IEB daily Global volume is over \$400bn (single count) with a high of \$500bn 10th February
- Average daily European Repo nominal volume is now at €140bn in 2005 with a high of €148bn 10th March



Leverage of Electronic Access – EU Repo

Electronic	Ave Daily
Repo Traders	Trades

• Jan 2001:	45	239
• Jan 2002:	186	1,258
Jan 2003:	277	2,258
• Jan 2004:	368	3,099
• Jan 2005:	395	3,579

- Largest number of tickets by individual bank: 838 (1/3/05)
- Largest number of tickets by individual trader: 534 (25/2/05)



Repo Counterparties

- Interdealer (B2B)
- 68 counterparties live on Repo
- Counterparties located in every EU country
- 18 counterparties via a 3rd Party Clearer
- 5 counterparties in the process of 'going-live'
- 4 firms offering 3rd party clearing
- Clearing will extend to offer US Treasury Repo in Europe into GSCC/FICC



The ICAP 'Hybrid'

- Anonymity will be retained for ALL electronic client submitted orders & executed trades
- Voice Brokers able to interact passively and aggressively on BTEC system on 'behalf of customers' in ALL Markets:
 - Anonymous
 - Bilateral Markets
 - Stipulated [broker access only]
- Traders have full choice between electronic, voice assisted electronic or off-screen trading.



BTEC - New markets

- UK Treasury Bills
- Portuguese Bills
- CDS market launched on Btec system

Delivering Efficiencies

- Direct Settlement in Greece extended trading times
- 3 decimal places for Gilt Repo over 1 month
- Working to improve French Fails situation



BTEC New Functionality

New front end release in early Q3 2005

- Messaging
- Improved Screen layout
- Condensed View for Repo
- P&L calculator cash
- Tailor made Repo enhancements
- Bulk Order Manager improvements

GC Allocator

- Spanish & Greek Coupon issues 'wash period'
- Ability to query GC basket prior to trading



Strategic Development

ICAP - Internal

- Corporate Repo on Btec
- Launch of the ICAP Corporate Repo web browser
- Money Market Deposits
- Extending 'Cross Connect' between Btec & ETC

External – depend on external delivery date

- DBV via LCH
- Euro DBV facility
- Eurobonds via a CCP (?)



Benefits of ICAP Electronic Trading

- Combining voice and electronic liquidity pools
- Providing complete choice to traders
- Full Market support for voice and electronic
- One API for all pre & post order/trade requirements
- Full Anonymity & Firm prices
- Increased 'footprint' and number of participants
- Automated sending of eligible 'voice' trades to LCH markets. Clients will not need to utilise ETCMS processing for trades on BTEC/Garban
- Automated ticket writing for Voice trades via BTEC system using existing Post Trade Feeds



Electronic Trading Trends

- Broadening of products & markets traded
- More sophisticated aggregators and interfaces
- Continued consolidation (Brokers, CCP's, Settlement)
- Voice markets become hybrid (BTEC & ICAP)

