ICMA European Repo Council (ERC) General Meeting

19 November 2014
MTS, London
ICMA European Repo Council General Meeting
November 2014

Fabrizio Testa – CEO of MTS
Part of a leading diversified exchange group

Primary Markets
- London Stock Exchange
- Borsa Italiana
- Turquoise
- LSE Derivatives
- IDEM
- IDEX

Cash Equities
- Monte Titoli
- CC&G
- LCH.ClearNet

Derivatives
- ORB
- ExtraMOT
- MOT
- MTS

Fixed Income
- RNS
- Proquote
- Historical & Reference Data
- Unavista
- Real Time Data
- FTSE

Post Trade
Information Services
Technology
Pan-European repo network

[Image showing flags of various European countries]
Growth and expansion

Agency Cash Management (ACM)

€GCPlus

RepoFundsRate

LCH.CLEARNET

BrokerTec

IIS ICAP INFORMATION SERVICES
ICMA European Repo Council General Meeting
November 2014

Fabrizio Testa – CEO of MTS
ICMA European Repo Council (ERC) General Meeting

19 November 2014
MTS, London
Welcome and opening remarks

Godfried De Vidts, ICAP
# Financial Reforms Impacting Repo Markets

## Securities Regulation
- Short Selling Regulation
- EMIR
- MiFID 2/R
- CSDR
- SFTR (including FSB)

## Prudential Regulation
- Increased capital requirements, including leverage
- LCR
- NSFR
- AIFMD/UCITS/MMF
Other Issues

» Formation of a new ECB contact group called Macroprudential Policies and Financial Stability Contact Group (MFCG)

» ICMA Secondary Market Study: The current state and future evolution of the European investment grade corporate bond secondary market: perspectives from the market

» Greater buyside activity in the market is being embraced by the ERC

» Modernisation of ERC Committee election procedures is being debated
Minutes approval

Approval of the minutes of the ERC General Meeting held on January 22, 2014 in Luxembourg
Target 2 for Securities (T2S) Impact Study and Industry Target Operating Model

The European Repo Council (ERC) of the International Capital Market Association (ICMA) Conducted by Rule Financial
Survey Objectives

The ERC commissioned this industry wide survey by Rule Financial to assess market preparedness and industry attitudes towards T2S.

The survey results provides insights on industry participants’ current understanding of T2S, their level of practical engagement and their understanding of the consequences of T2S to their individual firms.

The knowledge gained from this survey will be used by the ERC to help guide and shape its approach in the future in providing T2S information, guidance and training to its members.
Webinar speakers

Rob Mason
Head of EMEA Securities Operations, RBS
Rob has over a decade of experience in the securities markets, covering middle office, confirmation/allocation, settlement and asset servicing. Rob runs the RBS bond and equity operations teams in EMEA.

James Tomkinson
Specialist OTC clearing and collateral mgt
James was part of the team that developed the first European triparty repo product at Clearstream. Prior to joining Rule Financial, James was VP, collateral management, global transaction services at Citi Group. He was also director of repo products at Nomura International.

David Field
Specialist in clearing and collateral
David has led numerous clearing & collateral consultancy engagements across buy-side, sell-side, custodians and CCPs; covering strategy, target operating model and technology implementation.

• The survey was conducted during summer 2014
• Findings were analysed and an industry target operating model (iTOM) designed
• Findings, conclusions & recommendations were presented at a public webinar on 10 November 2014 attended by 60 industry participants
• This presentation concludes the Rule Financial survey
Post trade mechanics: Case Study

- Post trade, different message formats and timings for confirmation and affirmation exist
- Numerous instruction messaging may be required to facilitate settlement
- Connectivity to multiple CSDs required to support each issuer market
- Each market may have different settlement rules (cut-off/instruction type)
- Access to ECB money via each NCB, meaning connection needed to many domestic markets
- Multiple cash accounts result in liquidity constraints and inefficiencies - collateral is pledged in multiple NCBs
- Fragmentation of collateral inventory creating operational overheads
Industry target operating model (iTOM)

- Direct connection removes many instructions passing through the chain to issuer CSDs
- Connectivity can be to 1 settlement location: T2S
- T2S has a single settlement rule (cut-off/instruction type)
- T2S allows linkage to one dedicated cash account, offering an opportunity to have a single cash account to collateralise at an NCB
- T2S offers opportunity for a single securities account consolidating collateral inventory, improving collateral liquidity
Even a “simple” cash trade in today’s landscape can be complex…

… but could be much simpler post T2S

Will this opportunity for simplification be taken up?
Will the potential for efficiencies realised?
We surveyed a broad cross section of the industry....

Organisations

- Sell Side Institution: 28%
- Custodian: 11%
- Buy Side Institution: 14%
- Other (CCP, Central Banks, Supranational): 47%

Nearly half of the survey respondents were from Sell Side institutions. Buy Side respondents represented just over 10%.

Area of Business

- Back Office & Middle: 14%
- Business Management: 4%
- Collateral: 10%
- Front Office: 20%
- Other: 24%
- Technology: 20%
- Treasury: 12%

Survey respondents represented a good cross section of business functions.

Primary Trading Office Location

- Europe - Eurozone: 67%
- Europe - Non-Eurozone: 18%
- The Americas: 12%
- Asia-Pacific: 3%
... and found most people are aware of T2S ...

My organisation is fully aware of the operational implications of T2S

- 55% Agree
- 21% Neither Agree nor Disagree
- 7% Disagree
- 17% Strongly Agree
- 0% Strongly Disagree

Over 75% of respondents agreed or strongly agreed that they were aware of the implications of T2S

Doing nothing in preparation for T2S is a viable option for my organisation

- 52% Agree
- 30% Neither Agree nor Disagree
- 10% Disagree
- 8% Strongly Disagree
- 0% Strongly Agree

Less than 20% of respondents believe that doing nothing was a viable option
... and anticipate significant benefits...

“Cut-off standardisation and level playing field will make all process more efficient”

“Commercial solutions for post trade services will reduce as we deal with harmonised settlement. Although additional challenges will arise especially in Asset Servicing”

“At the beginning it will be difficult, but in a second stage it will consist of a benefit”

“Centralised Funding and liquidity benefits”

“Harmony will increase awareness and hence everyone is on the same page to get things settled on time”

“Improved settlement efficiencies”

“Innovation brings efficiencies, so in my view it will help the bottom line”

“Positive - the cost increase is up-front, in the long run costs will probably decrease”

“Lower costs for our bank as intraday cash requirement will be reduced”

“We will have to amend our Swift messages so no great operational changes for us”

“We see no benefit in harmonisation, but shortening of settlement timelines is positive move”

“more efficient use of collateral that is currently spread over several CSD’s / Custodians”

“The harmonisation / extension of settlement timelines will improve the settlement efficiency”

“Cost of cross border settlement should decrease”

“Harmony will increase awareness and hence everyone is on the same page to get things settled on time”

“We don’t foresee any benefit for our organisation”

“Improved settlement efficiencies”

“Cost of cross border settlement should decrease”

“Centralised Funding and liquidity benefits”

“Harmony will increase awareness and hence everyone is on the same page to get things settled on time”

“Improved settlement efficiencies”

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Over 80% expect a significant impact...

How great an impact will T2S have on your organisation? Please provide a rating between 1 (low) and 10 (high).

More than 80% of respondents felt that T2S will have a significant impact on their organisation (an impactor of >5). One surprising and concerning message is that the types of firms that saw T2S being of less impact included Custodians and Central Banks.
... which varies by business function...

Please indicate the anticipated nature of the impact of T2S on the following areas of your organisation

**Operations**
- 16% Strongly positive
- 18% Positive
- 36% Neither positive nor negative
- 26% Negative
- 4% Very negative
- 7% No impact

**Funding**
- 12% Strongly positive
- 7% Positive
- 36% Neither positive nor negative
- 17% Negative
- 2% Very negative
- 2% No impact

**Network Management**
- 38% Strongly positive
- 36% Positive
- 7% Neither positive nor negative
- 2% Negative
- 10% Very negative
- 7% No impact

71% of Operations staff see positives in T2S. Will this be a simplification of work? Reduction in fails and accounts, meaning less post-settlement date chasing?

62% see positives in T2S—likely to be a way to reduce cash accounts and funding complexity. In fact, funding are more positive than Operations staff!

Network Management respondents were the cynics when it comes to T2S. Only 45% see benefits in T2S...
Please indicate the anticipated nature of the impact of T2S on the following areas of your organisation

**Repo Trading**
- 51% No impact
- 16% Very positive
- 16% Positive
- 3% Neither positive nor negative
- 2% Negative
- 12% Strongly negative

**Cash Trading**
- 44% No impact
- 26% Very positive
- 16% Positive
- 9% Neither positive nor negative
- 5% Negative

Repo traders see more potential benefits in T2S: likely to be a reflection of increased liquidity collateral, via more efficient settlement and harmonisation of settlement deadlines.
Most respondents have plans underway...

The majority of respondents have plans and initiatives underway in response to T2S, with many reviewing their Network Management and Custodian arrangements.

Has your organisation put in place any of the following measures in preparation for T2S? Please select all that apply.

- Review Custodian Structure
- Train Existing Staff
- Revised Network processing structure
- Platform changes to meet the new default settlement period around T+2
- Hire Staff
Has your organisation made any of the following changes in preparation for T2S? Please select all that apply.

- Additional staff hires: 6%
- Implementing organisation-wide cost reduction initiatives: 8%
- Organisational restructuring: 11%
- None of the above: 13%
- Settlement activity consolidation: 19%
- Changes to cash and/or liquidity management: 19%
- Message system upgrades (e.g., SWIFT): 24%

Survey responses indicated that the bulk of the organisational changes in preparation for T2S are in the payments and cash management areas of organisations (62%). Lower activity in settlements likely to stem from the decision by many participants to remain indirectly connected via existing providers.
... who see major liquidity benefits...

<table>
<thead>
<tr>
<th>Impact</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2S will result in an increase in the repatriation of capital across the industry</td>
<td>0%</td>
<td>17%</td>
<td>54%</td>
<td>29%</td>
<td>0%</td>
</tr>
<tr>
<td>T2S will result in a greater pool of collateral and increased liquidity across the industry</td>
<td>0%</td>
<td>3%</td>
<td>20%</td>
<td>57%</td>
<td>20%</td>
</tr>
<tr>
<td>T2S will result in greater Triparty interoperability</td>
<td>0%</td>
<td>11%</td>
<td>23%</td>
<td>60%</td>
<td>6%</td>
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<tr>
<td>The number of European agent banks that my organisation uses will decrease as a result of T2S</td>
<td>0%</td>
<td>12%</td>
<td>36%</td>
<td>48%</td>
<td>3%</td>
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<tr>
<td>T2S will impact my organisation's current T+2 settlement arrangement for Euros</td>
<td>0%</td>
<td>20%</td>
<td>37%</td>
<td>37%</td>
<td>6%</td>
</tr>
<tr>
<td>My organisation's buy-in arrangements will change as a result of T2S</td>
<td>0%</td>
<td>6%</td>
<td>53%</td>
<td>41%</td>
<td>0%</td>
</tr>
<tr>
<td>T2S will increase the use of European collateral to finance non-Euro currency business across the industry</td>
<td>0%</td>
<td>6%</td>
<td>49%</td>
<td>40%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Respondents felt that the impact of T2S will have most significance regarding: collateral pooling, increased liquidity, Tri-party interoperability and a decrease in the number of agent banks.
The majority of participants will connect to T2S indirectly ...

Most Sell Side institutions were planning to connect to T2S indirectly i.e. Indirectly Connected Party (ICP)

A significant minority of institutions (29%) indicated that they will review this within 2 years. Yet 60% state their firm have no plans to review.
... but there are still major technology impacts.

Most organisations feel that costs will either increase or not change.

Do you believe that T2S will result in additional costs in any of the following areas? Please select all that apply.

Electronic Messaging (e.g. SWIFT) and Agent network/connection to T2S are areas of investment that are likely to be the drivers for increased technology spend.
Mixed view on challenges arising from phased approach...

Most custodians anticipate operational challenges from the phased implementation of T2S; sell-side and others aren’t sure.
... and no clear view of potential for repo in T2S.

T2S modified for Repo transactions
i.e. Should repo transactions be recognised in T2S?

Do you believe that T2S should be modified specifically for Repo transactions?

“Starting Leg and Maturity Leg should be linked together”

“Tri-party interoperability is key!”

“Tri-party collateral management transactions should be treated differently from regular / outright settlements. The charges should be reduced as the collateralisation aspect has a higher priority than the security purchase / sale aspect”

No clear opinion on whether T2S should be modified for Repo with the exception of custodians who were clearly not in favour.
## Summary findings

<table>
<thead>
<tr>
<th>Infrastructure and Planning</th>
<th>High feeling of awareness and understanding of T2S objectives in respondents</th>
<th>Both Sell Side and Buy Side firms felt that T2S will have a significant impact</th>
<th>T2S will have a positive to very positive impact across most areas</th>
<th>Most respondents have plans in place – Network Mgmt &amp; Custody Services are the priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>High number of respondents will connect indirectly but many plan to review this decision</td>
<td>Payments and Cash Management departments doing the most preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Impact</td>
<td>Main impacts seen as collateral pooling, increased liquidity, opportunity to rationalise agents</td>
<td>Technology changes require the highest level of investment</td>
<td>Respondents unsure whether T2S should be modified for Repos</td>
<td></td>
</tr>
<tr>
<td>Other Impacts</td>
<td>T+2 Settlement will have an impact</td>
<td>Phased approach to CSD implementation seen as having an Ops impact by some</td>
<td>Hold and Release functionality reasonably well understood</td>
<td>Majority are undecided and are not planning to implement new hold &amp; release processes</td>
</tr>
</tbody>
</table>
Repo in T2S: a missed opportunity?

**T2S will improve settlement efficiency, timeliness and remove complexity**

a) Complex and inefficient cross-border settlement will no longer be required for assets held in T2S. Batch processing and differing settlement deadlines will be removed. This should result in fewer fails, later settlement times, more opportunity to trade late in the day and more collateral optimisation opportunities.

b) There is an opportunity to reduce the number of agents (even to a single agent) to handle the settlement of assets in T2S.

c) Participants will have the opportunity to manage a single DCA account which will improve liquidity and reduce operational overhead

**T2S will NOT improve repo end leg settlement nor lifecycle events**

a) T2S will not provide matched ‘off’ leg trade economics (accrued etc.) at the time of ‘on’ leg instruction

b) ‘Off’ leg proceeds calculation will have to be provided by the participant

c) Automatic ‘off’ leg settlement on term repo was not built into T2S

d) ESES in France will no longer support submission of Repo trades as a single instruction

e) Repo tracking will not be available: corporate action events will have to processed by participants

f) Repo tracking will not be available: coupons/redemptions will have to manually processed by participants and chains of payments will continue to be needed

g) T2S does not offer a trade repository: the industry will have to find and fund an alternative solution

h) Repo legs cannot be linked within T2S: legs must be linked by participants in their own systems
Recommendations for future development

1. **Introduce transaction type in T2S (repo, cash, buy/sell back, triparty etc.) in order to:**
   
a) Provide the ability to track beneficial owner of coupons/redemptions and ensure cash reaches beneficial owner on payment date, removing risk and effort
   
b) Ensure the beneficial owner receives corporate action notifications immediately, removing risk that the beneficial owner does not receive their rights to elect
   
c) Provide functionality for T2S to act as a repository for repo trades data, providing transparency to parties who desire more information, such as the Financial Stability Board (FSB)

2. **Introduce a common repo ID to link ‘on’ and ‘off’ legs to ensure all firms can explicitly track closure of multi-leg trades**

3. **Provide central interest calculation facility to reduce risk of exceptions between parties on multi-leg trades at off-leg settlement and reduce failed trades**
The survey results should give industry participants comfort that the implementation of T2S is well understood. Business areas seeing benefits of T2S focus on Operations and Cash Management. This is a result of the likely reduction in the use of custodian bank network and the resultant simplification of the settlement and funding mechanisms. However Front Office benefits resulting form T2S were also identified, with improvements to collateral liquidity being a key positive.

Over 80% of respondents indicating a view that T2S will have a significant impact on their business. This will required careful planning. The time for action is now.
Identification of Securities Financing Transactions in Message Formats

Frank Versmessen, SWIFT
Identification of Securities Financing Transactions in Message Formats

General Meeting European Repo Council
London, 19 November 2014
Background

Issue:

• Recent regulatory developments have significant implications for securities financing transactions:
  – Buy-in process stipulated in the EU CSD Regulation includes partial exemptions for repo trades and other SFTs
  – Recent reports from the FSB and the upcoming EU SFT Regulation show more transparency is required for SFTs in the EU and globally

Solution:

• Standardised identification of Repo and other SFTs in post trading and settlement processes will enable the partial exemptions included in the CSD-R regulation to be leveraged
• Proper identification of Repos and other SFTs in the post trade process will also ensure easier implementation of new reporting requirements when these start to apply at a later stage

Conclusion: SFTs must be clearly identified in post trade processes
Message flows

Remarks:

- Trade confirmation to potentially include settlement details
- Settlement may or may not include intermediaries
Settlement Instructions in ISO 15022

Repo deal

Seller
SELLGB22

MT 543

Agent or Sub-Custodian
SUBCXX12

MT 543

CSD
NCSDXX2

Buyer
BUYRGB22

MT 541

Agent or Sub-Custodian
SUBCYY34

MT 541

Trade Confirmation

Settlement Instruction Type field : :22F::SETR//xxxx
Correct usage of msg formats and code words

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<th>MT 541</th>
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<td>From BUYRGB22 to SUBCYY34</td>
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<td>98A::SETT//200150304</td>
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List of Settlement Instruction Types

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<tr>
<th>Code</th>
<th>Description</th>
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<td>BSBK</td>
<td>Buy Sell Back</td>
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<td>CLAI</td>
<td>Market Claim</td>
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<td>CNCB</td>
<td>CB Collateral Operation</td>
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<td>COLO</td>
<td>Collateral Out</td>
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<td>SYND</td>
<td>Syndicate of Underwriters</td>
</tr>
<tr>
<td>TBAC</td>
<td>TBA Closing</td>
</tr>
<tr>
<td>TRAD</td>
<td>Trade</td>
</tr>
<tr>
<td>TRPO</td>
<td>Triparty Repo</td>
</tr>
<tr>
<td>TRVO</td>
<td>Triparty Reverse Repo</td>
</tr>
<tr>
<td>TURN</td>
<td>Turnaround</td>
</tr>
</tbody>
</table>
Usage of Settlement Instruction Type field
(based on SWIFT network statistics - Q1 2014)

Against payment messages:

- Usage of TRAD about 90%
- Usage of REPU about 1%
- Usage of RVPO about 1%

Free of payment messages:

- Usage of TRAD about 60%
- Usage of SECL about 16%
Securities Market Practice Group (SMPG)

• Market practices exist, documented on www.smpg.info
• For repo settlement:
  – Each party (buyer, seller) should instruct using **one and only one message type** for ALL repo information throughout the WHOLE process
  – The party receiving the cash in exchange of the securities collateral (the seller) will always release delivery messages
  – The party receiving the securities collateral and delivering the cash (the buyer) will always release receive messages
  – The instruction will be identified as being the settlement of a repo operation by using field :22F::SETR//REPU
  – The instruction will be identified as being the settlement of a reverse repo operation by using field :22F::SETR//RVPO
  – The repo sequence is used to provide the closing information; the minimum business elements needed in the repo sequence are closing date, repo deal reference, the necessary info to calculate the repurchase amount or the repurchase amount itself, total number of collateral instructions
Way forward

• Spread know-how about standards and market practice

• Adoption by market players

• Adoption by intermediaries

• Maintenance/upgrades if required
Thank you
Recent trends in the European repo market and what we have to look forward to

Richard Comotto, ICMA
Survey overview

- outstanding value of contracts at close of business on Wednesday, 11th June 2014
- 65 responses
Headline numbers

- **June 2014**: EUR 5,782 billion
- **December 2014**: EUR 5,499 billion
- **June 2013**: EUR 6,076 billion
- **December 2012**: EUR 5,611 billion
- **June 2012**: EUR 5,647 billion
- **December 2011**: EUR 6,204 billion
- **June 2011**: EUR 6,124 billion
- **December 2010**: EUR 5,908 billion
- **June 2010**: EUR 6,979 billion
- **December 2009**: EUR 5,582 billion
- **June 2009**: EUR 4,868 billion
- **December 2008**: EUR 4,633 billion
- **June 2008**: EUR 6,504 billion
Headline numbers

27th European repo market survey conducted in June 2014

Lehman

LTRO

Jun-07

Jun-10

Dec-08

EUR 5,782bn
Europe v US

27th European repo market survey conducted in June 2014

EUR/USD billion

Lehman
Dec-09
LTRO

USD 4,305.5bn
Comparable market growth

- 61 respondents participating in last 3 surveys
  - +3.3% since December 2013 (cf headline +5.1%)
  - -4.6% year-on-year
Trading analysis

automatic trading system
includes GC Pooling
bilaterally/triparty/CCP-settled

ATS
32.8% (31.7%)
direct
43.0% (43.3%)
bilaterally-negotiated by phone or EM bilaterally-settled

arranged by voice-broker
bilaterally-settled

broker
14.0% (15.1%)

triparty
10.2% (9.9%)
bilaterally-negotiated by phone or EM triparty-settled

27th European repo market survey conducted in June 2014
Trading analysis

27th European repo market survey conducted in June 2014

- Direct
- Triparty
- Broker
- ATS

repo
reverse repo

Percentage breakdown.
Trading analysis

27th European repo market survey conducted in June 2014

Lehman

LTRO

direct
triparty
broker
ATS
27th European repo market survey conducted in June 2014

Geographical analysis

ATS via CCP

- anonymous: 24.1% (25.0%)
- domestic: 25.1% (26.1%)
- in/out eurozone: 31.7% (30.9%)
- intra-eurozone: 19.1% (18.0%)

from reporting bank cross-border to a(nother) eurozone counterparty
from reporting bank cross-border to a non-eurozone counterparty
Geographical analysis

- Domestic: Red (repo) - 25%, Blue (reverse repo) - 25%
- Intra-eurozone: Red (repo) - 20%, Blue (reverse repo) - 15%
- In/out eurozone: Red (repo) - 30%, Blue (reverse repo) - 30%
- Anonymous: Red (repo) - 10%, Blue (reverse repo) - 10%
Geographical analysis

27th European repo market survey conducted in June 2014

Lehman

LTRO

domestic

cross-border

anonymous

Business cleared across CCP

27th European repo market survey conducted in June 2014

[Diagram showing business cleared across CCP with data points from June 2008 to June 2014, with labels for Lehman and LTRO periods.]
27th European repo market survey conducted in June 2014

Currency analysis

- EUR: 65.7% (66.2%)
- USD: 14.5% (14.8%)
- GBP: 10.5% (10.2%)
- JPY: 5.4% (4.9%)
- Other: 3.9% (3.8%)
Currency analysis

27th European repo market survey conducted in June 2014

Lehman LTRO

<table>
<thead>
<tr>
<th>EUR</th>
<th>GBP</th>
<th>USD</th>
<th>other</th>
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</tbody>
</table>

Collateral analysis

- **Japan**: 4.8% (4.2%)
- **US**: 2.6% (2.6%)
- **UK**: 10.6% (12.0%)
- **EUR**: 7.3% (8.1%)
- **BE**: 2.9% (3.4%)
- **ES**: 6.3% (4.6%)
- **DE**: 19.1% (21.9%)
- **IT**: 10.6% (9.2%)
- **FR**: 10.9% (11.7%)
- **etc**: 24.9% (23.3%)
Collateral analysis

27th European repo market survey conducted in June 2014

Lehman LTRO
Collateral analysis

EU non-govis
20.7%
(19.9%)

EU govis
79.3%
(80.1%)

27th European repo market survey conducted in June 2014
Collateral analysis

**repo**
- EU govis: 76.8%
- EU non-govis: 23.2%

**reverse repo**
- EU govis: 81.6%
- EU non-govis: 18.4%
Collateral analysis

27th European repo market survey conducted in June 2014

Collateral analysis diagram showing Lehman and LTRO periods with EU non-govis and EU govis percentages.
Maturity analysis

- 1D: 20.9%
- 1W: 16.8%
- 1M: 22.6%
- 3M: 11.7%
- 6M: 4.1%
- 12M: 3.6%
- +12M: 2.8%
- ft-ft: 10.4%
- open: 7.2%

Total = 60.3% (57.7%)
Maturity analysis

27th European repo market survey conducted in June 2014

27th European repo market survey conducted in June 2014

Lehman
LTRO

SD+ope
n
1M+
Maturity analysis

Lehman

LTRO

SD + open

1-6M
Maturity analysis

27th European repo market survey conducted in June 2014
Maturity analysis

27th European repo market survey conducted in June 2014
Maturity analysis

Lehman

LTRO

min. WAM

max. WAM
Rate analysis

- Fixed: 79.6% (78.8%)
- Floating: 13.2% (12.6%)
- Open: 7.2% (8.6%)
Rate analysis

Lehman
LTRO

fixed rate
floating rate
open
Product analysis

(repo 89.4%
lending 10.6%)

27th European repo market survey conducted in June 2014
Next survey

Wednesday, 10th December 2014
Currency analysis

- EUR
- GBP
- USD
- JPY
- SEK, DKK
- other

27th European repo market survey conducted in June 2014
Collateral analysis

27th European repo market survey conducted in June 2014
Collateral analysis

Lehman LTRO

DE
IT
FR
UK
other EU
other
Paper on the interaction of regulation on repo and collateral markets

Richard Comotto, ICMA & David Hiscock, ICMA
Alternatives for Repo Indices / Establishing a Standard for European Repo Indices

Romain Dumas

ERC, London, November 2014
Importance of a widely accepted repo index

» Significance of the European repo market

• Today, the **secured segment accounts for almost 80%** of interbank lending and borrowing transactions

• Repo markets have been able to **absorb a substantial part** of the reduction of unsecured lending/borrowing following the crisis, therefore limiting the intervention of the ECB to facilitate liquidity

<table>
<thead>
<tr>
<th>EUR bn</th>
<th>Reduction in unsecured turnover</th>
<th>Increase in secured turnover</th>
<th>Net reduction of turnover</th>
<th>Increase in Eurosystem BS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-327</td>
<td>+212</td>
<td>-115</td>
<td>113</td>
</tr>
</tbody>
</table>

**The Repo market has lessened the burden on the ECB***

**Secured vs. Unsecured (volumes for 2012)**

<table>
<thead>
<tr>
<th></th>
<th>Lending</th>
<th>Borrowing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EUR bn</strong></td>
<td>192</td>
<td>254</td>
</tr>
<tr>
<td><strong>Unsecured</strong></td>
<td>53</td>
<td>75</td>
</tr>
<tr>
<td><strong>Secured</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**There is a need of a pan-European effort to establish a widely-accepted standard**

- Increased market transparency
- Enhanced visibility for regulators
- Helping market participants **manage risks**
- Monitoring the **monetary policy transmission mechanisms**

*Source: ICMA “The Future of the Repo Market” – June 2013, Presentation by Francesco Papadia, Chairman of the Board of the Prime Collateralised Securities (PCS) and former Director General, Market Operations, European Central Bank*
A working example in the US: the DTCC GCF Repo index*

» The index was developed in response to concerns of the Treasury Markets Practice Group, sponsored by the Federal Reserve Bank of New York, regarding the need for enhanced transparency in the Treasury, agency debt and mortgage-backed securities markets.

» Based on an average daily volume of close to USD 400bn of overnight transactions.

» Based only on actual transactions.

» Fully transparent index methodology.

» Suite of 3 DTGCC GCF Repo Indices, each calculated as the weighted average of the interest paid each day on overnight transactions involving GCF Repos for:
  - U.S. Treasury (< 30Y maturity) (GCFRTSY Index)
  - Non-mortgage backed US agency securities (GCFRAGY Index)
  - Fannie Mae & Freddie Mac fixed rate MBS (GCFRMBS Index)

» Futures and swap market
  - Bloomberg page: Tulett Prebon → Tullett Prebon → OIS → GC Index Swaps (GDCO 6793 3)
  - Bloomberg tickers: USTA Cmddy

*Average daily trading in GCF Repos in 2012.
Adapting best practices to the Euro Zone reality

» Key differences from the US market
  • Heterogeneous market: European repo markets liquidity is along national “GC” lines and certain basket products (e.g. GC Pooling)
  • CCP: sovereign risks subject the CCP model to constraints unknown to the US
  • Data ownership: transaction data remains with inter-dealer brokers and not with CCPs
  • GCF/DBV: no pure GCF/DBV type of product encompassing the whole euro market

» Several parallel initiatives
  • Capturing different segments of the European market
  • Varying index calculation methodologies
  • Different levels of industry backing
  • In some cases, filtering algorithm to capture broader GC concept out of specific transactions

» A working group of the ICMA European Repo Committee has discussed the need for, and features of, a suite of secured benchmark indices reflective of the European repo market
Assessing and comparing existing initiatives for 1-day fixing

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Euro Zone</th>
<th>UK</th>
<th>US</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Eurepo*</td>
<td>RepoFundsRate</td>
<td>GC Pooling</td>
</tr>
<tr>
<td>Based on actual market transactions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Broad section of market</td>
<td>☐</td>
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<tr>
<td>Anchored in existing liquid markets</td>
<td>☐</td>
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<tr>
<td>Capturing only centrally cleared transactions</td>
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<tr>
<td>Diversity of participants</td>
<td>☐</td>
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<tr>
<td>Governance by industry body</td>
<td>☐</td>
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<tr>
<td>Pure GC basket product</td>
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</tbody>
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*decision made to de-commission in October 2014*
Assessing and comparing existing initiatives for term fixing

<table>
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<th>UK</th>
<th>GCF</th>
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</table>
Progress and discussion so far

» In September 2013, by invitation of the EBF/EMMI, the ERC Repo Index task force, the Eurepo steering committee and an observer from the ECB met as a working group to receive an update on the various initiatives and devise the way forward. A meeting with the EMMI Eurepo Steering Committee to discuss ATSs and CCPs will be hosted by ICMA in London on the 25th of November.

» For the benefit of the wider public, it comes out as a necessity to build the index as a unique pan-Eurozone daily index capturing the weighted average of all centrally-cleared, electronically-transacted 1-day repo transactions.

» This is a challenge given the liquidity structure of the Euro repo markets but one that can be resolved. Extracting information from the deepest and most liquid funding market with volumes in excess of EUR 250bn transacted daily is a worthwhile goal.

» It was decided to focus on secured funding transactions in EUR cleared on a qualifying CCP, electronically transacted as the result of an on-screen quote and collateralized by ECB eligible paper:
  • A clear definition to capture the full substance of the Eurozone secured funding market
  • While considering only transactions with the most transparent execution mode, in line with modern standards.

» Let’s note that the major private initiatives, conducted by Stoxx and ICAP Investor Services, took this on board and focus on precisely such transactions.
Secured funding transaction means a transaction for which the primary motive of the buyer / cash giver is **investing/collateralization** of cash. These can occur in **3 formats**:

- Pure **GC basket** products, such as GC pooling, with a rule based dynamic allocation
- **Traditional GC** trades, with a static allocation at point of trade
- Transactions on **individual bonds which do not trade special**

Intention to capture and consolidate all qualifying transactions from every Eurozone pool of liquidity (i.e. cluster of risk)

- **Homogeneity** of risk within each pool, which comes from participating to the **same default fund**
- **Consistency** of the calculation **methodology** applied **across all pools** for a given format of transaction
# European repo market typology

<table>
<thead>
<tr>
<th>CCPs/ Cluster of Risk</th>
<th>GC extracted from transactions on individual bonds and traditional GC</th>
<th>GC basket Product</th>
</tr>
</thead>
</table>
| LCH Limited           | • Germany  
                         • Netherlands  
                         • Belgium  
                         • Portugal, Ireland  
                         • .... |                  |
| LCH Clearnet          | • France  
                         • Italy  
                         • Spain | • Euro GC Plus |
| EUREX                 | • High grade corporate  
                         • Supra  
                         • Covered  
                         • Some sovereign activity | • GC Pooling |
| MEFF                  | • Spain |                  |
Creating the Euro Global Repo Index

Key principles

- Criteria for eligible transactions:
  - Centrally cleared
  - Electronic execution
  - ECB-eligible collateral

- Euro Global Index calculated based on sub-component representing each CCP / Risk-cluster
  - Consistent calculation method across all CCP / Risk clusters for each type of transaction (individual bonds vs. basket product)

- Governance by an industry body with broad based representation:
  - Responsible for the methodology and eligibility criteria
  - Existing index initiatives responsible for implementing method selected, each with its own expertise

Data extracted from transactions on individual bonds to calculate sub-indices
Data extracted from transactions on baskets to calculate sub-indices
Sub-indices used as data to calculate the Central Index
Selected key issues and recent developments

» Should there be a distinction between funding and special driven transactions i.e. shall we look to filter out of the transactions on specifics the bonds trading *specials*?
  • If no filtering: risk of skewing the data set lower; but simpler and also straightforward to aggregate
  • If distinction: what should the filtering methodology be? who decides what it is? which technical bias are introduced?

» How should the data be aggregated to create the Euro Global repo Index?
  • Should the Global Index consolidate consistently filtered data from each source or should it aggregate the raw data and then filter? No such question for the pure GC baskets products such as GC pooling, Euro GC Plus
  • Weighting of each sub component also has to be determined

» Establishing downward compatibility between the Euro Global Index and existing initiatives
  • Highly desirable to ensure the possibility for private initiatives of compatibility with the Global Index
  • Absolutely feasible given the same rules for the eligibility of the raw data are used. The question is only on the filtering methodology if any and when transactions other than pure GC baskets are considered

» Dynamism of private initiatives
  • RepoFunds Rate (Germany, France and Italy) all officially recognised by ISDA on 30th April 2014 with. MarketServ are due to upgrade their product in January 2015 to support trade reporting of OIS/RFR trades. **REFR Index Go**
  • Eurex launched on the 12th of November a Money Market Future on the STOXX GC Pooling Repo Index. **OME Index Go** for the Future and **SGCPDFR Index Go** for the underlying Index
ERC: Legal update

» GMRA legal opinion exercise: Agreement coverage

» GMRA: 2011 Protocol

» GMRA: buy side/corporate users
For further details

Contact:

- lisa.cleary@icmagroup.org
- +44 207 213 0330
On October 6th 2014, the European fixed income markets moved to T+2 settlement, both for on-venue and OTC.

The regulation (CSDR Article 5) requires T+2 latest settlement for “transactions in transferable securities...which are executed on trading venues” and settle on an EEA (I)CSD, and is effective from January 1st 2015. Trading venues are defined as:

- regulated markets
- multilateral trading facilities (MTFs)
- organized trading facilities (OTFs)

The decision was made to move all OTC transactions on EEA CSDs.

Edge-case issues: RegS vs 144A; Asia-Pac ‘XS-isins’; non-European EM (Global Coordination)
T+2 and repo

» SFTs have no standardized settlement date, so largely out of scope

» But, de facto liquidity shift to T+1 (and T+0) for most financing trades

» Challenges of shorter window for collateral and cash management

» Change in cut-off times for re-calls, returns, and re-rates for open repo (7% of market): 12pm London time T+1

» Cut-off times for edge-case open repos to take lead from underlying markets

» **Unintended consequence for repo platforms?:**

  “For complex operations composed of several transactions such as securities repurchase or lending agreements, that requirement should apply to the first transaction involving a transfer of securities.”
A smooth migration

» Netting and pair-offs across trades transacted on October 4th and 6th meant that settlement volumes on the 8th only increased by around 50%.

» Only around 1% of total traded volumes mismatching and subsequently requiring post-trade repair

» Settlement efficiency levels have remained high during the migration, with only a negligible uptick in settlement fails on October 8th

» Will continue to monitor

» Repo platforms in contact with EC to resolve issue related to forward-starting SFTs
CSDR – mandatory buy-ins and settlement discipline

Stefano Bellani, J.P. Morgan & Andy Hill, ICMA
CSDR Mandatory Buy-ins and Cash Penalties

» Regulation on improving securities settlement in the European Union and on central securities depositories (CSDR) aims to improve safety and efficiency of securities settlement in Europe

» Articles 6 & 7, which deal with *measures to prevent settlement fails* (better known as ‘settlement discipline’), provides for:

  • CSDs to establish systems to monitor fails

  • CSDs to provide a penalty mechanism which will serve as a deterrent for settlement fails

  • A mandatory buy-in process to be initiated where a transaction is still failing 4 days after intended settlement date (ISD) – this has scope to be increased to 7 days, depending on liquidity of the security being bought in

  • *Securities financing transactions (SFTs) to have a partial exemption from mandatory buy-ins*
Problems with executing buy-ins

» Buy-in prices can often be very far from ‘fair market value’, creating market distortions

» The counterparty being bought-in will effectively incur a cost equivalent to the bid-offer spread between the buy-in price and the sale necessary to flatten the position post buy-in.

» A counterparty being bought-in has market risk until they flatten their position. If there is a delay in communicating that the buy-in has been executed this will expose them to unquantifiable market risk

» Bought-in securities still may not settle

» It may be difficult to find buy-in agents

» Buy-ins can cause relationship issues
Challenges of implementing mandatory buy-ins

» Buy-ins currently occur at the trading level. CSDR provides that this should occur at the settlement level. How can this disconnect be reconciled?

  • Can CSDs differentiate between failing transaction types (important for exempt SFTs)?
  • Can CSDs identify fail-chains and know who should be bought-in to settle the chain?
  • What happens with fail-chains across different CSDs (including those outside of EEA)?
  • How and when are buy-ins communicated at the trading level (since this increases market risk)?

» Central clearing counterparties (CCPs) are exempt. How does this impact buy-in chains?

» What should be the calibration for the extension periods (4-7 days) for different securities (MiFID II?)

» What is the impact of exempting some SFTs and not all? Market fragmentation.

» Mandatory buy-ins for the start-legs of SFTs will conflict with the legal provisions of the GMRA/GMSLA.
What will be the likely impact of mandatory buy-ins

» Increased risk and cost to market-makers, who will either only show offers in securities they hold, or will widen spreads to reflect risk

» Increased administrative and legal stress, as well as market risk, as number of buy-ins to manage increases exponentially

» Market disruption caused by multiple buy-ins, particularly in less liquid securities

» Reduced lending of securities where SFTs are in scope of buy-ins

» A reduction in settlement efficiency and increased fails as lending pool of securities reduces

» Ever more buy-ins as an vicious circle of settlement inefficiency takes hold
Key take-aways for Mandatory Buy-ins

» CSDR is settlement regulation with major trading impacts, which is in itself a problem

» Mandatory buy-ins pose a significant threat to European bond market liquidity

» Mandatory buy-ins will discourage lending of securities and fragment the European repo market

» Mandatory buy-ins will most likely have the counterproductive impact of reducing settlement efficiency

» While it may no longer be possible to reverse the regulation, it is critical that users of the secondary bond and repo markets work with ESMA, the EC, the ECB, local regulatory authorities, local central banks, and DMOs to ensure that is implemented in a way that causes the least disruption and damage to market liquidity and efficiency
Cash Penalties

ICMA/AFME view on guiding Technical Standards:

- Simple model based on ad valorem rate related to benchmark rate
- Similar to TMPG mechanism in US Treasury market
- Harmonized approach across all CSDs (T2S)
- Compensation model as opposed to penalty model
- Gross model as opposed to net model
- Automated claiming process based on CSD messaging
Penalty model does not incentivize settlement in a chain

Penalty model:

A fails to B, who fails to C. A and B are both penalized, even though B is flat. C is not compensated. B can avoid the penalty by borrowing bonds in the repo market, but this is still a cost.
A fails to B. However, B can borrow bonds in the repo market (cost 50bp) to deliver to C. Since B is compensated for A’s fail (3%), there is an incentive to do this (and earn 250bps).
A solution looking for a problem

Bond Market Settlement Efficiency

Source: ICMA-ERC Settlement Efficiency survey, 2014
A solution looking for a problem

Repo Market Settlement Efficiency

Source: ICMA-ERC Settlement Efficiency survey, 2014
Financial Stability Board: Haircuts on non-CCP Cleared SFTs

David Hiscock, ICMA
On 14 October 2014, the FSB published its Regulatory Framework for haircuts on non-centrally cleared SFTs. This Framework is a key part of the FSB’s policy recommendations to address shadow banking risks in relation to SFTs and takes into account:

» Public responses received on the consultative proposals issued on 29 August 2013; and
» Results of a two-stage QIS
The Framework aims to limit the build-up of excessive leverage outside the banking system and to help reduce the procyclicality of that leverage. It consists of:

i. Qualitative standards for methodologies used by market participants that provide securities financing to calculate haircuts on the collateral received; and

ii. Numerical haircut floors that will apply to non-centrally cleared SFTs in which:
   – Financing against collateral other than government securities
   – Is provided to entities other than banks and broker-dealers (referred to for simplicity as “non-banks”).

In revising the Framework, the FSB has decided to raise the levels of numerical haircut floors based on the QIS results, existing market and central bank haircuts, and data on historical price volatility of different asset classes.
## FSB – Haircuts on non-CCP Cleared SFTs

<table>
<thead>
<tr>
<th>Residual maturity of collateral</th>
<th>Haircut level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Corporate and other issuers</td>
</tr>
<tr>
<td>≤ 1 year debt securities, and Floating Rate Notes (FRNs)</td>
<td>0.5%</td>
</tr>
<tr>
<td>&gt; 1 year, ≤ 5 years debt securities</td>
<td>1.5% (1.0%)</td>
</tr>
<tr>
<td>&gt; 5 years, ≤ 10 years debt securities</td>
<td>3.0% (2.0%)</td>
</tr>
<tr>
<td>&gt; 10 years debt securities</td>
<td>4.0% (2.9%)</td>
</tr>
<tr>
<td>Main index equities</td>
<td></td>
</tr>
<tr>
<td>Other assets within the scope of the framework</td>
<td></td>
</tr>
</tbody>
</table>
The FSB has also decided to propose applying the numerical haircut floors to non-bank to non-bank transactions so as to:

- Ensure shadow banking activities are fully covered
- Reduce the risk of regulatory arbitrage: and
- Maintain a level-playing field

A consultative proposal in this regard, for comment by 15 December 2014, is set out in Annex 4 of the Framework document

The FSB will complete its work on the application of numerical haircut floors to non-bank to non-bank transactions and set out details of implementation monitoring by the second quarter of 2015
Qualitative standards for methodologies used by market participants to calculate haircuts:

- Standards for methodologies to calculate haircuts on an individual asset basis
  - Haircuts should be based on the market risks of the assets used as collateral and be calibrated at a high confidence level, using a long historical time period that includes at least one stress period, in order to cover potential declines in collateral values during liquidation
  - Haircuts should capture other risk considerations where relevant
- Additional guidance for methodologies to calculate haircuts on a portfolio basis
FSB – Haircuts on non-CCP Cleared SFTs

**Recommendation 12:**

Regulatory authorities should set qualitative standards for the methodologies that firms use to calculate collateral margins/haircuts, whether on an individual transaction or portfolio basis, and should review those standards against the guidance set out above by the end of 2017.

In particular, regulatory authorities should seek to minimise the extent to which these haircut methodologies are procyclical.

Standard setters (e.g. BCBS) should review existing regulatory requirements for the calculation of collateral haircuts in line with this recommendation by the end of 2015.

**Recommendation 13:**

For non-CCP cleared SFTs in which banks and broker-dealers provide financing to non-banks against collateral other than government securities (i.e. bank-to-non-bank transactions), the BCBS should review its capital treatment of SFTs and incorporate the framework of numerical haircut floors into the Basel regulatory capital framework (i.e. Basel III framework) by the end of 2015.
FSB – Haircuts on non-CCP Cleared SFTs

» **Recommendation 14:**

Following the BCBS’s incorporation of the framework of numerical haircuts floors into the Basel III framework, authorities should then implement the framework by the end of 2017. That may be either through the Basel III framework or by requiring banks in bank-to-non-bank transactions to conduct transactions above the numerical haircut floor or collect minimum excess margin amounts consistent with the numerical haircut floors. Such a requirement could be directed solely at banks and broker-dealers (i.e. entity-based regulation) or could be encompassed within a requirement that applies on a market-wide basis (i.e. market regulation). To the extent that the market regulation also captures non-bank-to-nonbank transactions, this would be subject to the consultation on the application of numerical haircut floors to non-CCP cleared SFTs between non-banks as set out in Annex 4 [of this document].
**Recommendation 15:**
Taking into account the findings of the consultation [in Annex 4 of this document], authorities should also introduce the framework of numerical floors for haircuts applicable to non-bank-to-non-bank transactions by the end of 2017.

**Recommendation 16:**
The FSB, in coordination with the relevant international standard setting bodies, will monitor the implementation of the framework of numerical haircut floors and will consider reviewing the framework including its scope and levels as necessary.
Does QIS1 data support the theory that haircuts are procyclical?
On 29 January 2014, the European Commission adopted a proposal for a regulation providing a set of measures aiming to enhance regulators’ and investors’ understanding of STFs.

This proposal stems from a prior public consultation on shadow banking and an impact assessment, through which three main problems in relation to SFTs were identified:

i. Regulators are unable to effectively monitor the use of SFTs;
ii. Risks that SFTs are used to the detriment of fund investors; and
iii. Rehypothecation shifts the legal and economic risks in the market.

Underlying these problems are “the absence of comprehensive (frequent and granular) data on SFTs and the risk that SFTs create conflicts of interests between fund managers and fund investors.”
Key provisions of the proposal:
In order to address the problems identified, the impact assessment concluded that a combination of different measures is necessary to ensure that the shadow banking activity of using SFTs is properly supervised and regulated, including:
» Reporting of SFTs to trade repositories;
» Disclosure on the use of SFTs to fund investors; and
» The need for prior consent to rehypothecation of the financial instruments and that these financial instruments are transferred to an account opened in the name of the receiving counterparty before rehypothecation can take place

The use of SFTs as such will not be prohibited nor limited by specific restrictions, but it will be made more transparent
» As such the measures are not expected to create structural impacts on the SFT market
» The measures will increase the reporting costs for the counterparties but this increase should be outweighed by the benefits of having greater transparency for the competent authorities, clients, investors and society at large
Outline of certain articles in the European Commission’s proposal:

- **#2**: Outlines the scope of the regulation, applying it to any SFT counterparty, including UCITS management companies and managers of AIFMs, established in:
  - The EU (including all branches wherever they are located); or
  - A third country, where the SFT is concluded in the operations of an EU branch
- **#4**: States that counterparties to SFTs shall report (this reporting obligation may be delegated) the details of such transactions to a recognised, registered trade repository
  - The details shall be reported no later than the working day following the conclusion, modification or termination of the transaction
- **#13 – #14**: Outline the obligation of UCITS and AIFMs to inform investors of their use of SFTs and other financial structures
- **#15**: Outlines the right and limitations of counterparties to rehypothecate client securities
  - Namely that the providing counterparty be informed in writing of the associated risks of rehypothecation, the granting of the providing counterparty’s consent, and the transference of collateral received to an account in the name of the receiving counterparty
Following a series of working sessions, the European Council has settled its political position.

Revisions seen in Presidency compromise text are not ideal, but have generally improved the text:

- Some generally helpful additions to the recitals
- Scope adjusted to remove possible overlap with derivatives reporting under EMIR
- Clarification of central bank repo exemption & possible extension to non-EU central banks
- Clarified definitions
- Made clear that reporting covers modifications and terminations of SFTs
- SMEs to be exempt from reporting their side of SFTs
- UCITS management/investment companies & AIFMs to report SFTs on behalf of UCITS or AIFs
- Shift of focus from rehypothecation to reuse, but with fairly clear recognition of TTCAs
- Extended language regarding arrangements with respect to third countries
- Clarification of the timing for application, allowing time for technical standards & then for adoption
The new European Parliament held a first discussion on 4 November.

Rapporteur, MEP Renato Soru (S&D, IT) and four shadow rapporteurs each spoke,
- Comments concerned many of the points on which the Council has been working
- New suggestion to introduce something regarding the regulation of haircuts (unclear for now)

### Outline of Parliament’s SFTR Timetable

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deadline for draft report</td>
<td>18 December</td>
</tr>
<tr>
<td>Consideration of the draft report in ECON</td>
<td>21 January</td>
</tr>
<tr>
<td>Deadline for Amendments</td>
<td>27 January</td>
</tr>
<tr>
<td>Consideration of Amendments</td>
<td>23 or 24 February</td>
</tr>
<tr>
<td>Vote in ECON</td>
<td>23 or 24 March</td>
</tr>
</tbody>
</table>
On 7 November, jointly with ISLA, the ERC conducted an educational session in the European Parliament – to help those in the new European Parliament who will be working on the SFTR. This session comprised a short, informal buffet lunch followed by a presentation, during which the audience engaged interactively by questioning the presenters. The presenters were the ERC Chairman, the ISLA Chief Executive, Mr. Kevin McNulty; one member each from the ERC Committee and the ISLA Board; and a representative from the buyside. The audience comprised one of the MEP shadow rapporteurs, who hosted the session, along with 12 MEP advisors, including those supporting the rapporteur and one of the other shadows. The presentation provided:

- A basic picture of repo and securities lending (i.e. what they are, who does them and why);
- Illustration of the benefits of SFTs & their importance in context of the need for collateral fluidity;
- Introduction of some of the issues related to risks in SFTs and how they are managed; and
- Delivery of a series of useful links to the wealth of related materials which are available on the ICMA and ISLA websites.

This is the start of a process of engagement intended to ensure that the EP can conduct a well informed debate of this important file – further discussions are already underway.
On 23 September 2014, the ESRB published its Occasional Paper No. 6, SFTs and the (Re)use of Collateral in Europe: An Analysis of the First Data Collection Conducted by the ESRB

This report presents the results of two data collection exercises that were conducted to gain some initial insights into the structure of the SFT market and the correlated practices adopted by market participants concerning the re-investment or the re-use of the collateral sourced through SFTs or via equivalent transactions.

The first data collection exercise encompassed a sample of 38 EU banks, representing approximately 60% of the EU banking system’s total assets – the institutions covered by this sample are the main players in the management of securities collateral.

The second data collection targeted 13 agent lenders that are considered to be the largest re-investors of cash collateral in Europe.

The sample period of the data is fixed at the end of February 2013.

The data collections were intended to fit in the broader policy context initiated by the FSB and the resulting analyses ultimately address a number of the FSB’s recommendations – and much of the analysis is relevant for the European Commission’s proposal.
The data collections were intended to fit in the broader policy context initiated by the FSB and the resulting analyses ultimately address a number of the FSB’s recommendations. The first element of the analysis in this report is specifically related to the FSB’s fourth recommendation (disclosure of collateral management activities) and, to a certain extent, to the first recommendation (authorities to collect granular information on SFTs of large international financial institutions). The second element is similarly related to the first of the FSB’s recommendations, but also the sixth, which requests better disclosure of securities lending activities. The analysis contained thereafter is relevant for the European Commission’s proposal.
On 13 November 2014, the FSB published for public consultation (for comment by 12.02.15) its report Standards and Processes for Global Securities Financing Data Collection and Aggregation.

The proposed standards and processes in the consultative document define the data elements for repos, securities lending and margin lending that national/regional authorities will be asked to report as aggregates to the FSB for financial stability purposes.

The document also describes data architecture issues related to the data collection and transmission from the reporting entity to the national/regional authority and then from the national/regional to the global level.

To ensure consistency among national/regional data collections, the quality of global aggregates and the efficiency of the reporting framework, six recommendations to national/regional authorities are proposed.

Furthermore, the potential uses of the aggregated data are discussed and the next steps for the completion of the initiative are outlined:

» FSB will complete its work on developing standards and processes by the end of 2015; and by then, will also develop an implementation timeline for the global data collection and aggregation.

» After that, the publication of relevant aggregates on the global securities financing markets to improve market transparency will be considered.
ICMA European Repo Council Annual General Meeting
Operations update
Nicholas Hamilton, J.P. Morgan
European Repo Council Operations groups

Committee Structure:
18 members: Chair Nicholas Hamilton (JPM)  Co Chair Sanjiv Ingle (Soc Gen)

- 3 working groups:
  - Matching & Affirmation – Adam Bate (MS)
  - Target 2 Securities - Rob Mason (RBS)
  - Repo Data Repository - Jonathan Lee (JPM)

- 3 focus groups:
  - T+2 settlement convention review
  - ICSD / CCP Tri-party interoperability
  - CSDR Buy-in & settlement discipline review

- Contributions
  - Repo Best Practice Guidelines
ERC Ops – T+2 settlement adjustment

» Better together!! - Collaboration, Communication & consistency

» Preparation
  • Excellent industry and vendor partnership to normalise the approach and timings for the change
  • Best practice paper – focus on callable bonds, fails management, environment preparation & key risks
  • Open forum communications – ICMA / AFME / SIFMA & EMTA
  • Vendor dialogue to agree data loading

» The Event
  • successful alignment of 300-400k European asset defaults to T+2
  • No material fails spikes or liquidity issues
  • Orderly markets

» Post implementation
  • Performance monitoring – repair(internal review - VD) and failing trades across the market
  • Continued partnership with regional and global groups as we move to mandatory window Jan 1st
  • Understanding regional diversification NA & Asia
Matching and Affirmation Working Group – progress 2014

Overview
- 9 ICMA ERC Ops firms form part of the working group
- Clear need to have a comprehensive market standard of mandatory/voluntary matching fields
- Push for a consistent automated matching/affirmation product at the vendor
- Support the industry in the move towards automated matching/affirmation

Focus areas
- Appropriate vendor engagement to bring together the market offerings
- Creation of a standard template that all vendors can support
- Using the market move to T+1 as a driver towards automation
- Encouraging the industry to T0 affirm and match

2014 Progress
- Have been able to bring together the matching/affirmation service providers as a central group
- Partnership with ISLA to share best practices
- Industry better understands the need to match/affirm as close to Trade Date as possible

2015 Targets
- Consolidated template is shared with vendors having been approved by ICMA/ERC
- Collaboration across vendor platforms to establish some form of interoperability
- Look for synergies between matching/affirmation and transaction reporting
Working group tracked evolution of the regulatory agenda during 2014.

3 distinct requirements from the European Commission (ESMA), Financial Stability Board (FSB) and European Central Bank (ECB) have started to firm up but are still not finalized.

European Commission requirements are for trade level data, with emphasis on re-use and haircuts – attempting to track the path a particular security takes through the market and interconnectedness. The final draft is due by mid December 2014 to be voted on by the European Parliament in March 2015. ESMA reporting is likely to go-live between 2016-2017.

The FSB requirement is for globally aggregated reporting, supplied by each respective competent authority. The hope and expectation here is that this will be met by ESMA and ECB reporting provisions with no further FSB reporting requirements for member firms. This will be dependent on ESMA and/or ECB settling on a format that can be readily aggregated.

The ECB are planning to introduce a survey of the Top 100 banks in 2016 (intending to front-run ESMA requirements). The ECB are believed to be somewhat perturbed by the lengthy lead-in time and complexity of ESMA requirements. This may be used to meet FSB requirements too.
ERC Repo Market Data Repository Working Group 2014

Focus Areas into 2015

- Desire to pursue a single report option to service all 3 requirements.

- Requires significant standardisation of trade types and field population procedures across as much of the industry as possible to ease aggregation and regulator views of both sides of transactions. Thought and testing needs to go into how the data can readily be aggregated.

- Continued push to utilise Central Counterparty data (the only party that could provide a view to regulators of both sides of centrally cleared trades) and Triparty Agents to provide efficient and consistent triparty reporting with maximum accuracy.

- Opportunity to push to integrate trade matching / electronic affirmation into the core functions of the Trade Repository.
GC Pooling Triparty Settlement Interoperability

Jean-Robert Wilkin, Clearstream
Cedric Gillerot, Euroclear
Stefan Knoblauch, Eurex Clearing
GC Pooling
Triparty Settlement Interoperability
Status Update

General Meeting of ICMA’s European Repo Council
London, 19th November 2014
GC Pooling Triparty Settlement Interoperability

- Memorandum of Understanding signed in July 2013
- Parties: Eurex Clearing AG (ECAG), Euroclear Bank (EB), Clearstream Banking Frankfurt (CBF) & Clearstream Banking Luxembourg (CBL), European Repo Council (ERC)
- MoU scope: **GC Pooling** (the multi-baskets and multi-currencies repo product cleared by ECAG) to be settled across multiple Collateral Management Systems (CMS) and Securities Settlement Systems (SSS)
GC Pooling Triparty Settlement Interoperability

• 10 full-day workshops held between TSI parties with the objective to conduct a top-down analysis:
  – To get a mutual understanding of the functioning of the GC Pooling product and the general processes (current and future) in the management of trades,
  – To assess the impacts of TSI on the different layers in the post-trade processing chain,
  – In a T2S environment, and
  – Define a strawman for a feasible GC Pooling TSI model.

• Layers primarily impacted:
  – Clearing and exposure management
  – Triparty collateral management
  – Settlement and bookings
  – Asset servicing and reference data
GC Pooling Triparty Settlement Interoperability

- TSI parties confirm feasibility of the GC Pooling TSI model. The joint analysis so far confirmed significant and structural impacts for ECAG as well as for Euroclear Bank’s and Clearstream Banking’s Triparty Collateral Management Systems. Implementation will entail significant development costs for the TSI parties;

- Implementation of TSI also requires a high level of harmonization and synchronization of asset servicing infrastructures of CBF, CBL and EB as well as of their Securities Settlement Systems and all the links between them, taking into account the implementation of T2S;

- Implementation of TSI model has therefore a strong dependency on T2S, including the scope of securities covered under T2S;

- The considered upgrades of the “Bridge” (the CBL-EB settlement link) will significantly improve the current Bridge deadlines and settlement turnaround time but will however not meet the ECAG’s requirement of a 10 Min end-to-end turnaround time;

- On the basis of high-level analysis and assumptions, TSI parties collectively concluded that the earliest possible time for a delivery of all the infrastructure upgrades required for Clearing, Collateral Management Services and Settlement (i.e. Bridge & T2S) to support the proposed TSI model would be mid-2017 (post-implementation of T2S Wave 4).
GC Pooling Triparty Settlement Interoperability
Next steps

• On-going: Market consultation to validate the GC Pooling TSI model

• Following the market consultation, pursue the work between TSI parties - focus:
  – Validation of all the assumptions made so far in the joint analysis;
  – Derive and firm-up more detailed business requirements;
  – On that basis, build more detailed end-to-end scenarios;
  – Discuss and define testing strategy and market involvement;
  – Plan the migration to the GC Pooling TSI model;
  – Define legal and operational documentation.

• With the objective to deliver a detailed project scope definition.
Bridge Enhancements Status Update

Michel Bricq, Clearstream
Edwin de Pauw, Euroclear
Bridge Enhancements

Status Update

European Repo Council

London, 19th November 2014
Bridge Enhancements

Joint ICSDs objectives

T2S will bring cross-border settlement in CeBM to new standards. Regulators and market participants wish to see similar improvements to the existing CoBM infrastructure in order to foster harmonization at European level and create conditions for optimized liquidity and efficient collateral management.

Bridge enhancements must therefore achieve the following objectives:

1. Maximize settlement window between the ICSDs to support increased same-day and intra-day settlement activity
2. Move settlement windows & deadlines as close as possible to domestic cut-offs
3. Support settlement interoperability for triparty repo products, with Eurex GC Pooling

And should respect the following main principles:

1. Settlement results in the mandatory window should be available to customers
   - Before the main currency cash cutoffs (EUR, USD) to ensure efficient cash management
   - In sufficient time to allow securities to be used within ICSDs and T2S
2. Limit mandatory adaptation costs for customers
Bridge Enhancements
Joint Working Group progress

- End February 2014: Terms of Reference agreed between both ICSDs
- March 2014: Joint Working Group (JWG) established with an agreed scope
  - I. Bridge enhancements in the context of T2S
  - II. Non-T2S Bridge enhancements
  - III. Improvements linked to daily operations of the bridge
- March 2014 to July 2014: 16 workshops between JWG members
  - Top-down analysis of the areas for possible improvement with focus on enhancements in the context of T2S: improved settlement deadlines and turnaround times
  - Client consultation to ensure future enhancements meet client needs
- August 2014: Decision taken to phase the project and deliver the first set of Bridge improvement in 2015
- September 2014: Put in place new JWG structure for phased deliveries
  - Move into full project mode for Phase 1
  - JWG workshops continue to finalise scope definition for Phase 2
Bridge Enhancements – Agreed scope for Phase 1

In Phase 1 the ICSDs will move to a currency driven model and put in place some additional matching and settlement file exchanges to deliver:

- Significant improvement in input deadlines
- Removal of concept of optional vs mandatory settlement for Free of Payment transactions
- Turnaround time **after 12.00** will be reduced from between 60-120 minutes to between 35-90 minutes

<table>
<thead>
<tr>
<th>Current  Bridge input deadlines</th>
<th>Phase 1: New Bridge input deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory input deadline Free of and Against payment</td>
<td>Mandatory</td>
</tr>
<tr>
<td>13:00</td>
<td>Early European &amp; Asian currencies</td>
</tr>
<tr>
<td>Optional input deadline Against payment</td>
<td>EUR, GBP, USD, CAD, MXN, ARS, PEN</td>
</tr>
<tr>
<td>15:00</td>
<td>Optional Against payment</td>
</tr>
<tr>
<td>Optional input deadline Free of payment</td>
<td>All currencies</td>
</tr>
<tr>
<td>16:00</td>
<td>Free of payment</td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

ICSDs are in discussions to agree exact launch date
Bridge Enhancements – Phase 2

The Scope for Phase 2 is still under discussion but both ICSDs have agreed on a high level scope which will deliver, among other topics:

• Faster settlement turnaround throughout the day with turnaround times decreasing to between 10-40 minutes
• Improved matching process
  – Matching results within 2 minutes (rather than 30 minutes today)
  – Implementation of new matching fields
• Further improvements in input deadlines
• Further extension of interoperability between the ICSDs at the end of the day

Delivery window to be finalized taking into account the challenges to Euroclear and Clearstream’s roadmaps implied by T2S wave 2 and wave 3 migrations
Update on Regulatory Issues

David Hiscock, Senior Director, ICMA
On 31 October 2014, the BCBS issued the final endorsed standard for the NSFR, which will become a minimum standard by 1 January 2018.

- The BCBS is currently developing disclosure standards for the NSFR and expects, at around year end, to publish them for consultation.

- The final NSFR retains the structure of the January 2014 consultative proposal.
  - The key changes introduced in the final standard cover the required stable funding for short-term exposures to banks and other financial institutions; derivatives exposures; and assets posted as initial margin for derivative contracts.
  - In addition, the final standard recognises that, under strict conditions, certain asset and liability items are interdependent and can therefore be viewed as neutral in terms of the NSFR.

This sets the text of an agreed international standard, but it remains to be seen exactly what language appears in applicable national/regional rules which firms must actually comply with.
BCBS – Net Stable Funding Ratio (NSFR)

The NSFR requires that the ratio of available stable funding (ASF) to required stable funding (RSF) is greater than or equal to 100%:

\[
\text{ASF} / \text{RSF} \geq 100\%
\]

- ASF considers the different sources of funding on the liability side of the balance sheet and counts these in various proportions dependent on their perceived degree of stability (i.e. to what extent they are available for the long-term).
- RSF considers the different funding requirements needed to sustain the asset side of the balance sheet, proportionately weighting different types of asset dependent on the perceived need for them to be financed with stable funding.
BCBS – Net Stable Funding Ratio (NSFR)

» Secured financing transactions

32. For secured funding arrangements, use of balance sheet and accounting treatments should generally result in banks excluding, from their assets, securities which they have borrowed in SFTs where they do not have beneficial ownership. In contrast, banks should include securities they have lent in SFTs where they retain beneficial ownership. Banks should also not include any securities they have received through collateral swaps if those securities do not appear on their balance sheets. Where banks have encumbered securities in repos or other SFTs, but have retained beneficial ownership and those assets remain on the bank’s balance sheet, the bank should allocate such securities to the appropriate RSF category.

33. Securities financing transactions with a single counterparty may be measured net when calculating the NSFR, provided that the netting conditions set out in Paragraph 33(i) of the Basel III leverage ratio framework and disclosure requirements document are met.
## BCBS – Net Stable Funding Ratio (NSFR)

<table>
<thead>
<tr>
<th></th>
<th>RSF</th>
<th>ASF</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash on reserve account</td>
<td>0%</td>
<td>0%</td>
<td>Funding from financials, including Central Banks, &lt;6m</td>
</tr>
<tr>
<td>&lt;6m reverse repo v. Level 1 with financial institution</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;6m reverse repo v. non-Level 1 with financial institution</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;6m reverse repo with non-financial institution</td>
<td>50%</td>
<td>50%</td>
<td>Funding from financials, incl. Central Banks, 6m-12m</td>
</tr>
<tr>
<td>All reverse repos 6-12m</td>
<td>50%</td>
<td>50%</td>
<td>Funding from corporates, sovereigns, PSEs, and multilateral/development banks &lt;12m</td>
</tr>
<tr>
<td>All reverse repos &gt;12m</td>
<td>100%</td>
<td>100%</td>
<td>Liabilities &gt;12m (effective residual maturity)</td>
</tr>
</tbody>
</table>

**Note:** The above summary includes some details of NSFR as relate to the repo market (only)

» i.e. not derivatives, cash positions, etc.
Interdependent assets and liabilities

45. National supervisors have discretion in limited circumstances to determine whether certain asset and liability items, on the basis of contractual arrangements, are interdependent such that the liability cannot fall due while the asset remains on the balance sheet, the principal payment flows from the asset cannot be used for something other than repaying the liability, and the liability cannot be used to fund other assets.

For interdependent items, supervisors may adjust RSF and ASF factors so that they are both 0%, subject to the following criteria:

- The individual interdependent asset and liability items must be clearly identifiable.
- The maturity and principal amount of both the liability and its interdependent asset should be the same.
- The bank is acting solely as a pass-through unit to channel the funding received (the interdependent liability) into the corresponding interdependent asset.
- The counterparties for each pair of interdependent liabilities and assets should not be the same.

Before exercising this discretion, supervisors should consider whether perverse incentives or unintended consequences are being created.
The LCR improves the resilience of banks to liquidity risks over a short-term period.

- The CRR (adopted in June 2013) requires banks to respect a general liquidity coverage requirement from 1 January 2014.
- In addition, the CRR gives the power to the European Commission to specify the detailed rules for the calculation of the LCR, which it did via a delegated act adopted on 10 October 2014.
  - These detailed rules determine how to calculate net cash outflows expected in times of crisis and what liquid assets banks must hold to meet them.
  - Banks will be required to constitute a buffer of liquid assets as a percentage of net cash outflows in stressed conditions over a 30-day period.
  - The rules take into account comprehensive reports from the EBA, the Basel standards and relevant specificities of the EU banking and financial landscape.
BCBS – FAQs on the Basel III Leverage Ratio

» On 7 October 2014, the BCBS issued FAQs on the Basel III leverage ratio (the full text of which was itself issued on 12 January 2014

» Section #3 in this FAQ document responds to three questions concerning the netting of SFTs

» This makes clear that the specified criteria are not intended to preclude a Delivery-versus-Payment (DVP) settlement mechanism or other type of settlement mechanism, provided that the settlement mechanism meets the functional requirements set out; and seeks to clarify where this could be so

» Section #4 in this FAQ document responds to a question concerning netting under the Basel III leverage framework for derivatives and SFTs in the presence of cross-product netting agreements

» This makes clear that, whilst netting within a product category is allowed (subject to specified constraints), netting across product categories (i.e. derivatives and SFTs) is not permitted
EU – Common Definition of the Leverage Ratio for EU Banks

» On 10 October 2014, as part of a package of measures, the European Commission released details of a delegated act which establishes a common definition of the leverage ratio for EU banks, which will be the basis for publishing the leverage ratio from the beginning of 2015 onwards

» The delegated act does not introduce a binding leverage ratio, as a decision on whether or not to introduce a binding leverage ratio will only be made in 2016

» The delegated act amending the methodology for calculating banks' leverage ratio will enhance the uniform understanding of the components of the leverage ratio; and aims to align the leverage ratio as currently included in the CRR with the internationally agreed leverage ratio so that there is an international level playing field and true global comparability

» Of particular note, the main changes compared to the current CRR definition of the leverage ratio include a clarification that for SFTs collateral received cannot be used to reduce the exposure value of said SFTs, but that cash receivables and payables of SFTs with the same counterparty can be netted, subject to strict criteria

» Specifically, article 429(b) provides a specific treatment of the exposure value of cash receivables and cash payables of SFTs (both on- and off-balance sheet)
On 27 June 2014, the EBA published its final Guidelines on disclosure of encumbered and unencumbered assets, which include a set of principles and three templates (supplemented by a requirement to disclose some additional information on the importance of encumbrance in the reporter’s individual funding model) to enable the disclosure of all applicable information.

They are the first step towards a harmonised disclosure framework of asset encumbrance in the EU.

For the purposes of these guidelines, an asset should be treated as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralise or credit-enhance any on-balance-sheet or off-balance sheet transaction from which it cannot be freely withdrawn (e.g. to be pledged for funding purposes).

All SFTs are amongst the specifically identified types of contracts which should be considered encumbered.
OECD – Base Erosion and Profit Shifting (BEPS)

» On 16 September 2014, the OECD released its first recommendations for a coordinated international approach to combat tax avoidance by multinational enterprises, under the OECD/G20 BEPS Project designed to create a single set of international tax rules to end the erosion of tax bases and the artificial shifting of profits to jurisdictions to avoid paying tax

» One of these first recommendations focuses on helping countries to ensure the coherence of corporate income taxation at the international level, through new model tax and treaty provisions to neutralise hybrid mismatch arrangements

» Once translated into domestic law, the recommendations in Part 1 of the report will neutralise the effect of cross-border hybrid mismatch arrangements that produce multiple deductions for a single expense or a deduction in one jurisdiction with no corresponding taxation in the other jurisdiction

» This is of significance because this report says (at paragraph 56) that “… the most common transaction used to achieve a mismatch in tax outcomes under a hybrid transfer is a sale and repurchase arrangement…”

» Seeking to negate the tax effect of hybrid transfers achieved through the use of repos may lead to significant incremental tax compliance and reporting burdens, particularly in relation to repos between different legal entities within the same group of companies
Thank you, Ladies and Gentlemen

Contacts and information:

- David Hiscock: Senior Director – Market Practice and Regulatory Policy
  - David.Hiscock@icmagroup.org
  - Tel: +44 (0)20 7213 0321 (Direct Line) / +44 (0)7827 891909 (Mobile)
  - ICMA Ltd, 23 College Hill, London EC4R 2RP
    - www.icmagroup.org

- ICMA quarterly report provides detailed updates on these matters and ICMA's broader work