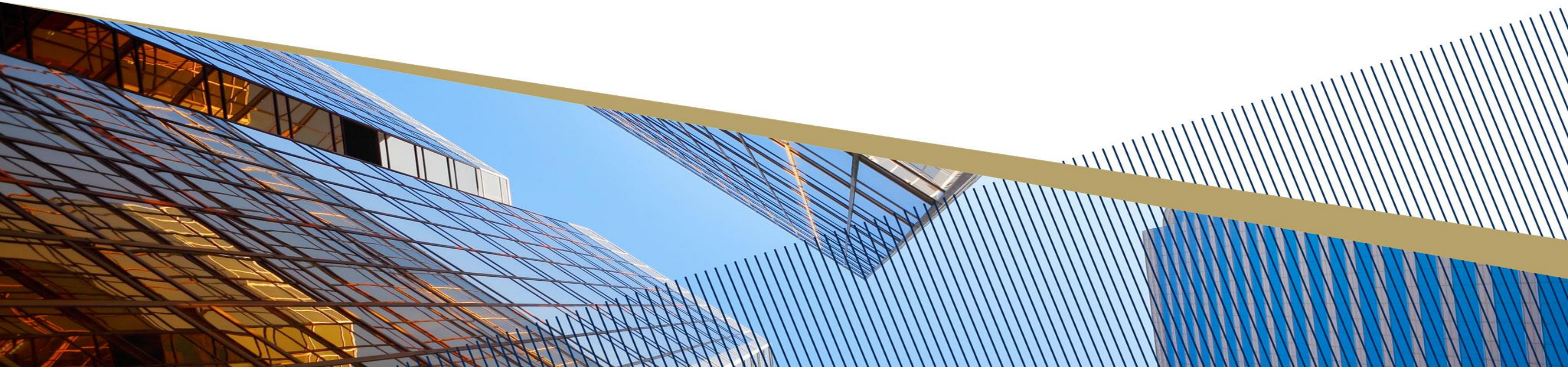
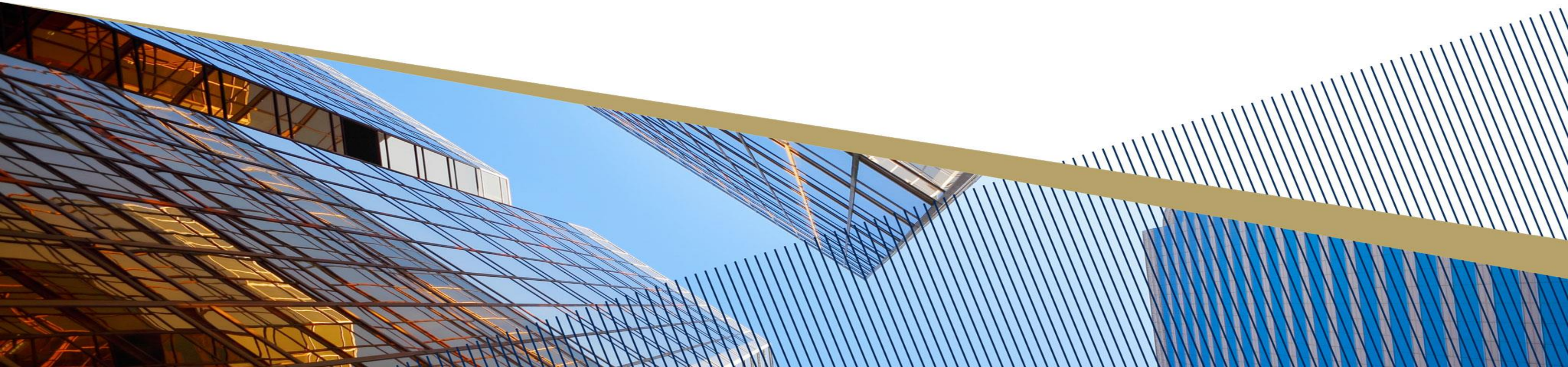
International Capital Market Association

ICMA



General Meeting of ICMA's European Repo and Collateral Council (ERCC)

27 September 2016



Welcome

- **Mr. Martin Scheck**, Chief Executive, ICMA

Keynote speech

- **Mr. Mark Yallop**, Chairman, FICC Market Standards Board
- “Regulation, Ethics and Standards in wholesale financial markets”

Remarks by the chairman of ICMA's ERCC Committee

- **Mr. Godfried De Vidts**, Chairman, ICMA ERCC Committee

In memory of

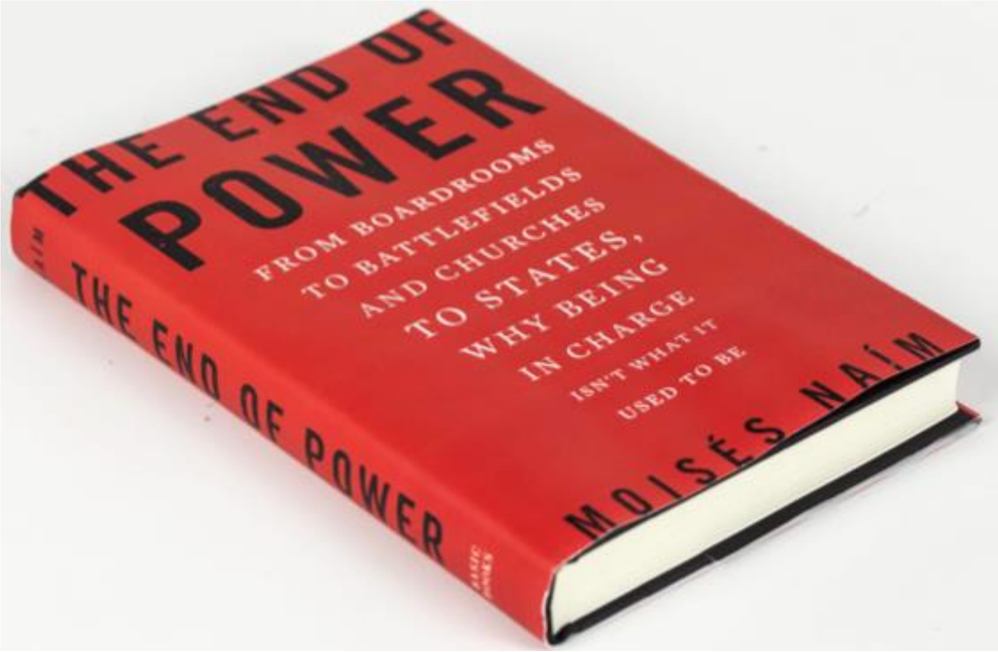
Mark Mazzonelli
1956 - 2016

The regulatory alphabet soup…

AIFMD
FROD
MiFIR / MiFID II
VLTRO
CRR / CRD IV: LCR/NSFR/ Leverage
EMIR
CSDR
MCD
ESEF
SFTR
PRIIPS
TD
IMD
AMLD / AMLR
SSR
UCITS V
EVCF
LTRO
SSM
ICSD
CRAR I/II/III / CRAD
OMT
SMR
Omnibus II
TLTRO
NFRD
QE
FCD
SAR / SAD
BRRD
FBR
ELTIF
ESFS – ESRB / ESAs
CRD III
IORP
S II
MMFR
DGSD
BSRR
MAD / MAR

We are preparing a perfect storm

Looking ahead to other topics



“The End of Power will change the way you read the news, the way you think about politics, and the way you look at the world.”

– Bill Clinton

Change is coming

"Another, even more sweeping, wave of innovations is building, one that promises to change the world as much as the technological revolutions of the last two decades did. It will not be top-down, orderly, or quick, the product of summits and meetings, but messy, sprawling, and in fits and starts. Yet it is inevitable. Driven by the transformation in the acquisition, use, and retention of power, humanity must, and will, find new ways of governing itself."

– Moisés Naím: The End of Power

ERCC current focus

- Collateral demand to increase with mandatory and bilateral clearing
- Participation of non-banks in repo market expected to increase
- Buy-side – how can their participation in the ERCC be increased
- Eurepo project, on track
- Study of routing of repo to CCPs
- Workshop re night & intraday liquidity management – should be a focus of CMU
- EPTF

Approval of the minutes of ICMA's ERCC Annual General Meeting held on 27 January, 2016 in Luxembourg

Legal update

- **Ms. Lisa Cleary,** Senior Director, Associate Counsel, ICMA

Legal opinion updates

- In 2016 ICMA obtained opinions on the GMRA 1995, 2000 & 2011 in over 60 jurisdictions.
- Opinions address enforceability of netting provisions and recharacterisation risk.
- Basic counterparty coverage (companies, banks and securities dealers) and extended counterparty coverage (also includes insurance companies, hedge funds and mutual funds).

- Opinions available at: http://www.icmagroup.org/legal

- Interim memo to the GMRA legal opinion for Germany
- ICMA has published a GMRA legal opinion for Georgia

- The ICMA GMRA legal opinions <u>will continue</u> to cover the GMRA 1995 in 2017 but ICMA will review the position for the 2018 opinions

- Regulatory desire to see the market using the most up to date version of standard market documentation
  - GMRA 2011 Protocol – multilateral application for adhering parties
    - Improved default provisions:
      - Methodology for calling an event of default
      - Procedure for closing out transactions and determining the amounts payable
    - Introduces a set off provision
    - Introduces a definition of Euro
    - Replaces references to LIBOR

- ICMA continue to encourage adoption of the 2011 GMRA Protocol

- At the request of the ERCC committee ICMA is developing an industry standard GMRA Annex for use with corporate counterparties. The aim is to open the repo market to a wider group of counterparty types, including firms which may not have the capacity to negotiate long form GMRAs. The annex would set out the principal contractual terms between counterparties. Due to the standardised nature of the document, it could theoretically be used for multiple transactions with disclosed participants within the same triparty system. The triparty agents' terms and conditions and service agreements would take effect separately.

- Challenges
  - Accommodating bespoke amendments-
    - House preferences
    - Compliance related
    - Jurisdiction related
  - Opinion coverage for counterparty types
  - Interaction with triparty service providers' service agreements

Contact details:

- ICMA Legal and Regulatory Helpdesk
  - legalhelpdesk@icmagroup.org
  - regulatoryhelpdesk@icmagroup.org]
  - +44 20 7213 0341

Development of a new repo index

- **Mr. Alberto Lopez,** Research and Benchmarks Development Officer
- European Money Markets Institute (EMMI)

Development of a new repo index

ICMA European Repo and Collateral Council

General Meeting

27 September 2016

Alberto López
Benchmarks Unit

Brief recap of the Project—highlights A

2016 Development of the Methodology

Market's preference for a more encompassing index (including all OTC and ATS transactions cleared through a qualified CCP).

EMMI starts its works on the **development of a methodology** for the benchmark.

2015 Euro Repo Market Analysis and Market Consultation

EMMI commissions an **analysis of the Euro Repo Market**.

ERCC recommendation on the expansion of underlying transactions.

The Joint Task Force recommends EMMI to launch a Public Consultation: preference for transactions and potential use and need of the benchmark.

2014 Establishing the Underlying Interest

The Joint Task Force meets with ATSs, Clearing Houses, and existing Index Providers covering the European repo market.

The Joint Task Force recommends EMMI to underpin the benchmark on on-screen euro repo transactions executed on European ATSs and cleared through qualified CCPs.

2013 EMMI/ERCC Joint Task Force

EMMI invites the ERC Repo Index Task Force to join efforts and devise a way forward toward the formulation of a pan-European secured benchmark.

Data observations

There is sufficient data to construct a transaction-based index for short maturities, but for longer maturities the data seems insufficient

Every platform plays a dominating role for different segments of the market

Different rate patterns can be observed depending on: collateral type, GC or special repo

There are seasonalities (e.g. year-, quarter-, month-end, and end of ECB maintenance period)

Conclusions

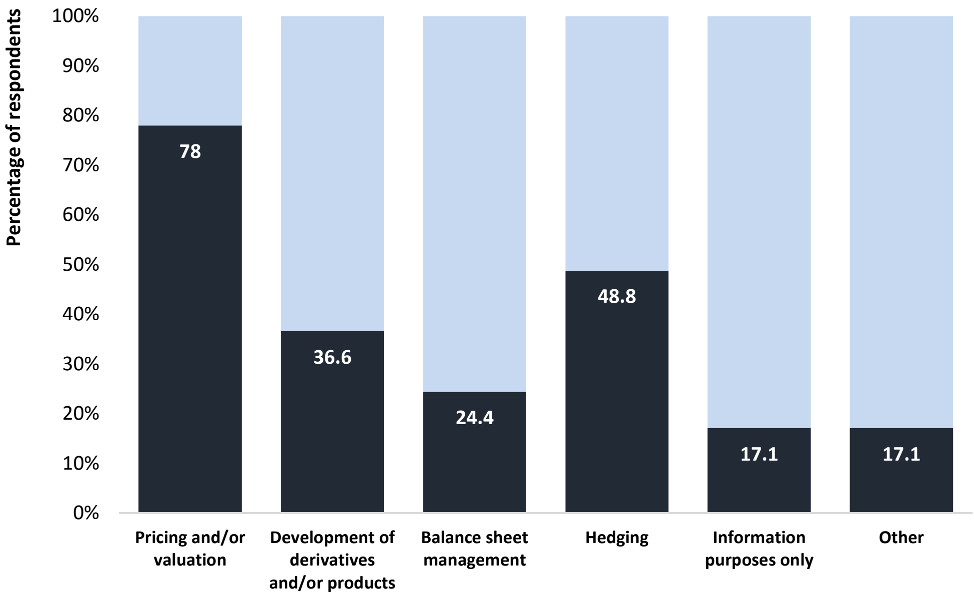
It is feasible to create a **robust**, **transaction-based** pan-European benchmark on one-day tenors

- Reliable representation of the secured money market
- Capturing and encompassing different market segments
- Reflecting common trends across the whole secured money market
- Reflecting the seasonalities and patterns in the data

In December 2015, the public consultation, as advised by the Joint Task Force, was launched by EMMI.

1

Potential need and use of a pan-European repo benchmark



- ✓ Pricing and valuation seem to be the most foreseeable potential uses of the New Index.
- ✓ A number of respondents indicated that the New Repo Index could be regarded as a possible substitute of the Eonia index.
- ✓ Other possible uses are as benchmark of historical performance and internal transfer pricing.

2

Underlying transactions supporting the determination of the index

Preference for transactions underlying the index consisting of: anonymous ATS executed and OTC's (i.e. voice-brokered and bilateral) euro repo trades centrally **cleared through a qualifying CCP** made against ECB eligible collateral.

- While EMMI acknowledges the market's appetite for an index whose underlying data includes all ATS executed, voice-brokered, and bilateral transactions cleared through qualifying CCPs, due to data availability issues, the preliminary design of the benchmark will be focused on **anonymous ATS executed trades, cleared through qualifying CCPs**.

- EMMI's decision was communicated to the ERCC and discussed during their February 24, 2016 meeting. The ERCC considered their advisory role as concluded: *EMMI's Secured Benchmark Task Force's work will continue to be monitored but is not a priority for the Committee*

- EMMI formally constitutes its Secured Benchmark Task Force

- Need to clearly delineate the mandate of the Task Force and its members:
  - Drafting and Circulation of Terms of Reference for the Secured Benchmark Task Force;
  - Need written confirmation from all members of abidance to these TOR;
- Due to the current and upcoming regulatory environment, EMMI needs to clearly document and reflect the transparency of the design process.

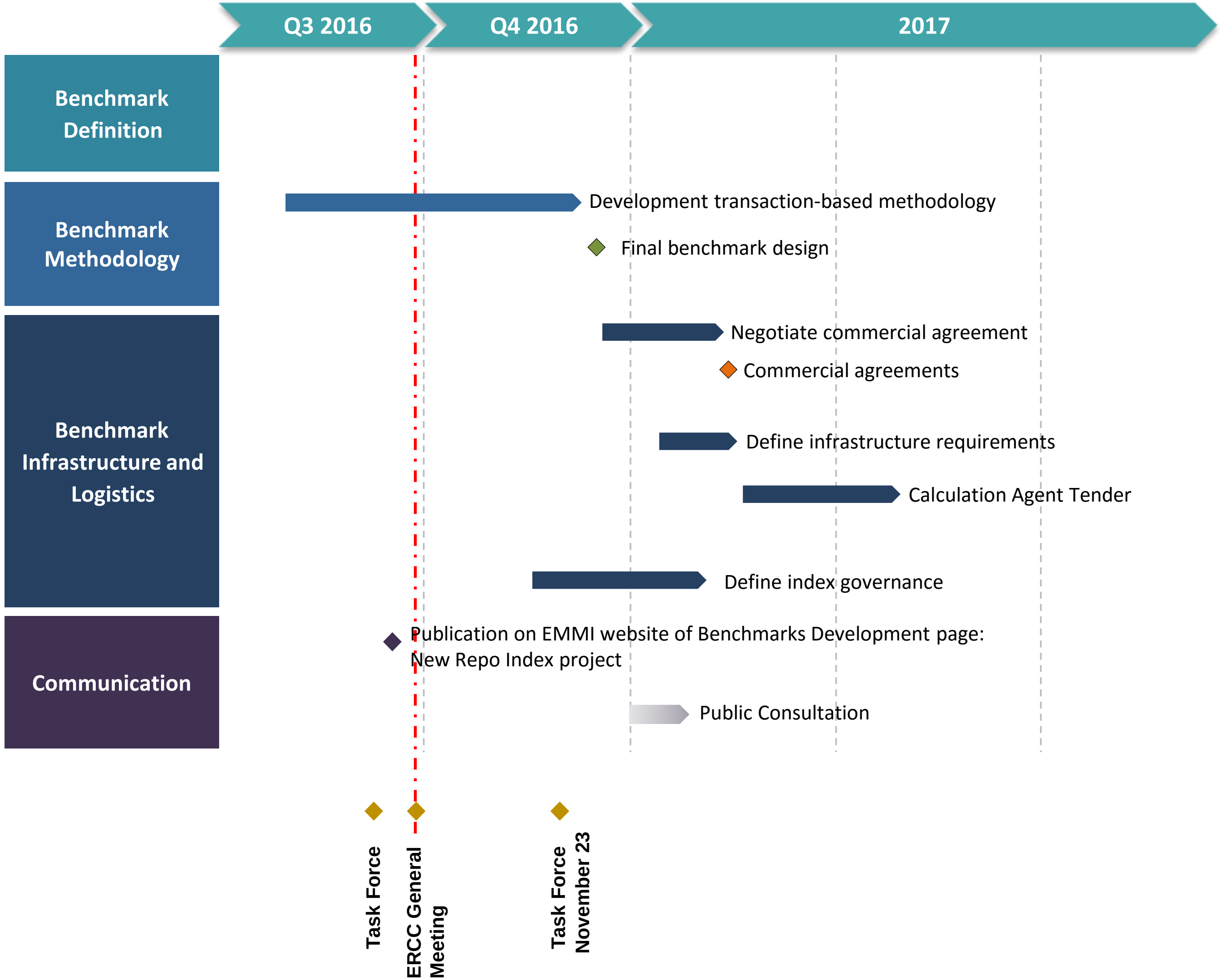
- Current membership of the Task Force:

Mr Jean-Marc Anciaux	Mr Andrea Masciovecchio	Mr Francisco de Pablos
Mr Harald Endres	Mr Eugene McGrory*	Mr Andreas Biewald
Mr Rich Hochreutiner*	Mr Stefaan Van De Mosselaer	Mr Luis Soutullo
Ms Julija Jakovicka (ECB, *observer*)		

- The Secured Benchmark Task Force has an advisory role to EMMI and its Secretariat

The Steering/Oversight Committee and its membership will be established at a later stage, once the benchmark's governance has been defined

Timeline D



- The Swiss Institute of Banking and Finance at the HSG is collaborating with EMMI in the design of the index methodology.
- A base line approach was recommended by the Task Force members during the September 6 meeting.
- A report with recommended methodologies and empirical backtesting will be presented during the Task Force meeting in November.

Remaking the corporate bond market

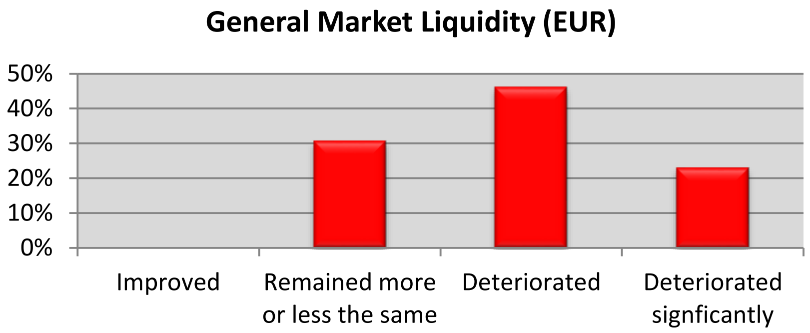
ICMA's 2nd study into the state and evolution of the European investment grade corporate bond secondary market (2016)

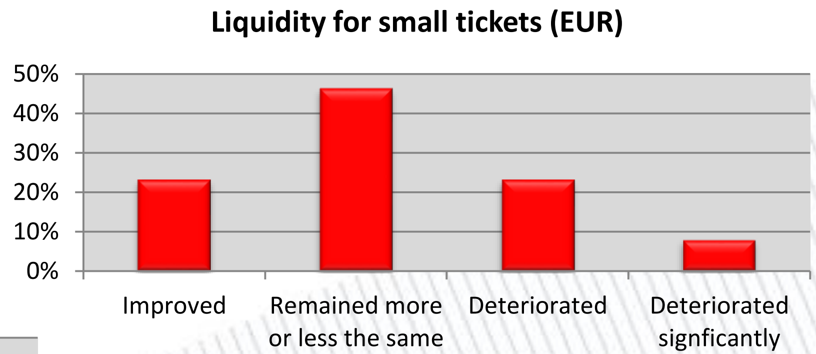
- **Mr. Andy Hill,** Senior Director, Market Practice and Regulatory Policy, ICMA

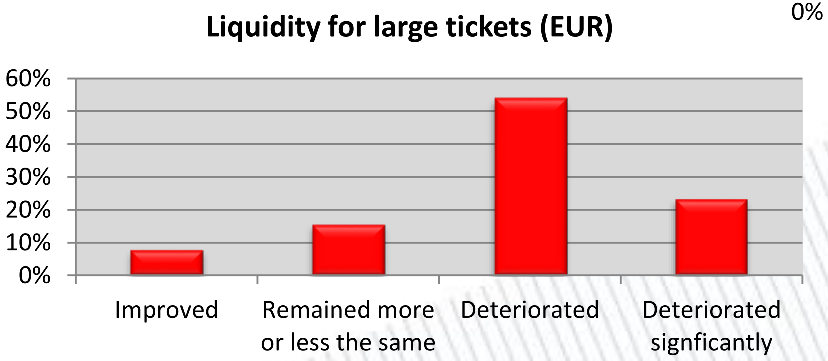
Key findings of the study?

- The general perception is that market liquidity is declining – but it is more nuanced than simply things are getting worse
- Over all, liquidity is becoming more challenging to provide and source
- Causes for this are attributed to the confluence of monetary policy and regulation
- Market participants are responding the challenge, including sell-side, buy-side, intermediaries, and infrastructure providers: changing business models and behaviour
- More interest in new trading protocols and e-solutions, as well as alternative products
- Looking ahead, major risks seen as the ECB's CSPP, MiFID II/R pre-trade transparency, and CSDR mandatory buy-ins [pre-Brexit]
- Corporate issuers more focused than ever: concerned about a growing disconnect between secondary market liquidity and primary market efficiency

ICMA Buy-side Liquidity Survey



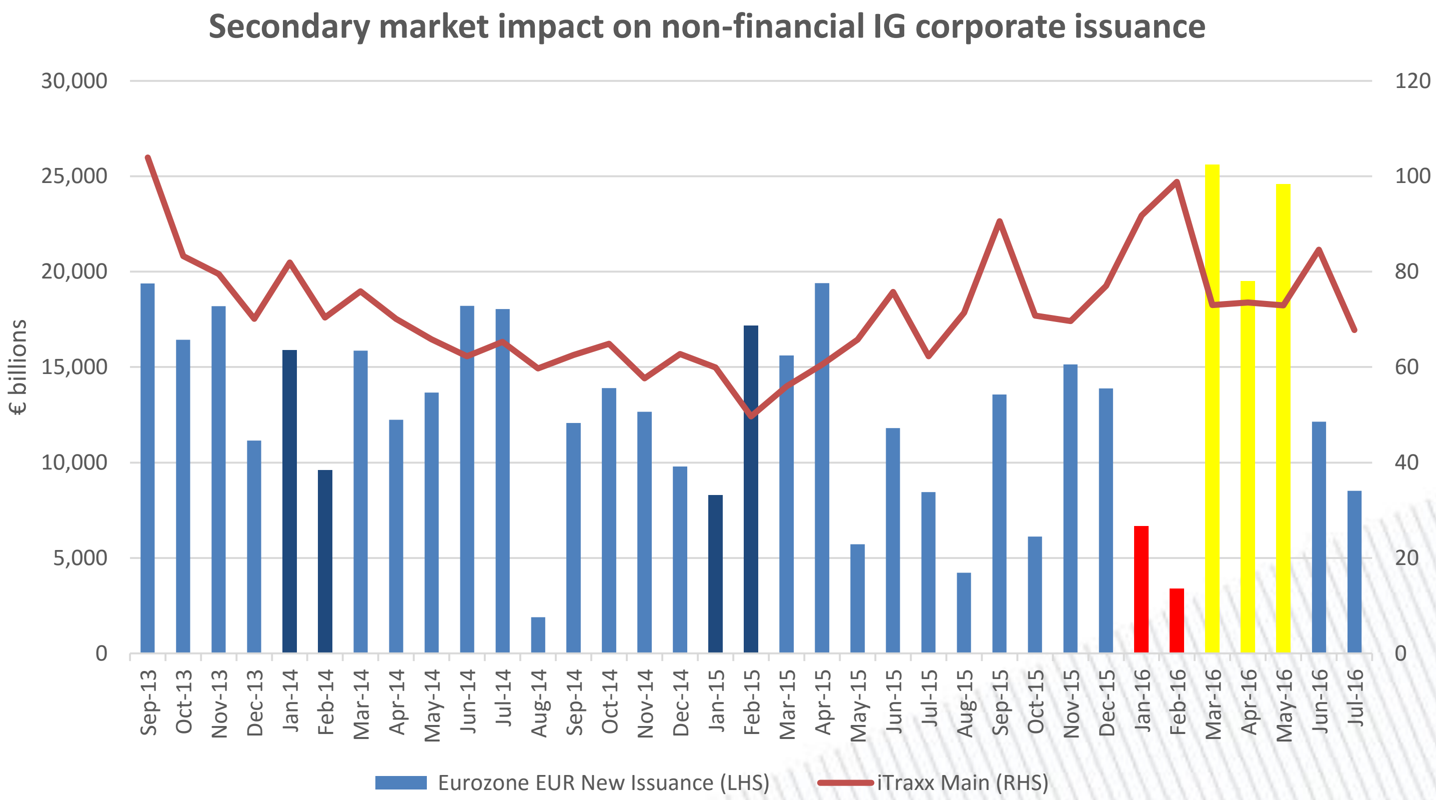




What do we mean by liquidity?

- “The ability to get a price in the size you require, when you need it”?
- The ability to trade without major market impact?
- Can liquidity be measured?
  - MiFID II/R liquidity measures
  - Interactive Data’s Liquidity Indicators
  - Bloomberg’s LQA
- What are the appropriate determinants?
  - Bid-ask spread? Market depth? Expected time to execute? Market impact? Historical volume and prints? Characteristics of instrument? Distribution of holders?
- Should liquidity measures be based on trade data, or on what failed to trade?
- Is liquidity dynamic?
- Should liquidity have a cost?

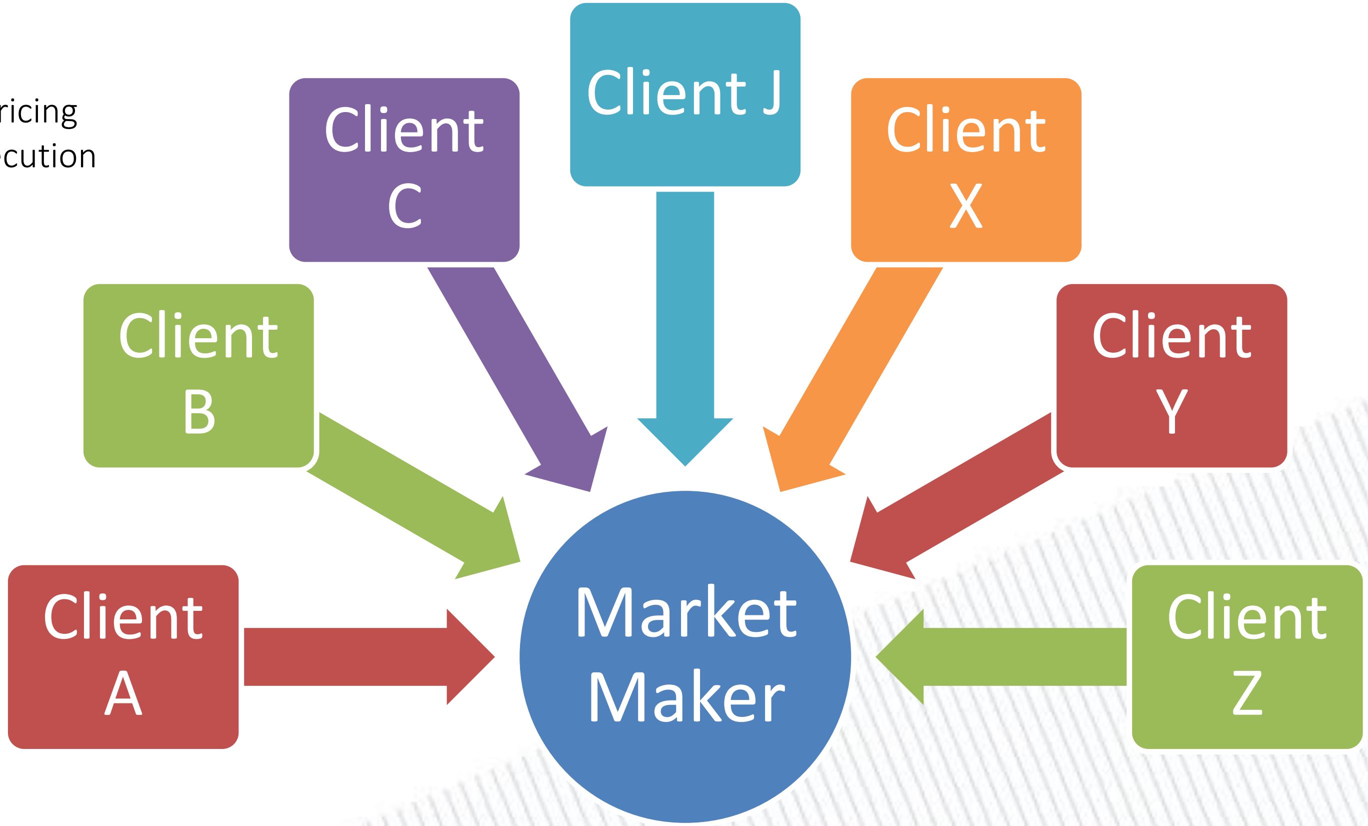
Issuer concerns



The traditional fixed income liquidity model

Provides for:

- Ready two-way pricing
- Immediacy of execution



The principal dealer (or market-maker) model

Essential ingredients for the model:

- ❑Availability of capital (balance sheet) to hold long and short-positions and warehouse risk
- ❑Availability of an efficient and liquid derivatives market (such as single-name CDS) to hedge dealer positions
- ❑Availability of an efficient and liquid repo market to fund dealer positions
- ❑Skills and experience of the trader

The principal dealer (or market-maker) model

Undermining the model:

- Availability of capital (balance sheet) to hold long and short-positions and warehouse risk
  - Increased cost of capital (Basel III & IV)
  - Volker Rule and restrictions on bank proprietary trading
- Availability of an efficient and liquid derivatives market (such as single-name CDS) to hedge dealer positions
  - CRD IV/R, EMIR, NSFR
- Availability of an efficient and liquid repo market to fund dealer positions
  - Leverage Ratio, NSFR,....
  - QE: negative rates and excess reserves
- Skills and experience of the trader
  - Ongoing attrition of experienced staff and 'juniorization' of trading desks

The evolving dealer model

Changes in dealer behaviour:

- Smaller inventories and faster turnover
- More considered allocation of balance sheet
- Deeper client engagement and awareness of needs
- More specialization and focus on competitive advantage
- More streamlined trading and sales desks

What we lose is:

- Ready two-way pricing
- Immediacy of execution

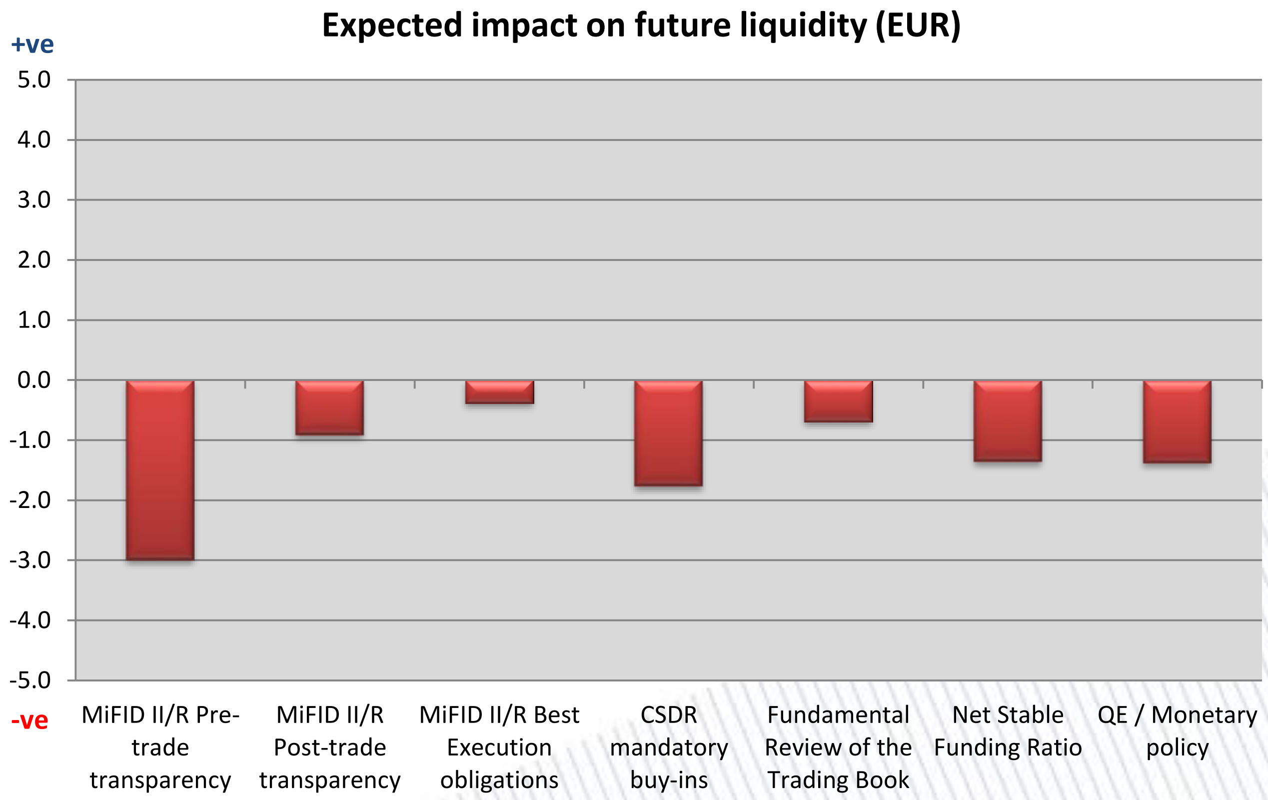
How is the market responding?

- Electronification: new initiatives, platforms, tools, and protocols
  - Connectivity
  - Data
- Changes in buy-side behaviour
  - Primary vs secondary
  - Buy-to-hold
  - Dealer relationships
  - Price 'makers'
  - Fund crossing
  - Outsourcing ('super desks')
- Use of alternative products, such as bond ETFs, CDS indices, Bond Index TRS
- Discussions on changes in issuance practice ('benchmarking')
- CMU Call for Evidence and the 'better regulation' initiative

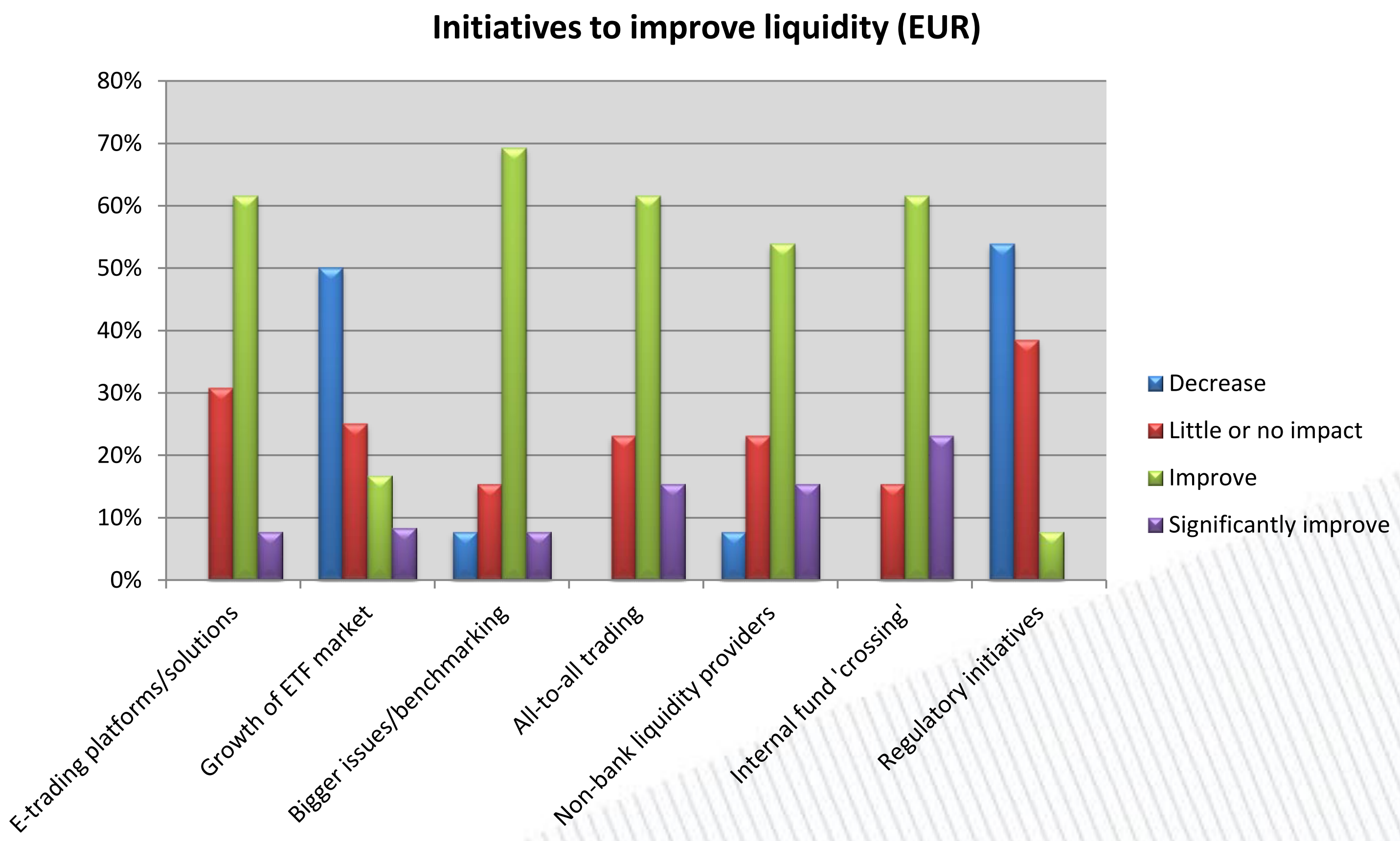
Future potential challenges to bond market efficiency and liquidity

- MiFID II/R pre- and post-trade transparency requirements (for bonds and single name CDS)
- MiFID II/R best-execution requirements
- CSDR mandatory buy-ins
- Even higher capital and funding costs (FRTB, NSFR)
- Other miscellaneous regulatory challenges (e.g. MAR disclosure requirements)
- ECB's Corporate Sector Purchase Programme
- Brexit

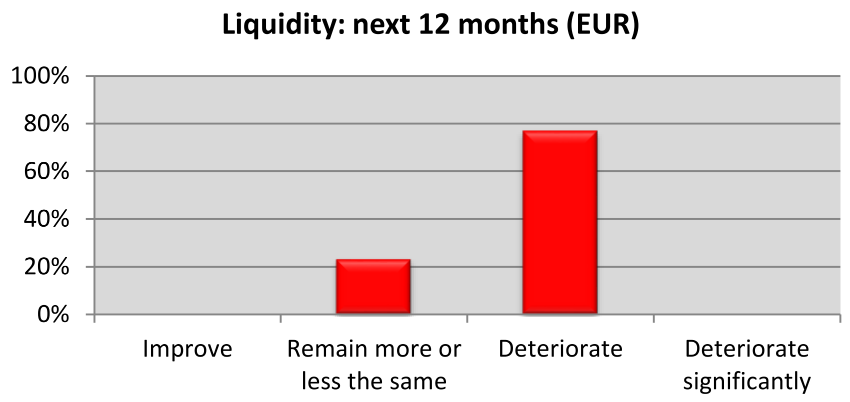
ICMA Buy-side Liquidity Survey

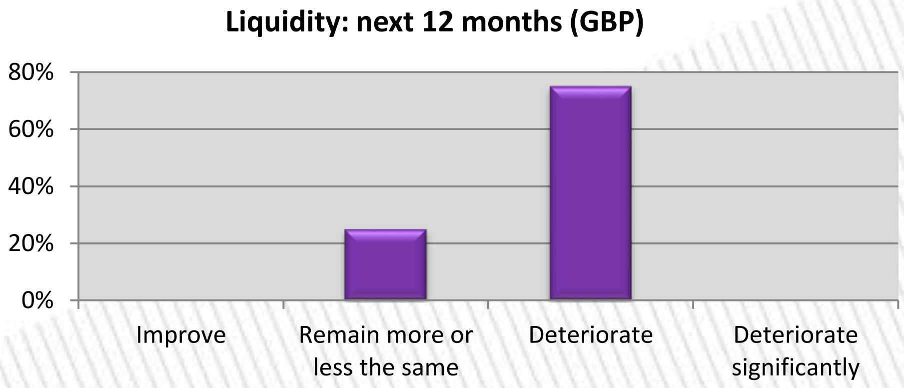


ICMA Buy-side Liquidity Survey



ICMA Buy-side Liquidity Survey





Recommendations

- Provide capital relief for market-making
- Revitalize the single-name CDS market
- Review and re-assess harmful regulation
- Bring all market stakeholders together to review the market structure

"Only through a greater understanding and appreciation of different stakeholder needs and perspectives can the market community achieve consensus and develop private and public initiatives to maintain and grow a healthy and vibrant pan-European corporate bond market."

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Contact: RegulatoryPolicy@icmagroup.org

European Repo Council

31st European repo market survey, conducted in June 2016

- **Mr. Richard Comotto,** Senior Visiting Fellow, ICMA Centre - Reading University

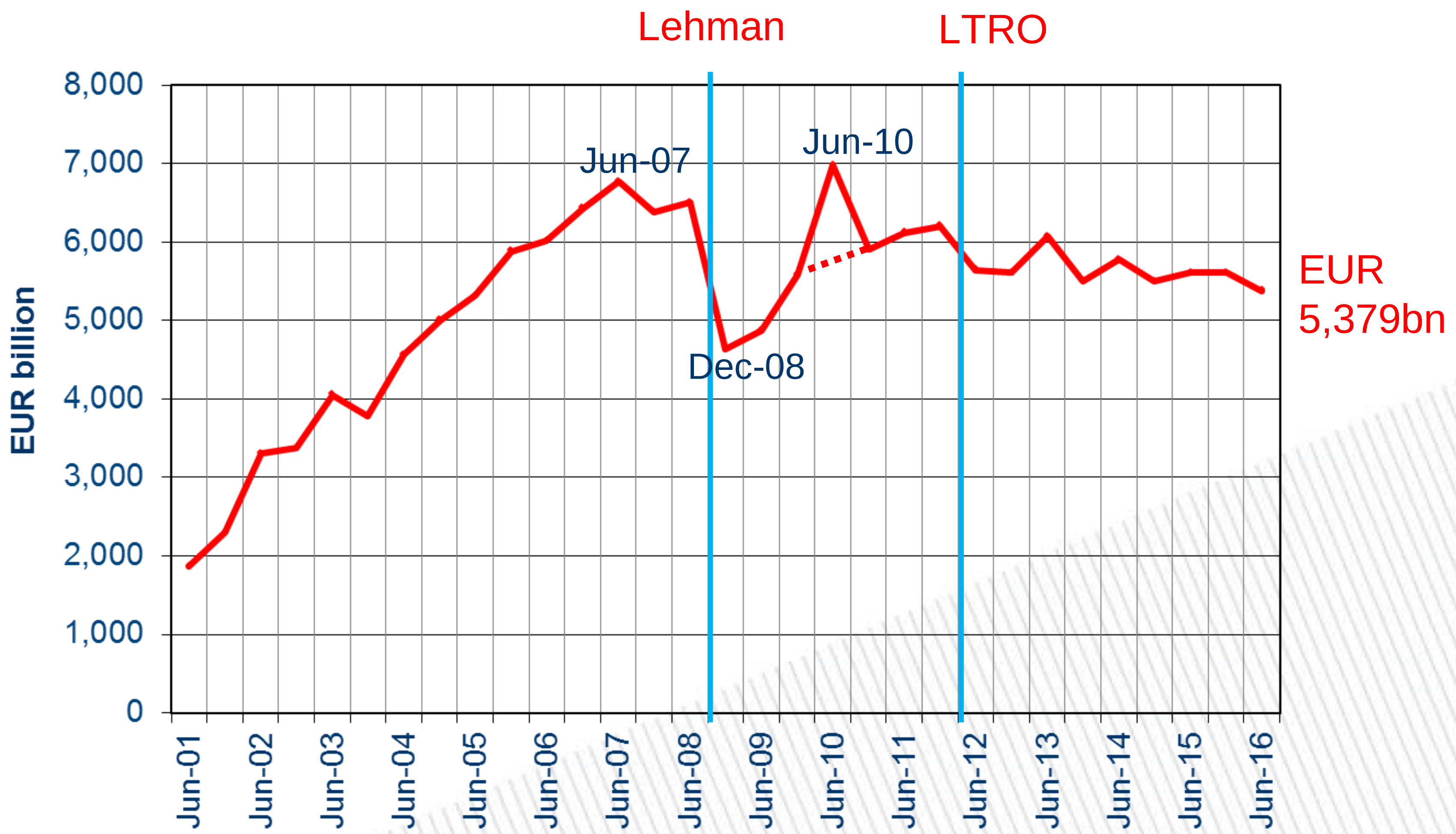
Survey overview

- outstanding value of contracts at close of business on Wednesday, 8th June 2016
- 67 responses (-5)

Headline numbers

• **June 2016**	**EUR 5,379 billion**
• December 2015	EUR 5,608 billion
• June 2015	EUR 5,612 billion
• December 2014	EUR 5,500 billion
• 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

Headline numbers

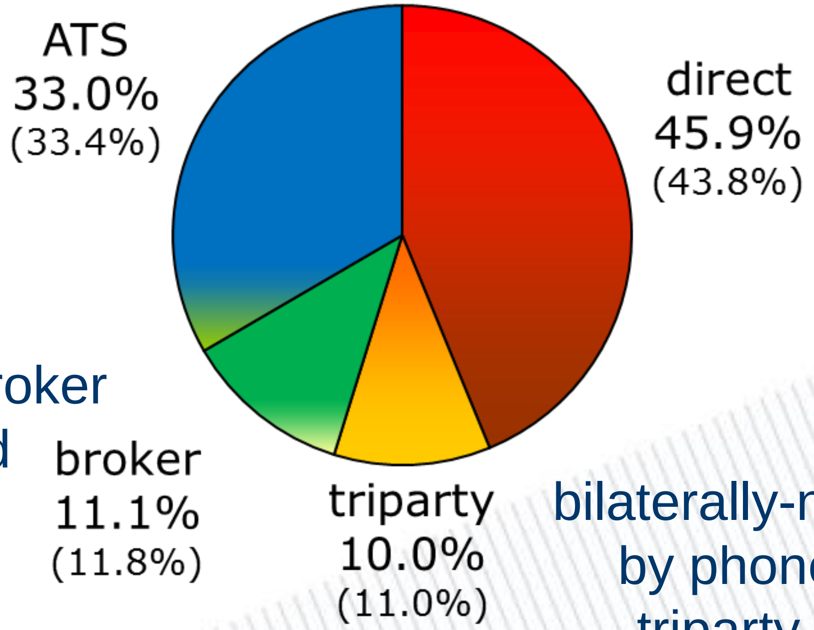


Comparable market growth

- headline number -4.1% since December 2015
- for 61 respondents participating in last 3 surveys
- +0.5% since December 2015
- -1.6% year-on-year

Trading analysis

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

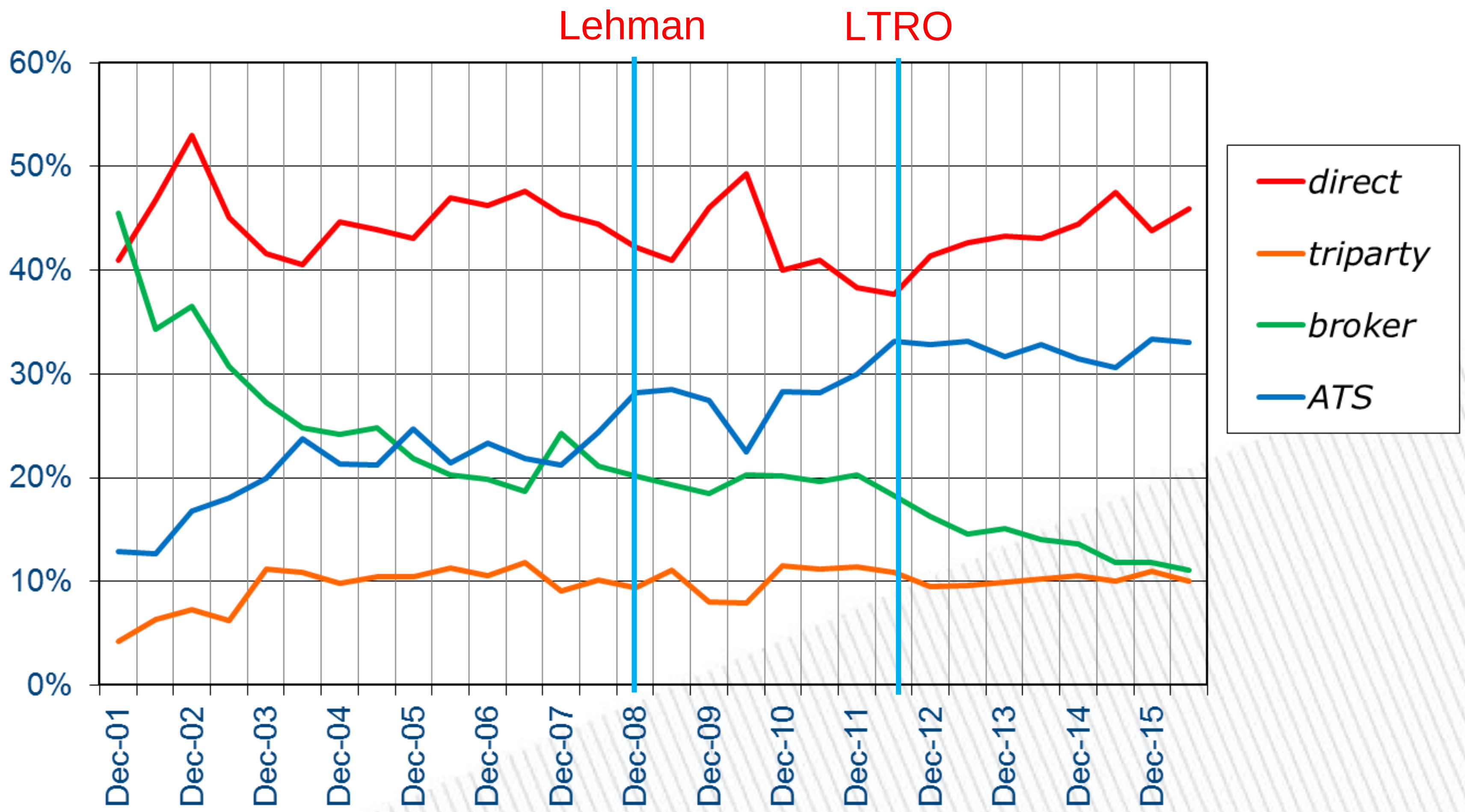


bilaterally-negotiated
by phone or EM
bilaterally-settled

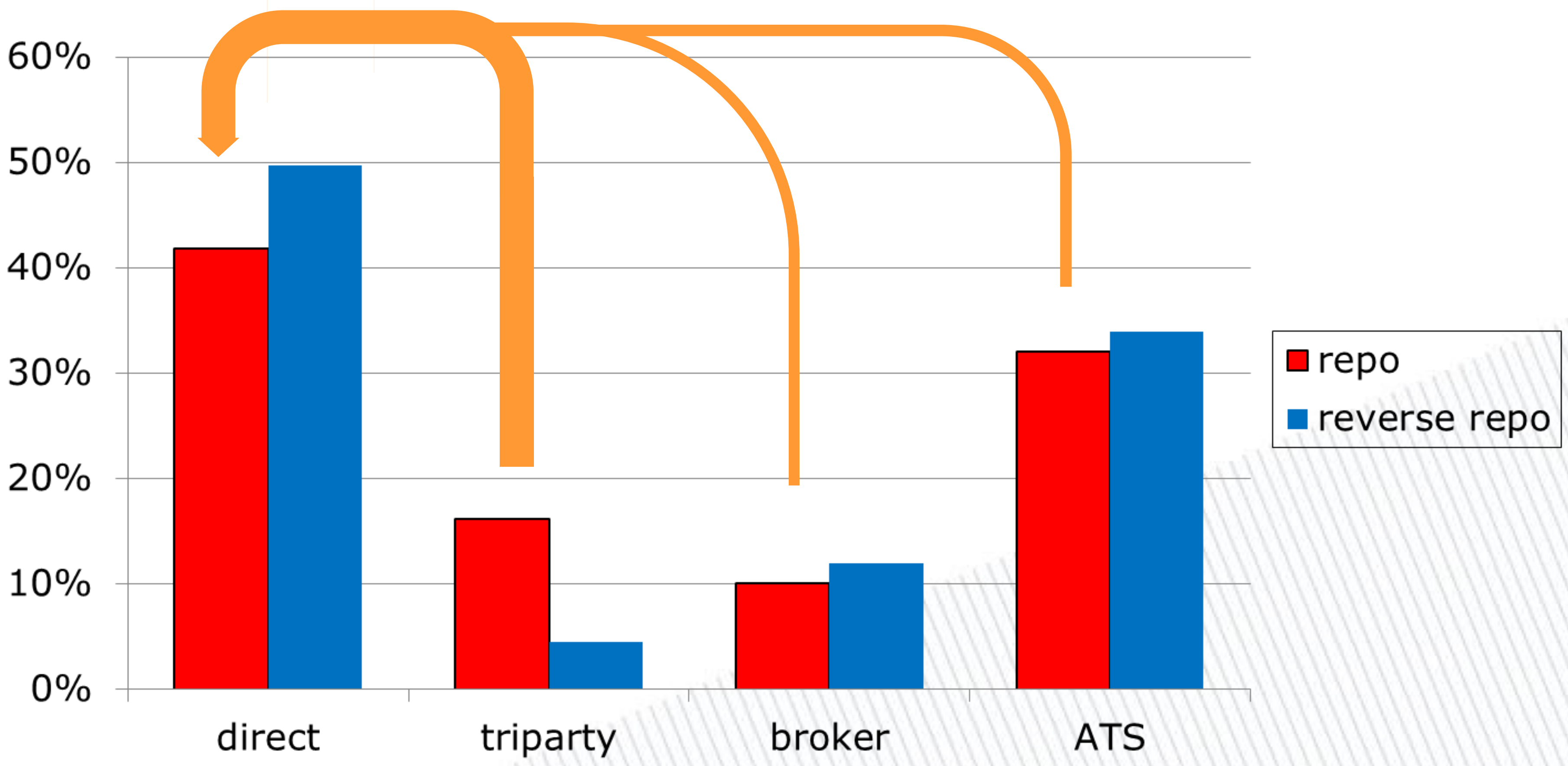
arranged by voice-broker
bilaterally-settled

bilaterally-negotiated
by phone or EM
triparty-settled

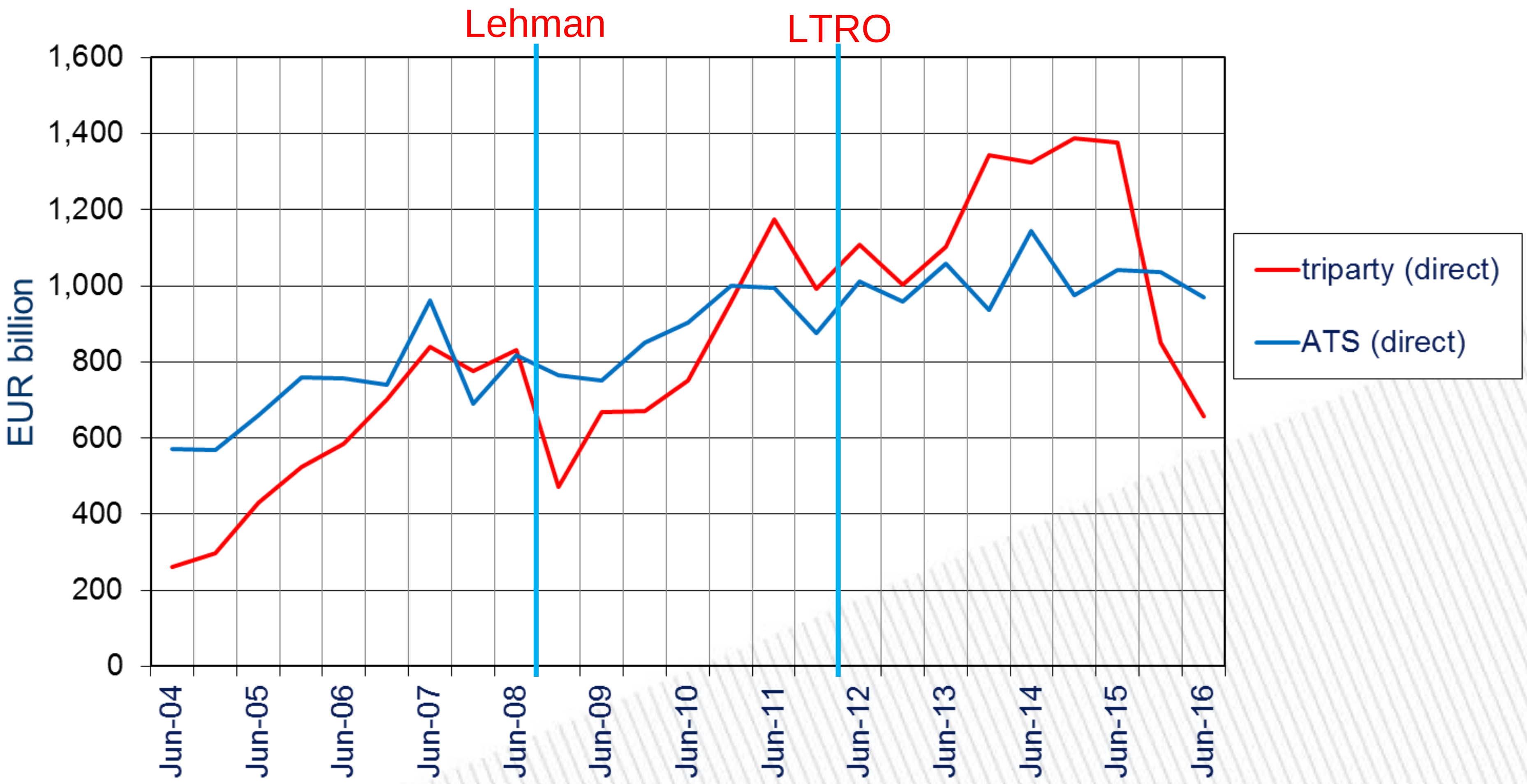
Trading Analysis



Trading analysis

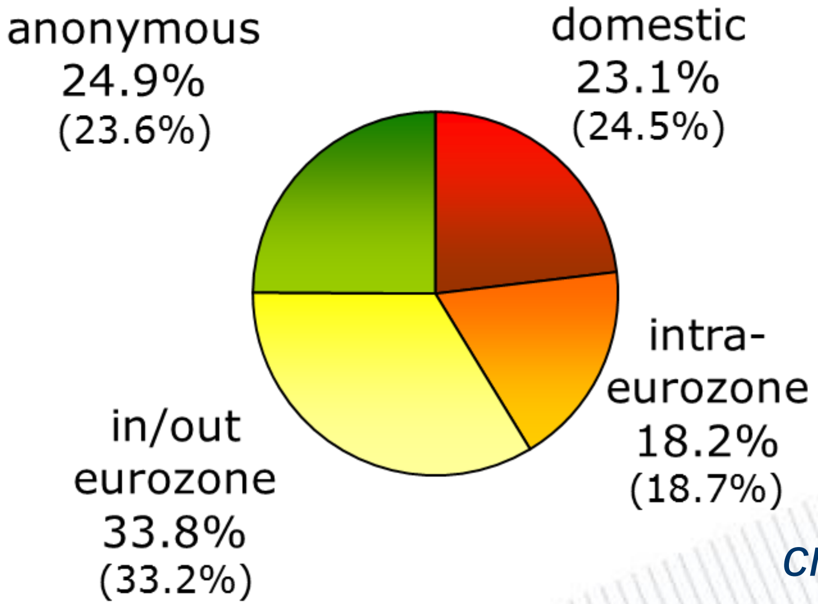


Trading Analysis (directly reported by providers)



Geographical Analysis

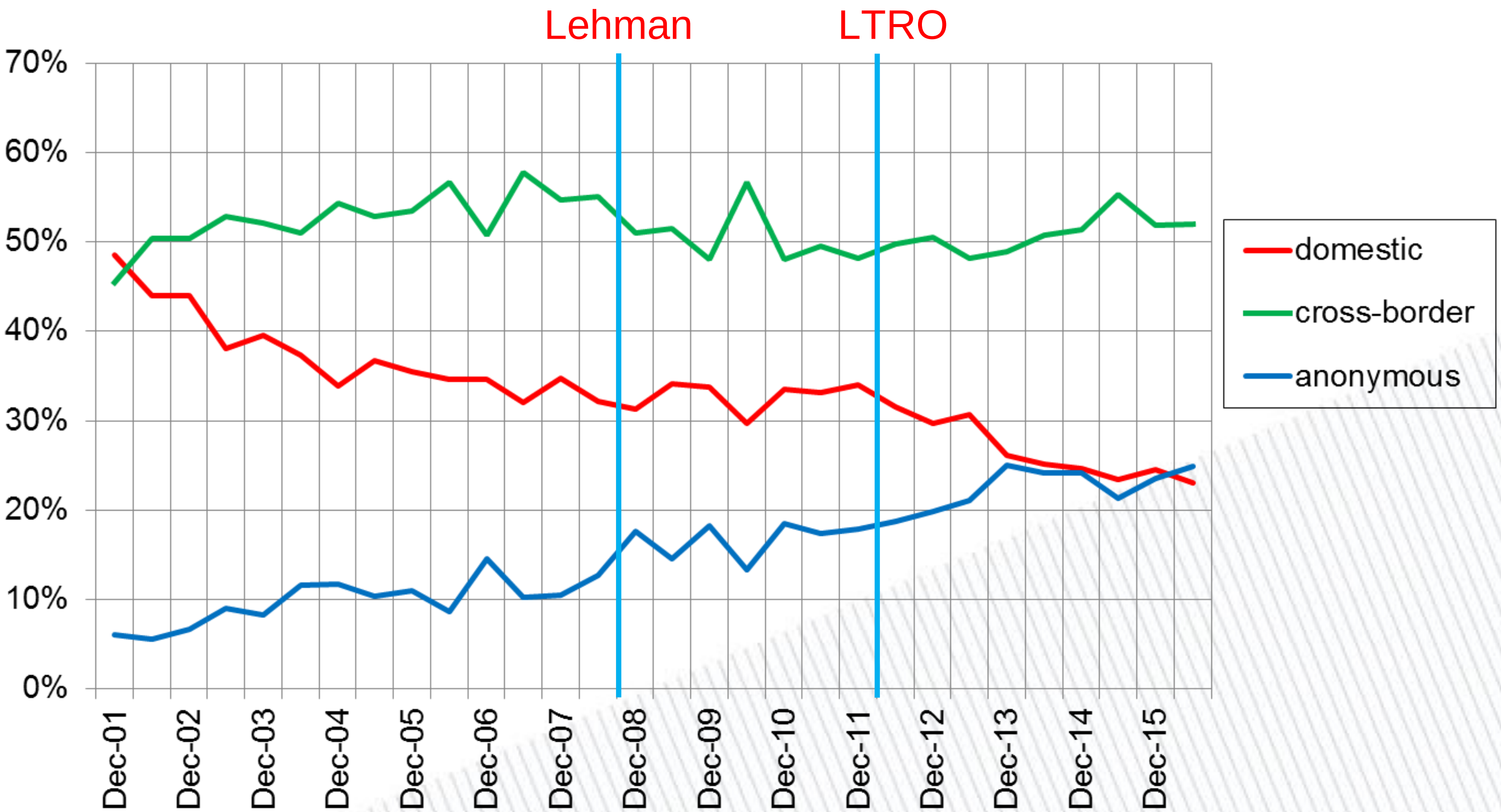
ATS via CCP



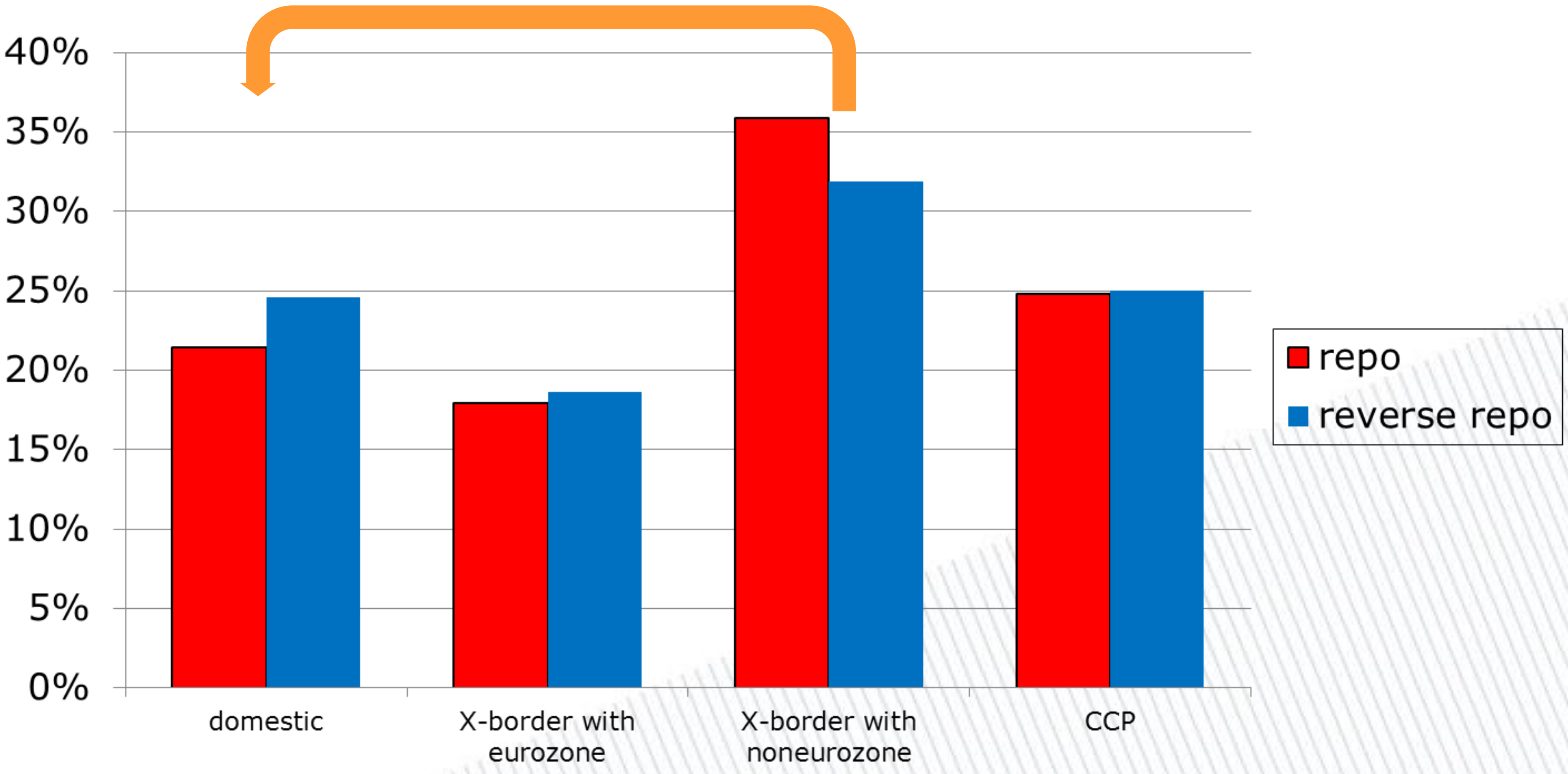
from reporting bank cross-border to a(nother) eurozone counterparty

from reporting bank cross-border to a non-eurozone counterparty

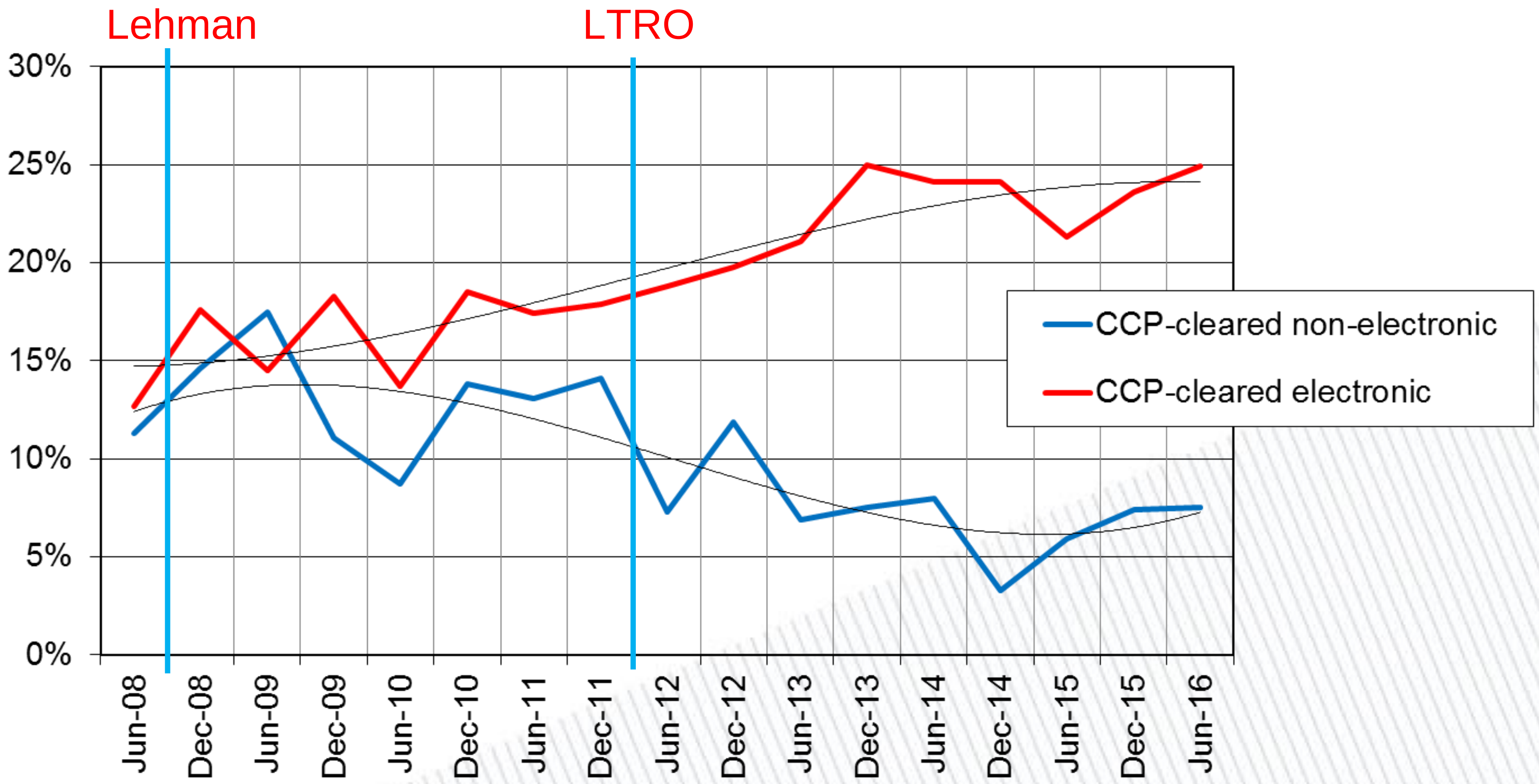
Geographical Analysis



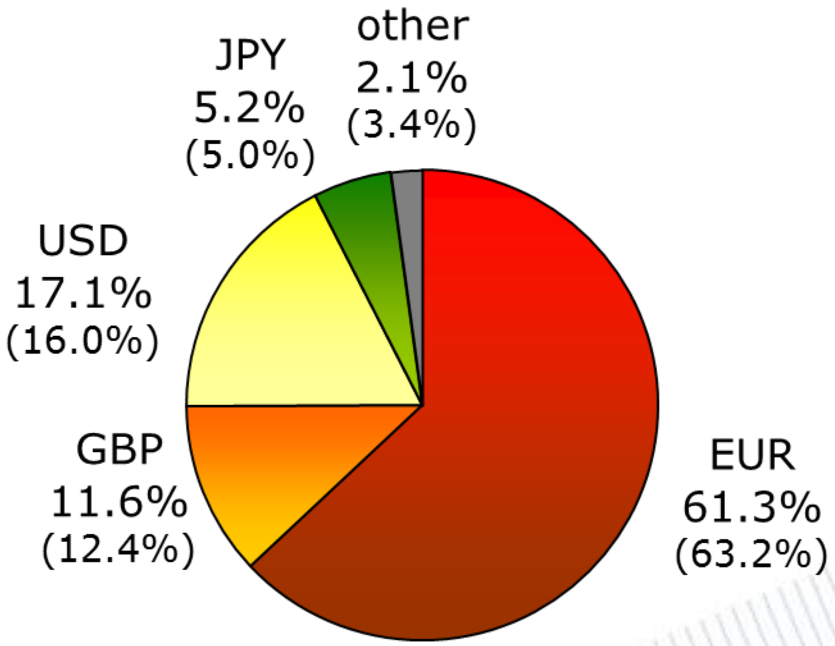
Geographic Analysis



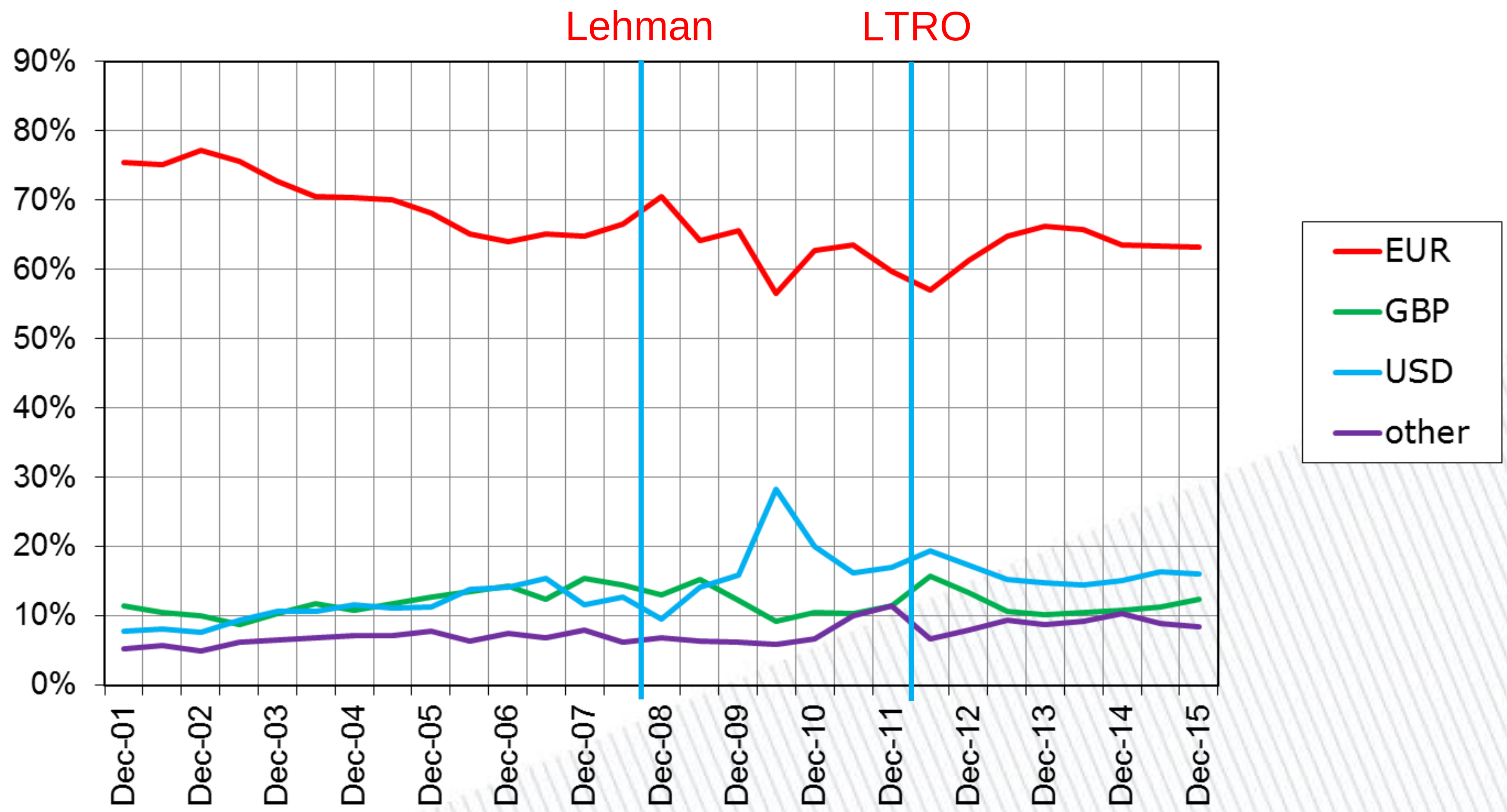
Business cleared across CCP



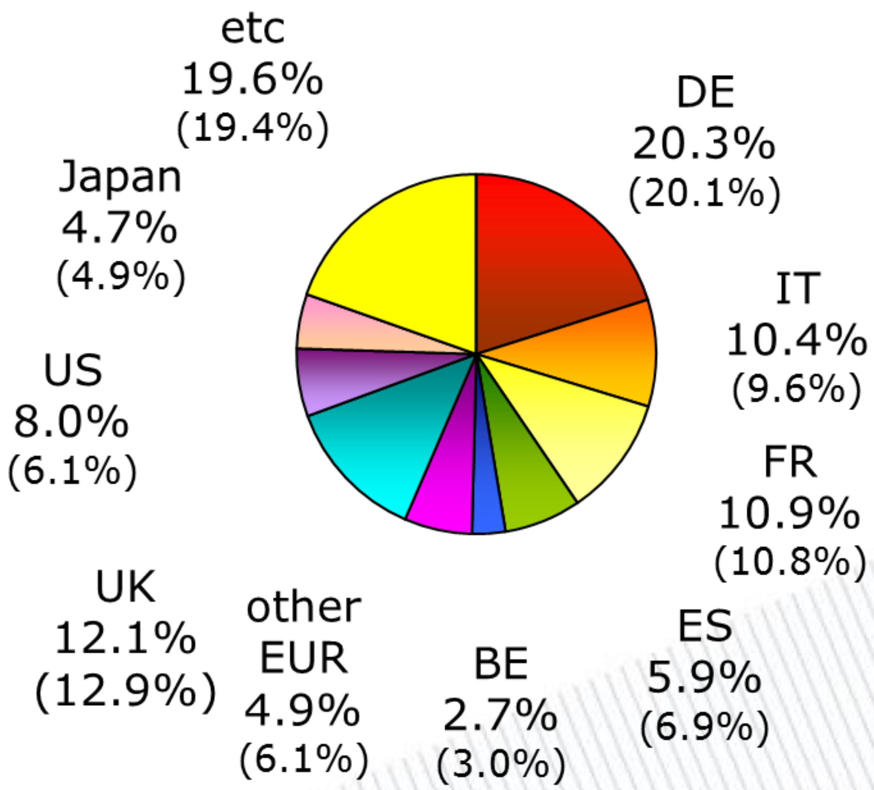
Currency Analysis



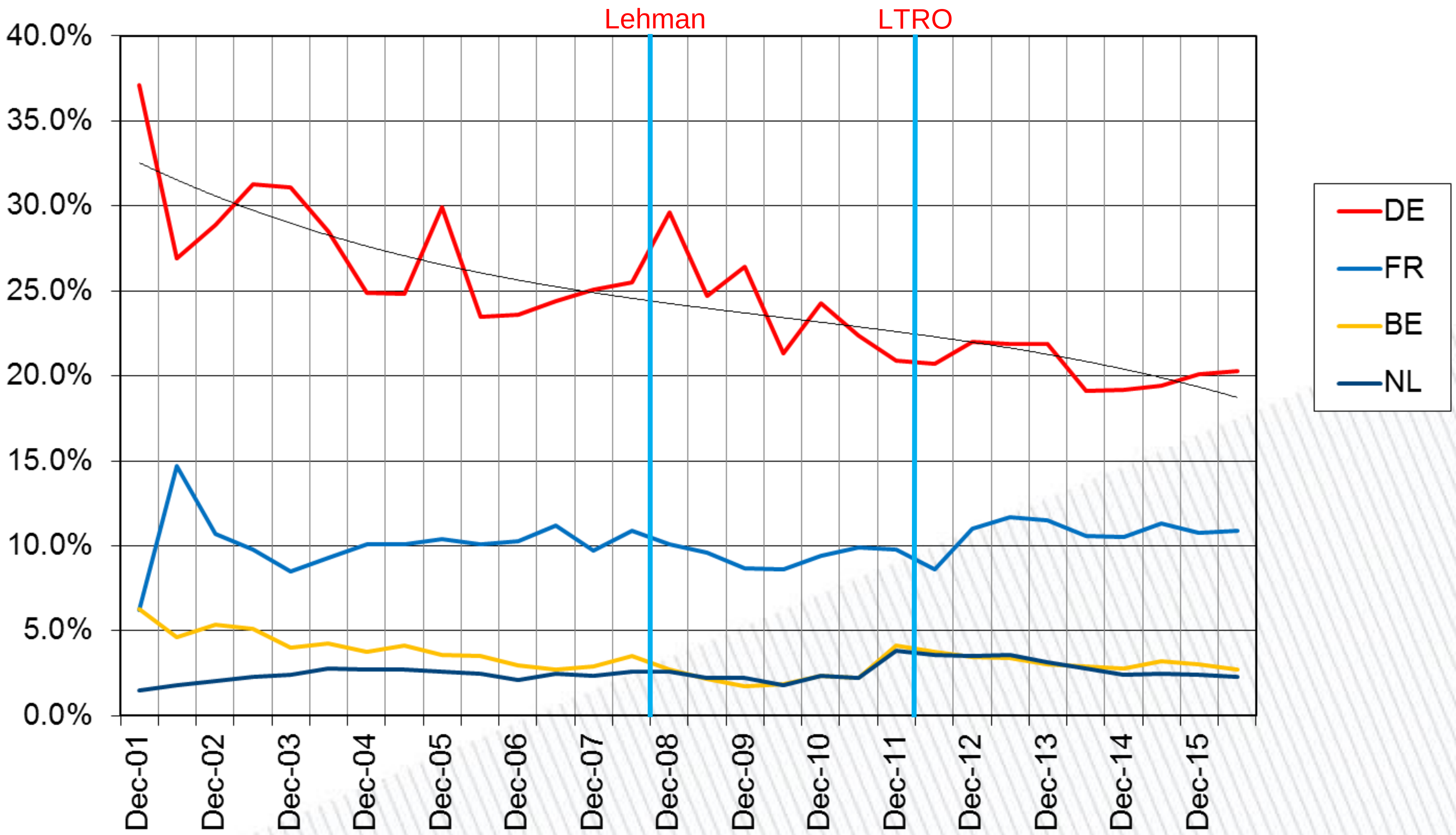
Currency Analysis



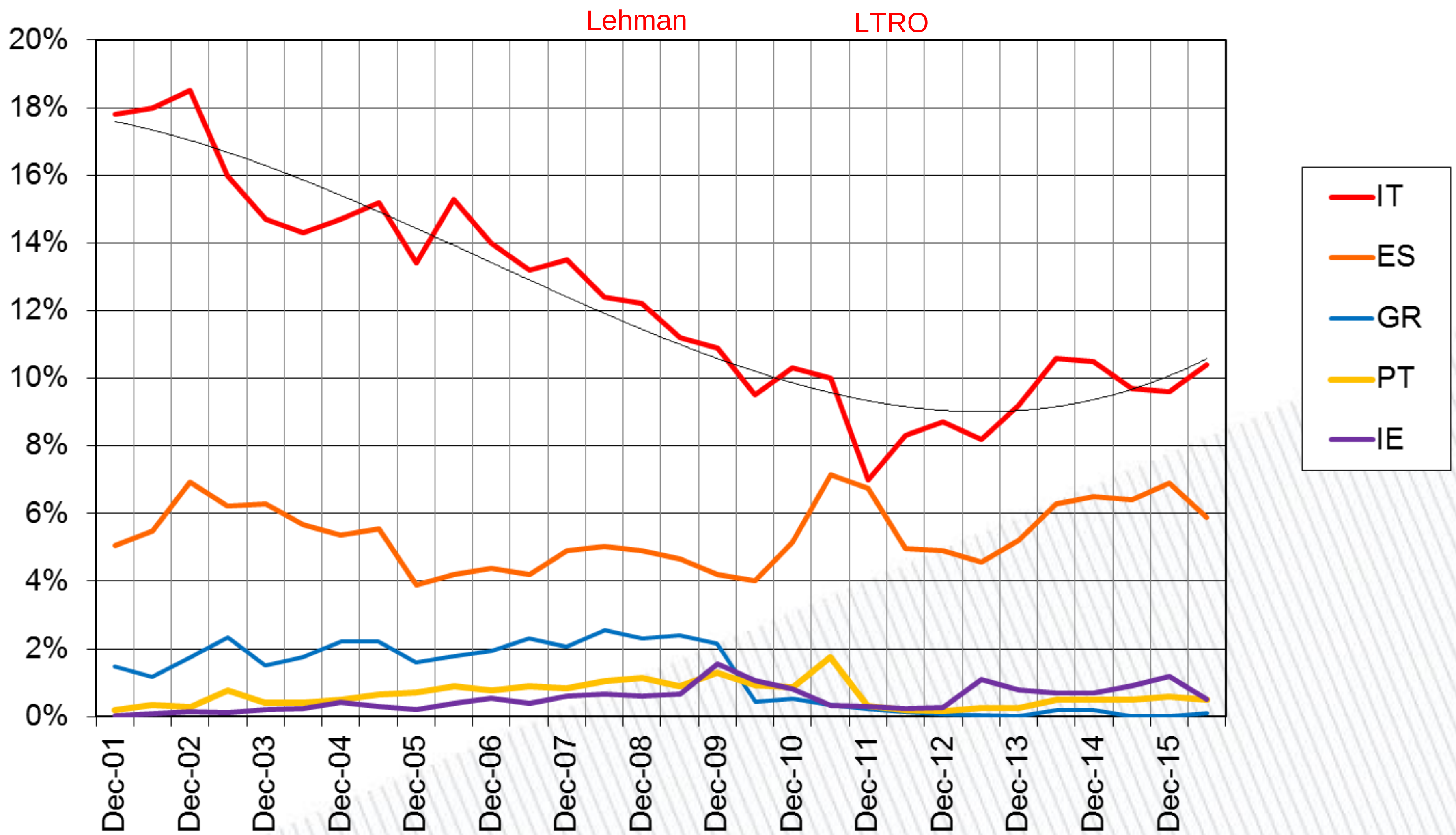
Collateral Analysis



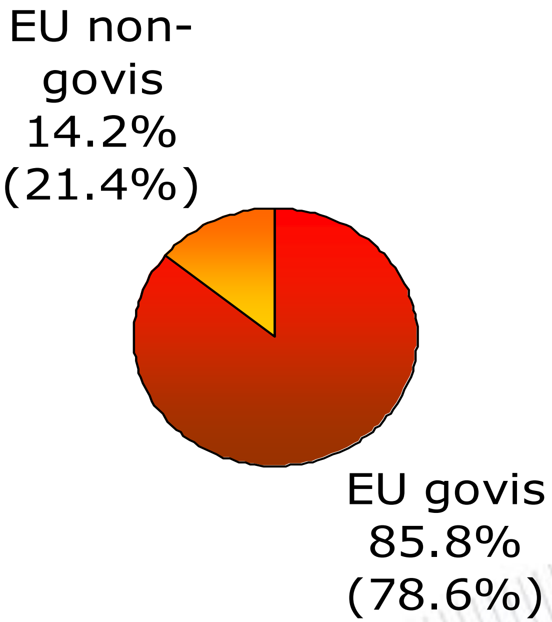
Collateral Analysis --- Core Eurozone



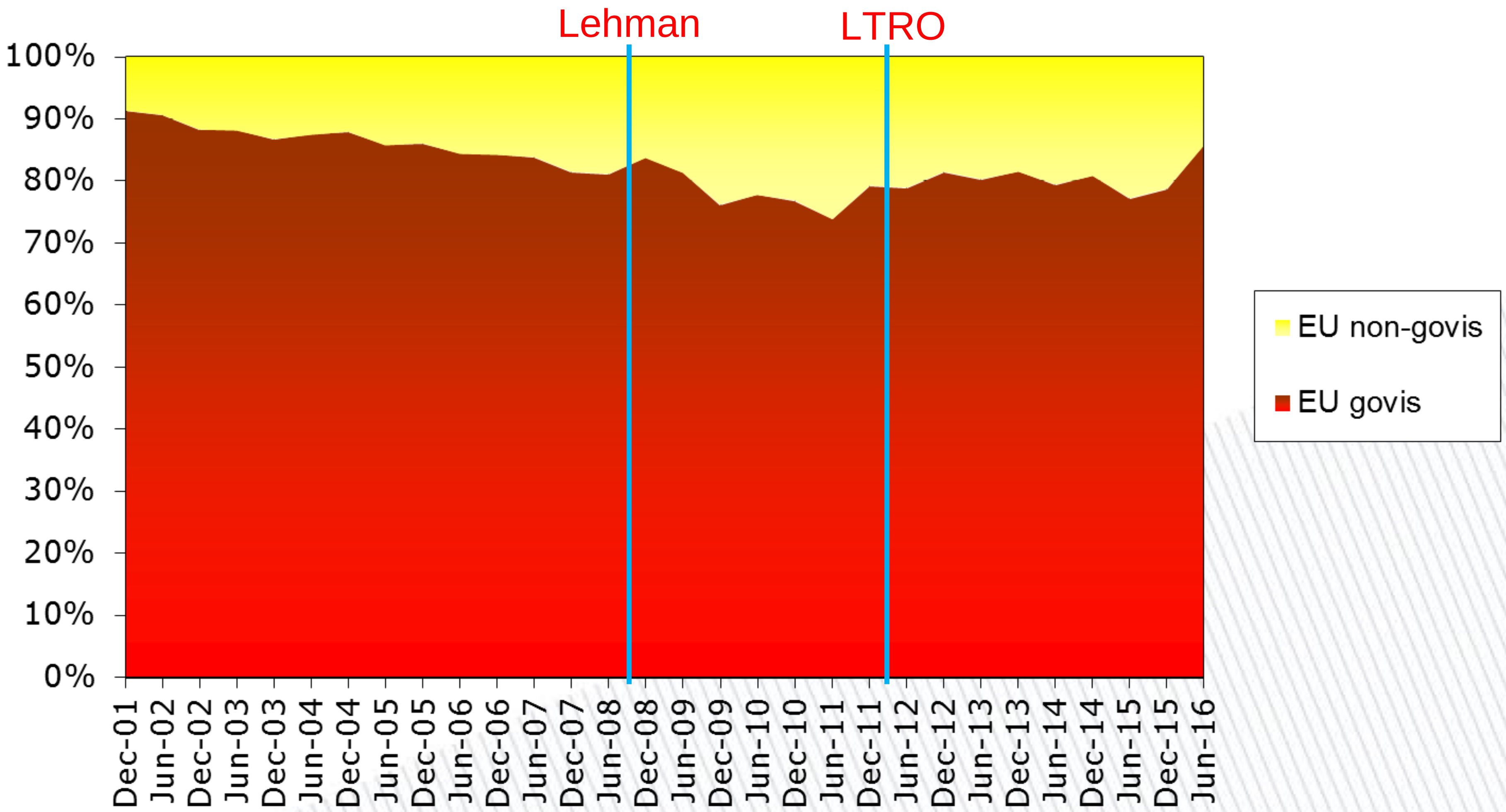
Collateral Analysis --- Peripheral Eurozone



Collateral Analysis

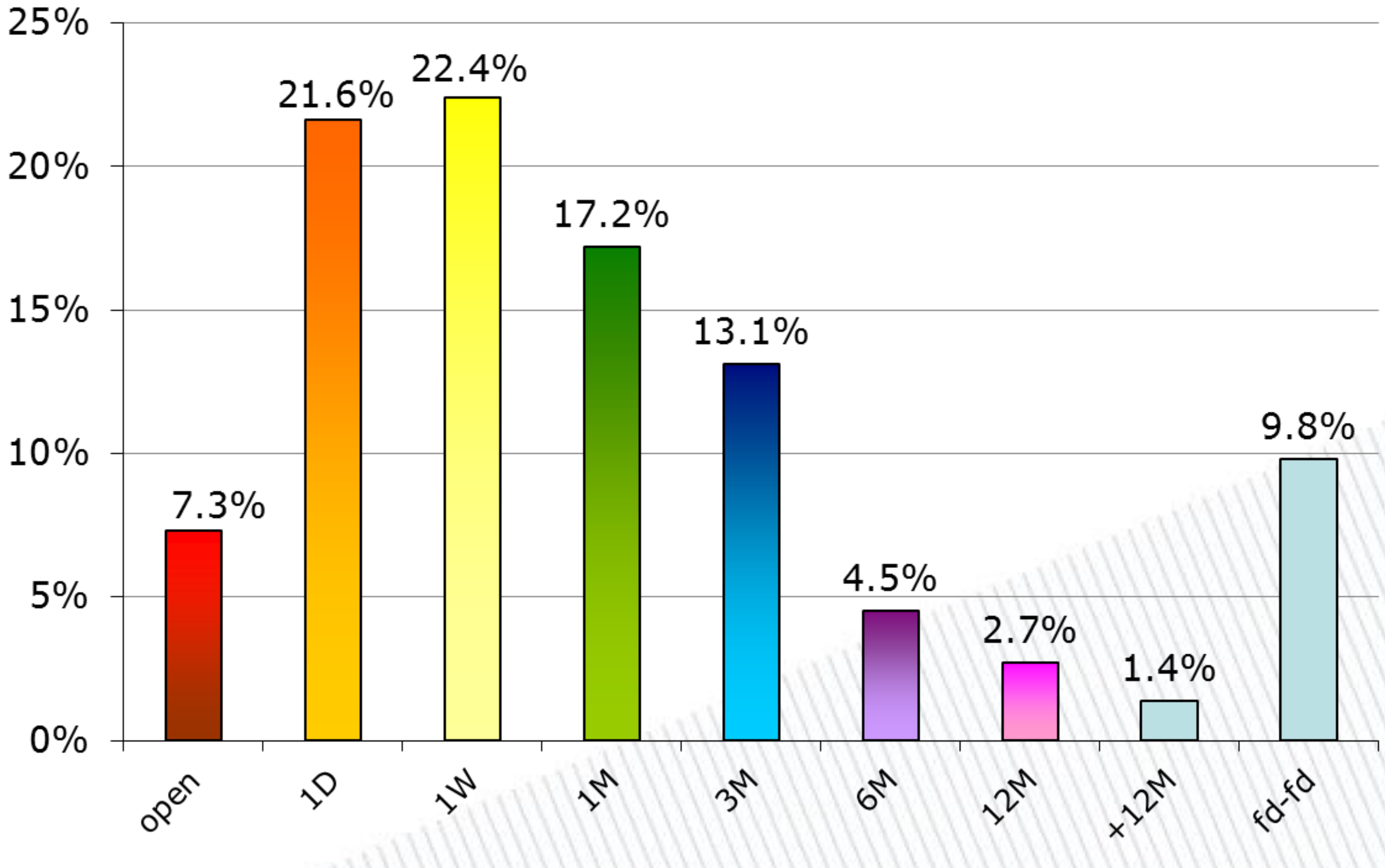


Collateral Analysis

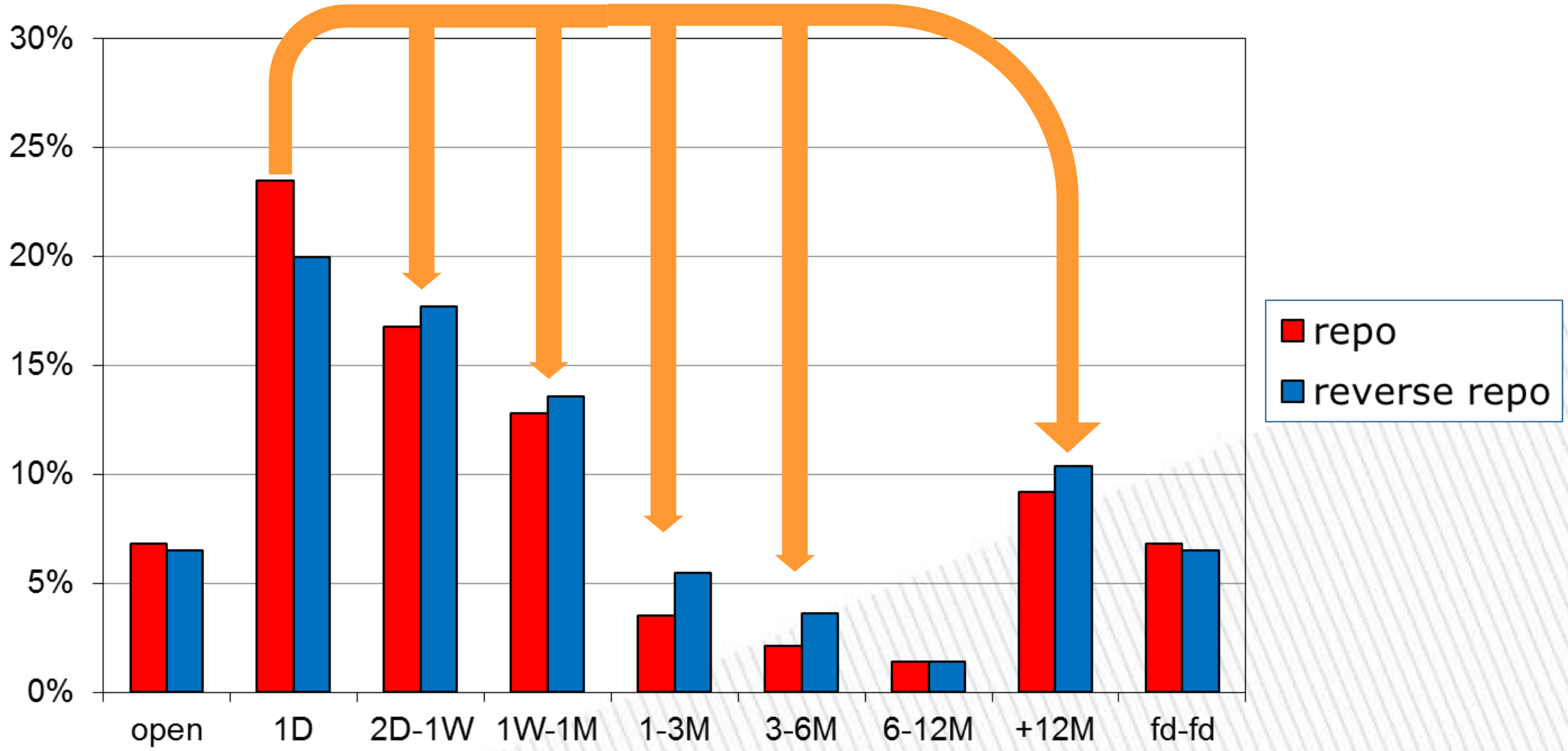


Maturity Analysis

short dates = 61.2% (56.7%)



Maturity Analysis



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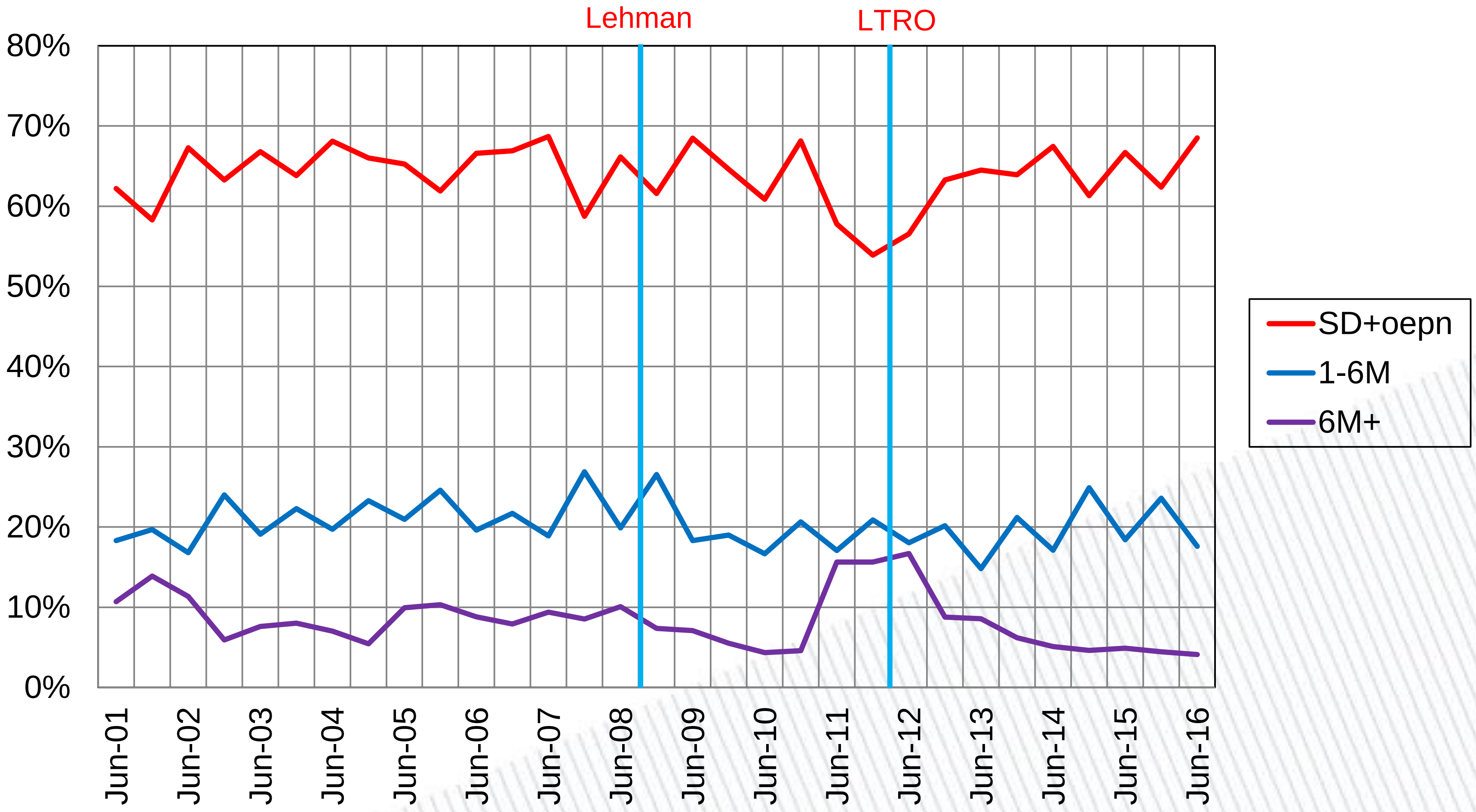
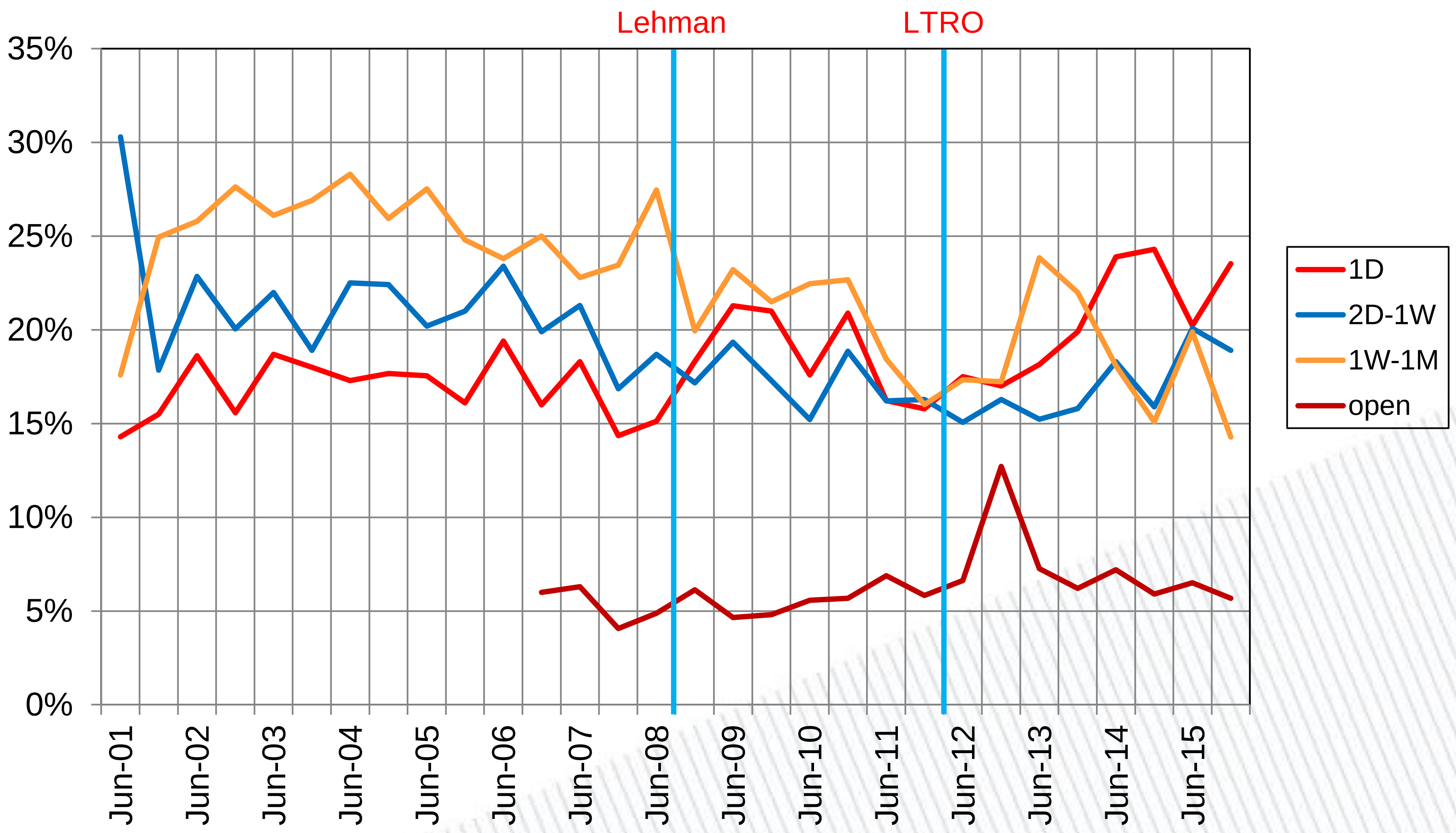
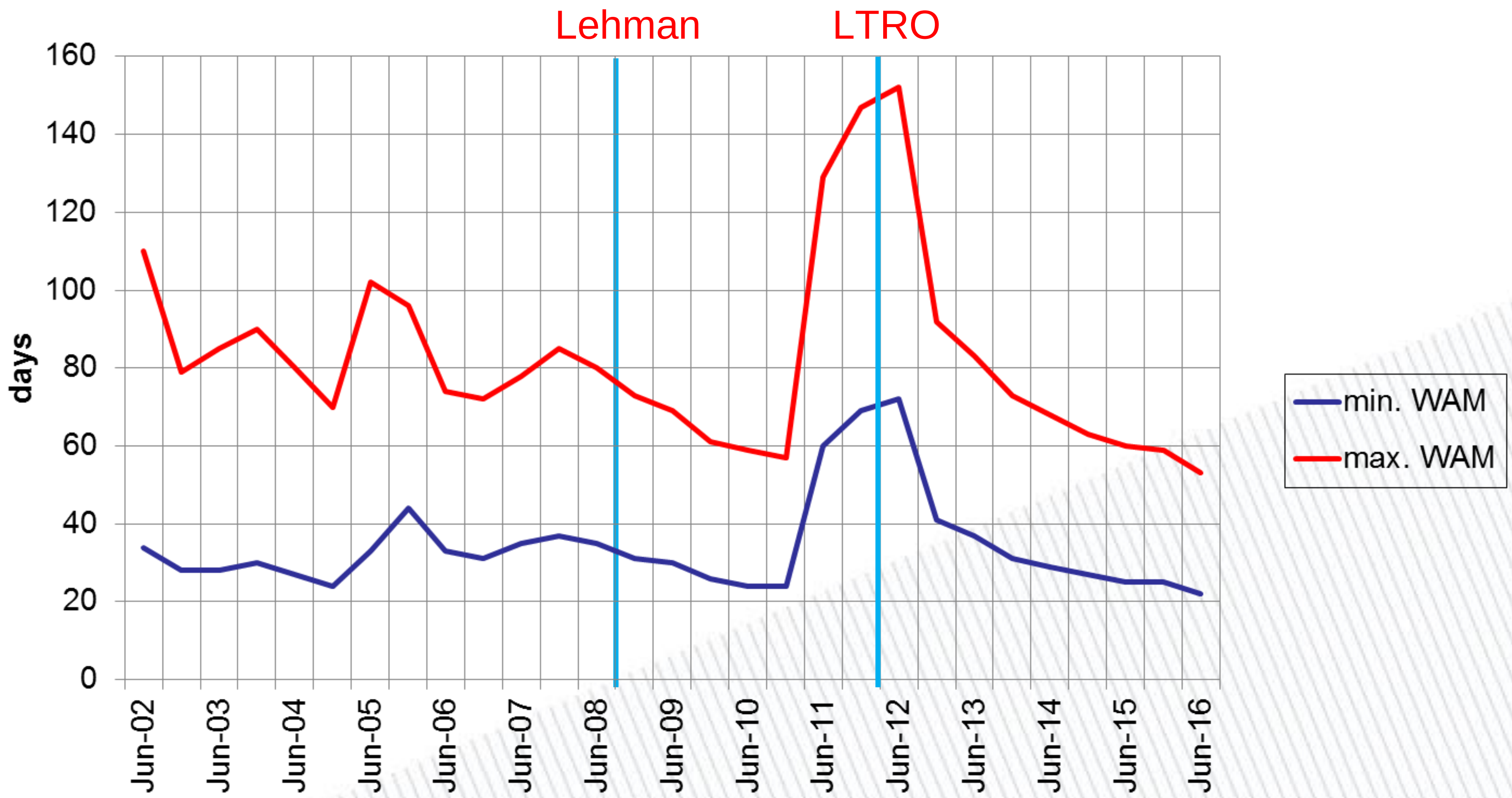


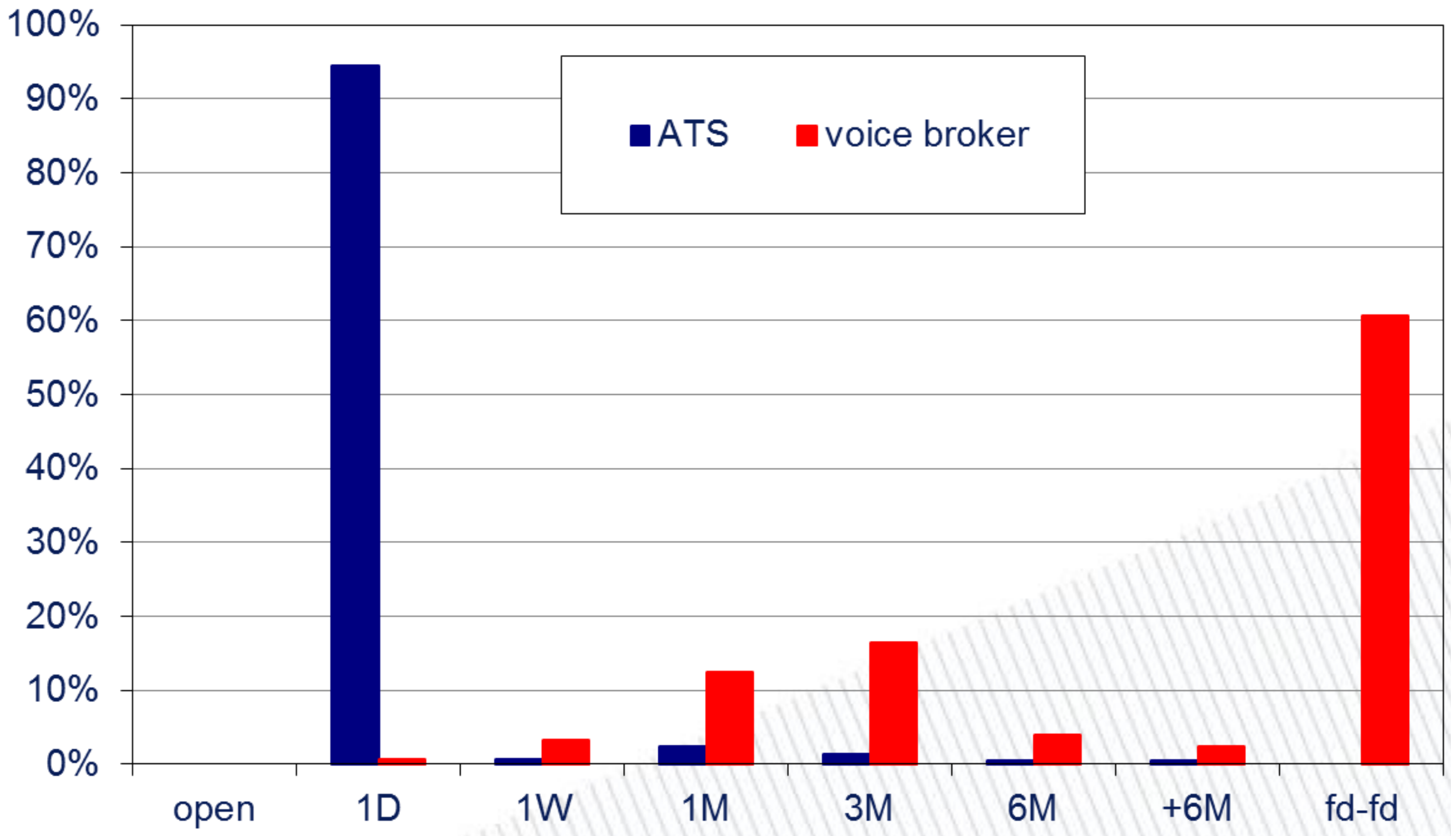
Maturity Analysis



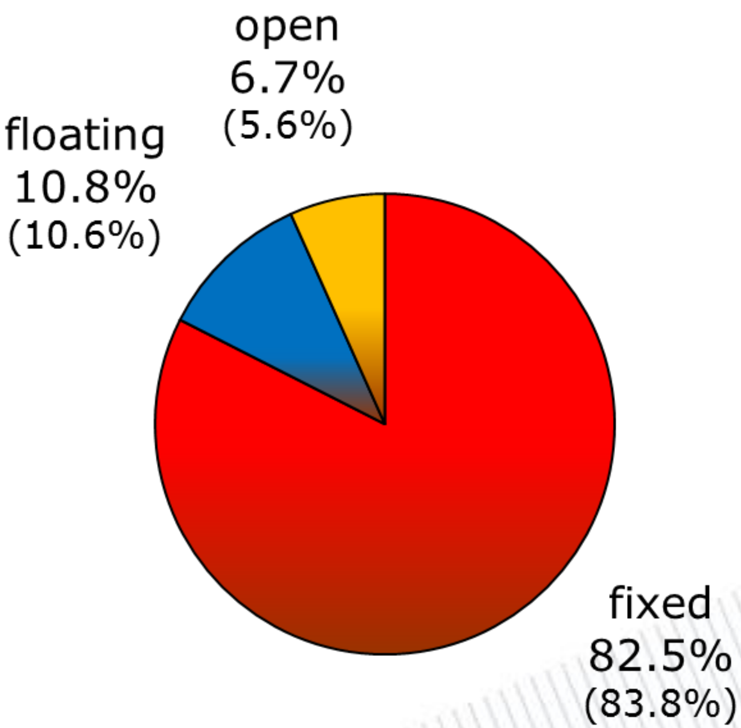
Maturity Analysis



Maturity Comparison



Rate Analysis



Next Survey

Wednesday, 7th December 2016

Repo in developing markets

- **Mr. Richard Comotto,** Senior Visiting Fellow, ICMA Centre – Reading University

Repo in developing markets

- there is growing interest in developing markets in establishing, reviving or rebuilding local repo markets, particularly in Africa and Asia
- there is a plethora of financial market development programmes being supported by IMF, World Bank & regional multilateral development banks
- ICMA provides technical assistance on the GMRA, as well as on repo & repo markets to central banks, treasuries, local market associations & local banks
- ICMA often works with regional multilateral development banks
- ICMA has a new partnership with Frontclear

Repo in developing markets

- many developing markets appear to have repo markets already
- but most are in fact disguised secured loan/deposit markets --- there are some acid tests
- these pseudo repo markets often seem to work well --- so why add repo?
  - collateralised borrowing/lending markets may be an evolutionary blind alley
  - true repo can provide superior legal protection & regulatory treatment
  - true repo can catalyse the securities market
  - true repo can make cross-border integration easier

Repo in developing markets

some common characteristics

- turnover of USD15-50 million a day
- collateral is usually limited to government & central bank securities
- collateral is illiquid & dealers rely on standard haircuts
- confidence is high in the credit of other banks (or the official safety net)
- there can be collateral stigma
- repo rates are often higher than unsecured rates
- repo & pseudo repo is often traded on an ‘exchange’
- NBFIs are usually excluded but there is often retail participation

Typical obstacles to active repo markets

key obstacles

- widespread misunderstanding about the character of repo
- legal uncertainty
  - will title transfer & netting in insolvency be enforceable?
  - undeveloped or unreliable juridicial systems
  - existing or proposed master ‘repo’ agreements are often inadequate, even risky
- fiscal
  - tax (eg stamp duty/CGT on purchase & repurchase, WHT on manufactured payments)
  - debt issuance --- incoherent primary market strategy means illiquid collateral market
- other obstacles--- short-selling prohibitions, inefficient market venues

Overcoming obstacles to active repo markets

removing legal obstacles

- best solution is statutory definition of repo & a netting law
- but reform is particularly difficult in many civil code jurisdictions
- some countries are trying to use regulation as an alternative
- also need a robust master repo agreement
- don’t use the US MRA
- consider GMRA plus country annex or country Annex I
- consider documented buy/sell-back, which means Buy/Sell-Back Annex
- legal opinion essential

Typical obstacles to active repo markets

documented buy/sell-backs

- it is often assumed that all buy/sell-backs are undocumented --- ask ESMA!
- but documented buy/sell-backs do exist & have operational features that can help avoid some common re-characterisation risks

Repo in developing markets

some advice

- contact the ICMA or your local multilateral development bank
- avoid the US Treasury
- think about documented buy/sell-backs
- but remember repo cannot exist in a vacuum

Repo in practice

- **Mr. Erik van Dijk,** CFRO, Frontclear

frontclear

A financial markets development company

THE CHALLENGE – INTERBANK MARKETS

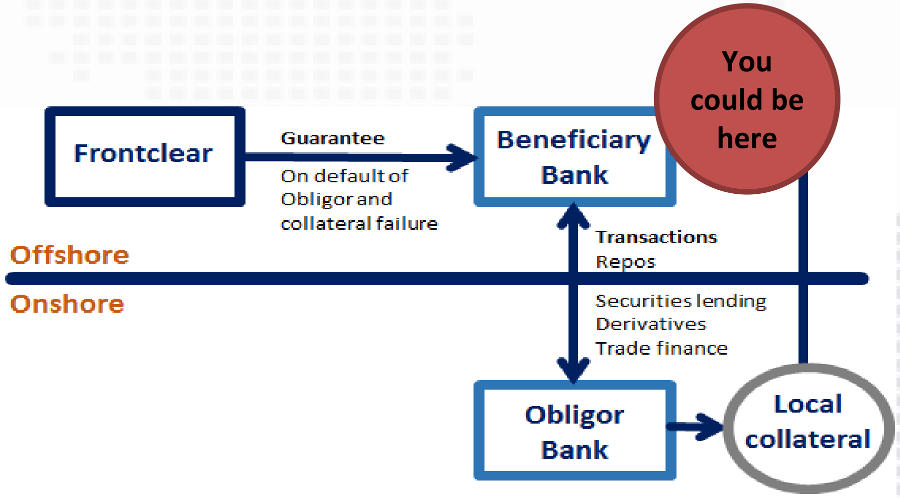
- Interbank markets operate on the assumption of fully mitigated credit risk through HQLA collateral (G7 cash/government securities)
- EMDC financial institutions can offer local currency collateral at best, exposing their transacting counterparties to country and market risk (if correlated: wrong-way risk)
- Lack of access to interbank markets fails to unlock comparative advantages and leads to higher borrowing costs and/or lack of liquidity in the local market

"Financial markets in EMDEs … [are] constrained by perceptions of high counterparty risk and often a limited supply of high quality collateral, contributing to high spreads … **-- Financial Stability Board, IMF and World Bank (2012)**

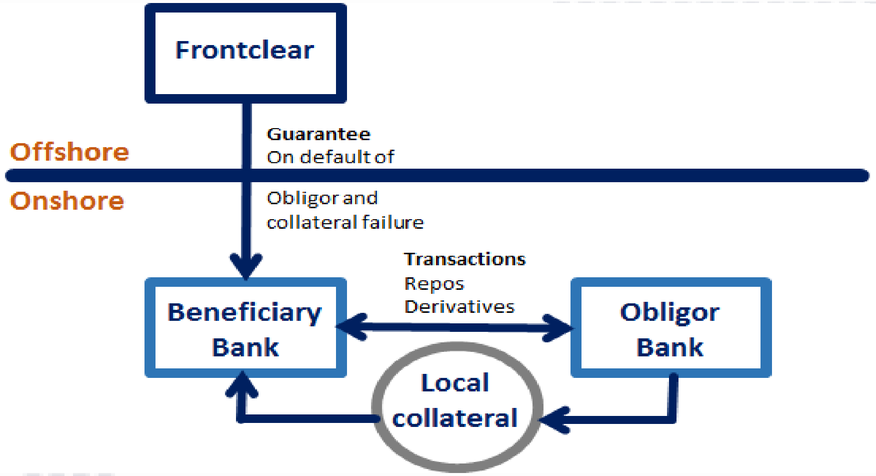
"An important policy measure that has been proposed to stabilize interbank markets — especially in emerging economies — is to collateralize transactions in the interbank market." **-- World Bank 2013 Financial Development Report**

"To improve the efficiency of the interbank and its role as a channel of transmitting monetary policy in such underdeveloped interbank markets like Kenya, monetary authorities must broaden the product tenors, increase the number of currencies traded, link the interbank with other money market segments and address counterparty risks." **-- African Development Bank (2014)**

FRONTCLEAR GUARANTEES



Introducing additional funding and liquidity from foreign investors



Redistributing existing (local) liquidity and promoting policy signals

TECHNICAL ASSISTANCE (FTAP)

Financial

Trainings, workshops, consulting in:
- Fixed income: bonds, REPO, valuation, trading
- Derivatives: overview, valuation, accounting and trading
- (Market) risk management
- Basel II/III: liquidity and balance sheet management

Legal system

Trainings, workshops, consulting in:
- Understanding and applying GMRA
- Understanding and applying ISDA
- Developing bespoke legal opinions in conjunction with legal workshop

Financial markets infrastructure

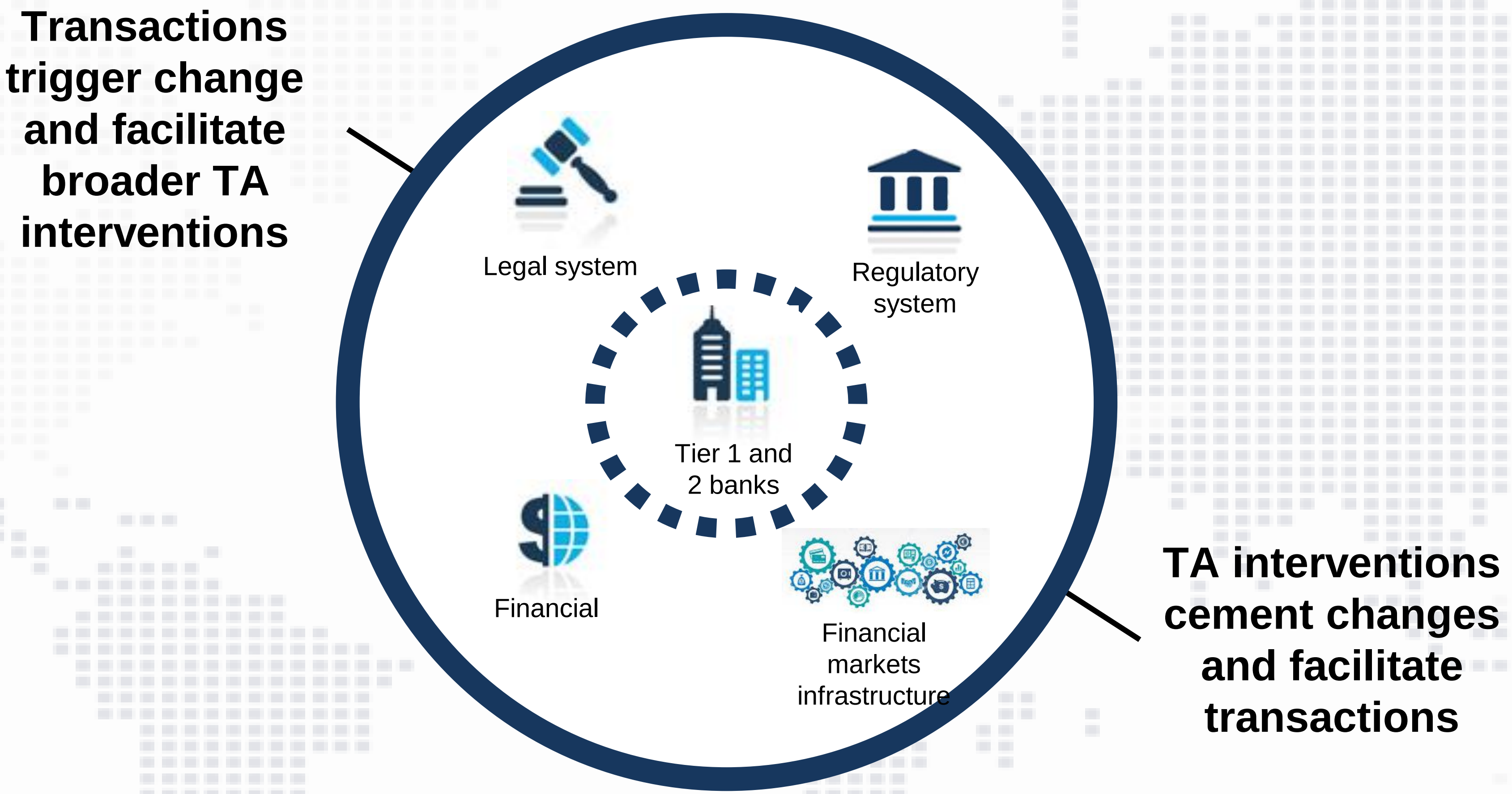
Custom trajectories such as:
- Settlement rules and reporting
- Central counterparty development (local clearing)
- Guarantee funds in support of local market infrastructure

Regulatory system

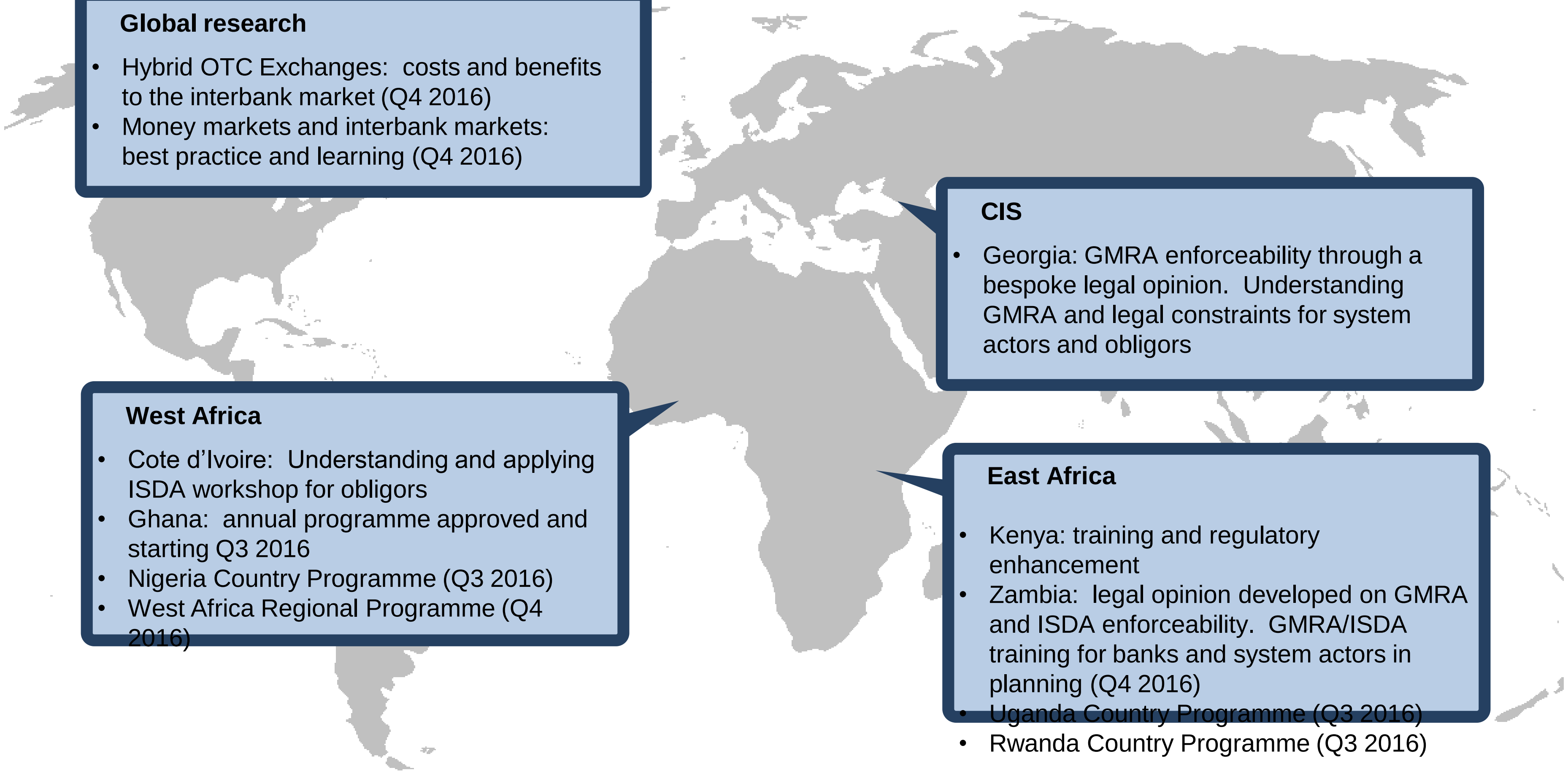
Custom trajectories especially directed to regulatory authorities based on any of the above trainings, workshop, consulting or research
e.g. current research on ‘Hybrid OTC exchanges: costs and benefits’

TX & TA – REINFORCING INTERVENTIONS

Frontclear Management B.V.



FTAP CASES



Global research

- Hybrid OTC Exchanges: costs and benefits to the interbank market (Q4 2016)
- Money markets and interbank markets: best practice and learning (Q4 2016)

CIS

- Georgia: GMRA enforceability through a bespoke legal opinion. Understanding GMRA and legal constraints for system actors and obligors

West Africa

- Cote d'Ivoire: Understanding and applying ISDA workshop for obligors
- Ghana: annual programme approved and starting Q3 2016
- Nigeria Country Programme (Q3 2016)
- West Africa Regional Programme (Q4 2016)

East Africa

- Kenya: training and regulatory enhancement
- Zambia: legal opinion developed on GMRA and ISDA enforceability. GMRA/ISDA training for banks and system actors in planning (Q4 2016)
- Uganda Country Programme (Q3 2016)
- Rwanda Country Programme (Q3 2016)

FRONTCLEAR IN SHORT

- Frontclear issues guarantees to cover counterparty credit risk on EM financial institutions in *secured* interbank market transactions
  - Subject to obligor posting local collateral (cash or government securities)
  - Global diversification of wrong way risk by Frontclear ensures capital efficiency / pricing power
  - 1st demand counter-guarantee from KfW
- Basel III compliant guarantee for Beneficiaries, eligible under substitution approach for capital relief and positive effect on CVA cost – lowering the cost of trading
- Market access on more amenable terms for Obligors, expanding growth and lending potential
- Frontclear Technical Assistance Program (FTAP) focused on:
  - Capacity Building of local market participants
  - Legal reform and market infrastructure development

INVESTORS AND COUNTER-GUARANTORS

Proparco
GROUPE AGENCE FRANÇAISE DE DÉVELOPPEMENT

TCX
the currency exchange fund

European Bank
for Reconstruction and Development

KFW

Cardano
development

fsdafrica
Innovation • Knowledge • Capacity

UKaid
from the British people

You could be here

FRONTCLEAR TEAM

CRFO

Erik van Dijk
evandijk@frontclear.com

FTAP

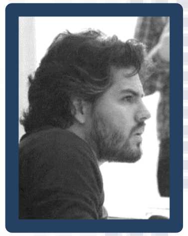
Ingrid Hagen
ihagen@frontclear.com

Support Officer

Maria Pia Kelly
m.kelly@cardanodevelopment.com

CEO and Sub-Sahara Africa

Philip Buyskes
pbuyskes@frontclear.com



Latin America

Damian Rozo
drozo@frontclear.com

CIS, CEE and Asia

Andrei Shinkevich
ashinkevich@frontclear.com

East African Community

David Thuo (agent)
david.thuo@theodoretrading.com

Frontclear Management B.V.
Mauritskade 63
Amsterdam, 1092 AD
The Netherlands
+3120 531 4854
www.frontclear.com

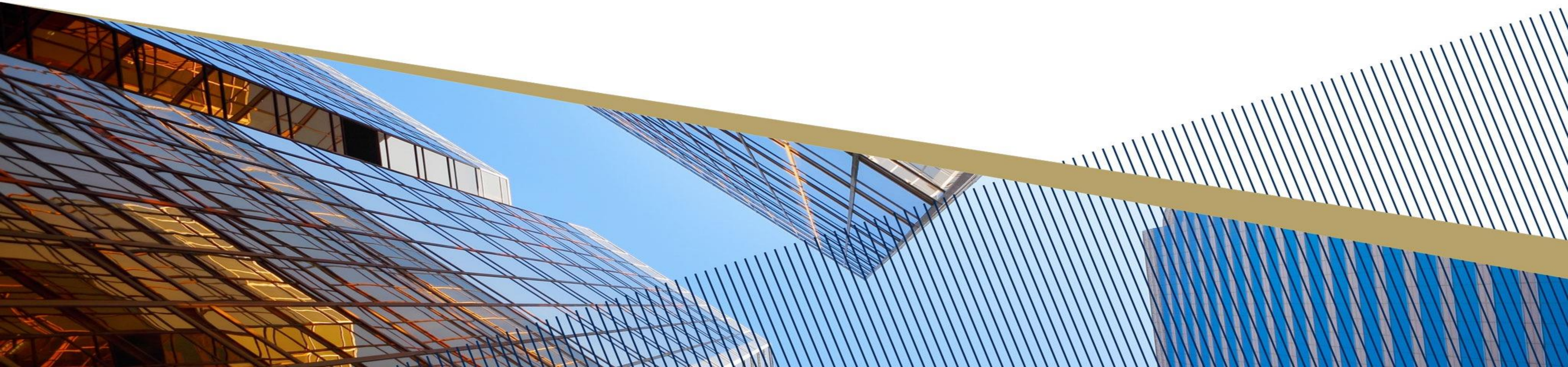
CCP trade capture

- **Mr. John Burke,** Consultant, ICMA

‘The Counterparty Gap’

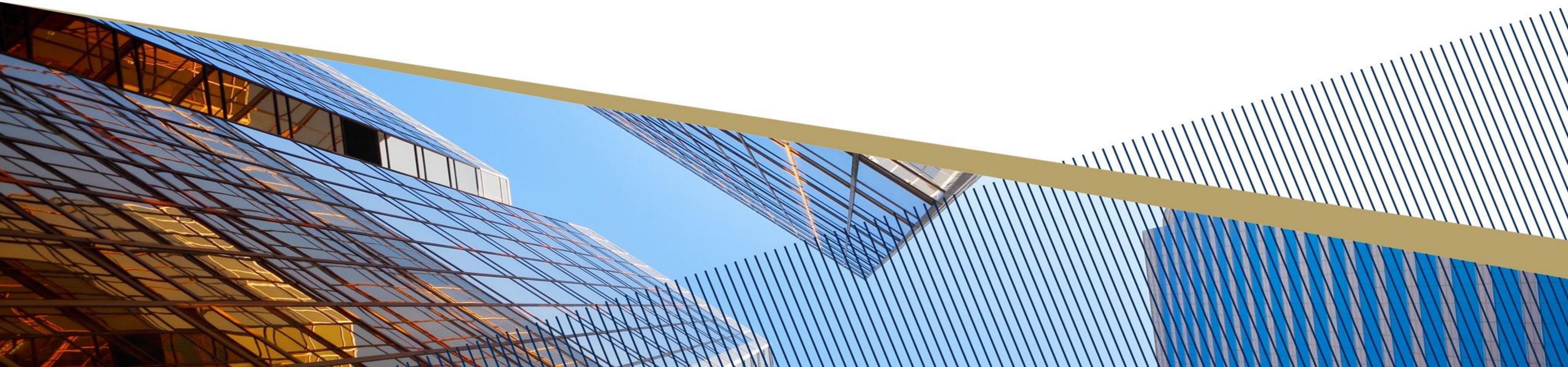
An ICMA ERCC study on the trade registration models used by European central counterparties for repo transactions

27 September 2016



Contents:

- Introduction and Background
- Summary of CCP responses relating to the counterparty gap issue
- The counterparty gap issue
- Contract outcome scenarios
- Summary
- ICMA ERCC Recommendations



Introduction

- These slides provide an update on the analysis undertaken by the ICMA European Repo and Collateral Council ('ERCC') during the Spring and Summer on CCPs' trade registration models and focus on a specific area of the trade registration process that creates risk for market participants and needs to be addressed
- The specific area of focus relates to risks borne by market participants arising from different trade registration models and the exact timings when CCPs assume counterparty responsibility for a trade – we refer to this risk as 'The Counterparty Gap'
- These slides contain recommendations from the ICMA ERCC on a number of changes to market best practice that, when adopted, could reduce the risk to market participants arising from these issues
- Further detail on the counterparty gap issue can be found in the ICMA ERCC report on the subject which is published today

Background

- Analysis undertaken of trade registration process of the six major Fixed Income CCPs in Europe (BME Clearing, CC&G, Eurex Clearing, LCH Ltd, LCH SA and Nasdaq Clearing)
- CCPs each completed a detailed trade registration questionnaire and participated in a telephone conference call with the ICMA project team to discuss, clarify and elaborate responses where required

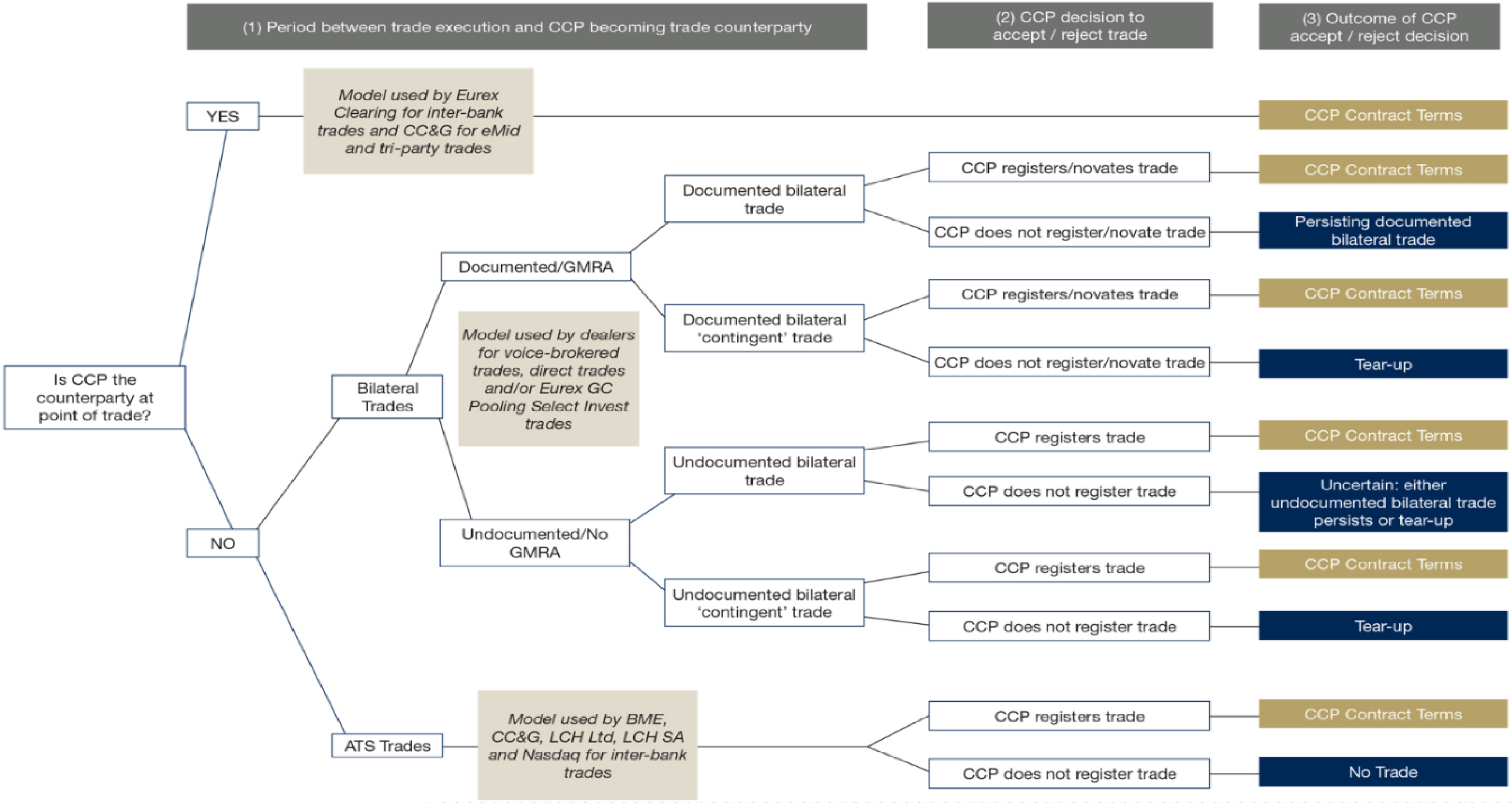
Summary of CCP responses relating to the counterparty gap issue

	BME Clearing	CC&G	Eurex Clearing	LCH Ltd	LCH SA	Nasdaq Clearing
Timing that CCP becomes counterparty to trade	Receipt and Acceptance *Moment of receipt and registration of trade by CCP*	Receipt and Acceptance *Moment of receipt and registration of trade by CCP*	Execution *Moment of execution on trade platform*	Receipt and Acceptance *Moment of receipt and registration of trade by CCP*	Receipt and Acceptance *Moment of receipt and registration of trade by CCP*	Receipt and Acceptance *Moment of receipt and registration of trade by CCP*
exceptions		*1) eMid trades at time of execution 2) Tri-Party trades at time of execution*	*GC Pooling Select Invest: Binding declaration of intent to execute a trade whose legal conclusion is contingent on CCP novation. Novation is subject to cash pre-funding for the opening leg.*			
Can CCP clear bilaterally executed trades?	Yes	Yes	Yes	Yes	Yes	Yes
Can CCP clear anonymous ATS executed trades?	No	Yes	Yes	Yes	Yes	No
Does CCP prescribe form of contract before becoming counterparty?	No *CCP silent*	No *CCP silent* *Not applicable for eMid and Tri-party trades*	*Open offer transactions : not applicable.* *GC Pooling Select Invest transactions: No. The binding declaration of intent is set out in the Eurex Repo rules & regulations.*	No *CCP silent*	No *CCP silent*	No *CCP silent*
What happens if CCP rejects trade?	CCP silent	CCP silent	*If CCP doesn't novate the trade due to missing cash pre-funding, the Select Invest Bank may request to stop further novation attempts after two unsuccessful novation attempts. The binding declaration of intent would dissolve.*	CCP silent	CCP silent	CCP silent

The counterparty gap issue

- A number of changes have been made to the CCPs' trade registration processes and the exact timing when they become counterparty to the trades routed to them for clearing
- The CCPs' motivation for these changes has principally been to manage their operational risk. The CCPs do not seek to explain nor take responsibility for the motivation or intention of the dealers or the trading platforms/intermediaries
- To understand the entire risk picture of the trade registration process, important to understand the inter-play between the dealer, the ATSs/intermediaries and the CCPs
- Any trade sent to a CCP that uses the Receipt and Acceptance trade registration model poses a question as to the legal status of the trade during the period between execution and the point where the CCP assumes counterparty responsibility
- An equivalent counterparty gap risk exists if a trade is rejected by a CCP for any reason
- In both circumstances, the original trade counterparties are left with two critical risk questions:
    - does my trade exist?
    - if so, who is my counterparty?

Contract outcome scenarios



Summary

- A complex picture. Multiple different trade registration models being used by CCPs
- The changes by CCPs to become counterparty at the point of Receipt and Acceptance of the trade addresses operational risk for the CCP but has had the effect of transferring an amount of risk from CCPs onto market participants
- Industry-wide, the majority of European CCP cleared repo trades are executed on ATSs (estimated at >95%) and in the majority of cases with the CCP becoming counterparty when the trade is received and accepted by the CCP
- Industry-wide, bilateral trades account for a small proportion of European CCP cleared repo trades (estimated at <5%)… *but 100% for BME and Nasdaq*
- Irrespective of whether a trade was executed anonymously on an ATS or transacted directly between two counterparties, any trade sent to a CCP that uses the Receipt and Acceptance trade registration model poses a question as to the legal status between execution and the point the CCP assumes counterparty responsibility
- If a trade is rejected by a CCP and the treatment for a trade rejection has not been clarified in the ATS rules or agreed between the original bilateral trade counterparties at the outset, the legal status of the trade can be ambiguous

Summary cont'd

- The critical point in the process is the CCP acceptance or rejection of the trade
  - *Equivalent to counterparty finality*

- In the majority of cases, the CCP's confirmation of acceptance *(or in exceptional circumstance, rejection)* should be the trigger for a dealer to know whether the trade actually exists and who their counterparty is

- The term 'novation' is often used erroneously by market participants
  - Technically, it means one legal contract being replaced by another contract
  - However, it is often used as if it is the time that a CCP contract arises
  - This may confuse because it pre-supposes that a contract of some kind would exist prior to a CCP contract being created… whereas in the majority of cases there is no prior contract
  - We use the term 'Receipt and Acceptance' to describe the moment of counterparty confirmation following receipt, interrogation and registration of trade by CCP

- Clarification of the counterparty gap issues will provide market participants with certainty on a trade's status at all points in its lifecycle
  - Helpful in a market-wide operational or default event

- By working together now to clarify the position regarding the counterparty gap issues, market participants and infrastructure providers will achieve an enhanced operating and risk management environment for CCP cleared business and ensure that any future increase in CCP activity e.g. Dealer to Client trades, can be managed more comfortably

ICMA ERCC promotes as best practice that all repo trades should be documented:

- for ATS/CCP trades this includes their respective rules/documentation
- for bilaterally organised trades this is achieved through agreed GMRAs and should include appropriate trade confirmations

All trades intended for central clearing should, as a matter of best practice, be contingent upon the CCP's acceptance and will otherwise be cancelled:

- for ATS trades, the ATS should make this clear within its rules/documentation; and
- for bilateral trades this should be agreed between the parties and reflected in writing

- Where the applicable CCP involvement is not on an "open offer" basis, ATSs should explain clearly within their rules / documentation the status of a trade that has been executed in anticipation of CCP clearing, but not yet registered by the CCP – this should include the ATS explaining clearly that any trade rejected by the CCP is automatically cancelled and that appropriate procedures are in place for such exceptional events

- For bilateral trades executed in anticipation of CCP clearing but not yet registered by the CCP, it should be clearly stated that the trade is contingent upon CCP registration – this should be reflected in writing, by the trader and in any associated confirmation (unless included in the applicable GMRAs as a mutually agreed negotiated clause)

Clarifying via a market convention that all CCP destined trades are CCP Contingent Trades highlights that it is important that everything is done to ensure that, to the extent reasonably possible, the time gap between a trade being executed and it being accepted by the CCP is minimised:

- Dealers should have transparency on the length of time it takes for all trades to progress from point of electronic match to the point of CCP's Receipt and Acceptance, meaning: (1) length of time for trade from ATS (execution) or the trade matching service to receipt at CCP gateway; and (2) time from receipt at CCP gateway to CCP acceptance as counterparty to the trade

- Asking for transparency in this way should serve to: (1) provide essential operational risk management information to dealers; and (2) provide incentives to ATSs and CCPs to optimise the speed of their trade acceptance process

- Dealers will need to consider any implications for the point at which they represent within internal systems that these trades exist – the assumption is that these trades are captured within internal risk and control systems from the point of execution, despite the fact that some of them might fail to be accepted by the applicable CCP and hence be cancelled

- CCPs should be encouraged to provide trade acceptance, or rejection, confirmation messages to dealers in the fastest economically rational time possible – this may require investment by the CCPs in reporting systems and STP messaging, but can be justified because the trend by CCPs towards becoming counterparty from the point of trade registration, instead of trade execution, has shifted significant operational risk onto the dealer community; and timely CCP reporting of trade registration is important to allow dealers to manage this risk

Cash Bond Trades

It is important that consideration is given to the applicability of an equivalent CCP Contingent Trade market convention for cash bonds

The cash bond community will need to understand the implications of the current CCP registration model for their market and what the CCP Contingent Trade convention is seeking to achieve for repo

It would increase complexity and create additional operational risks if the cash bond community elect to pursue a different approach to the repo market

A dialogue is being initiated with relevant cash bond market stakeholders to discus the situation and advise them of the steps that ICMA ERCC plan to take for market best practice in the repo market

Amendments to the Guide to Best Practice in the European repo market

- **Mr. Sylvain Bojic,** Director, London Head of Repo, Société Générale

Impact of regulation on repo

- **Mr. Michael Manna,** Managing Director, Head of Fixed Income Financing EMEA, Barclays Capital Securities Limited
- **Mr. David Hiscock,** Senior Director, Deputy Head, Market Practice and Regulatory Policy, ICMA
- **Mr. Alexander Westphal,** Associate, Market Practice and Regulatory Policy, ICMA

ICMA European Repo & Collateral Council (ERCC) General Meeting

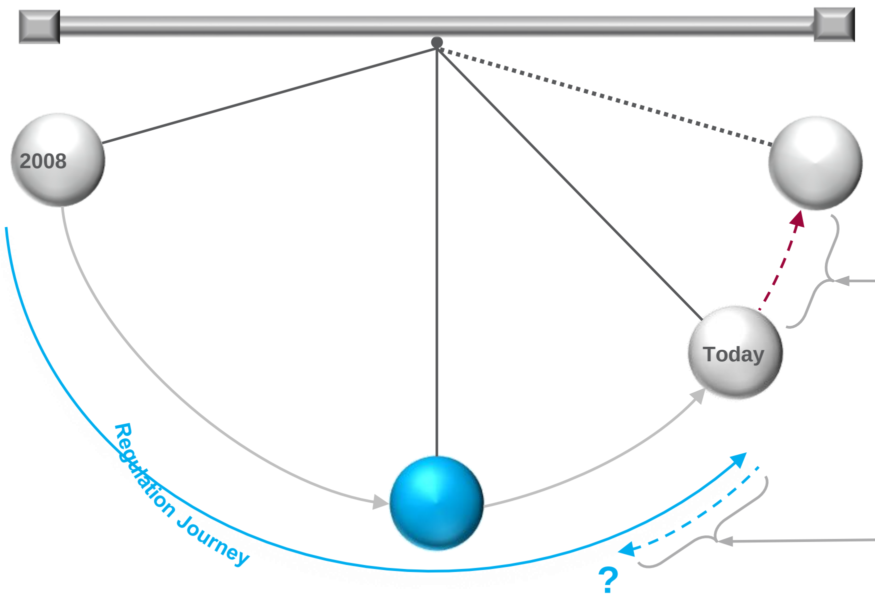
Impact of Regulation on Repo

27 September 2016

Michael Manna, Head of FI Financing Trading, Europe

The Regulatory Pendulum: Direction of Travel?

Following the events of 2008 there was little doubt the regulatory pendulum would swing in the direction of a more uncompromising application of regulation in order to promote macro prudential stability. New regulation was written against the back drop of a caustic political environment, with the then available evidence, and with no credible ability to fully asses its impact. Eight years later we have new facts, we're starting to observe unintended consequences, and regulators are asking questions.
Is there enough evidence to support delaying the regulatory pipeline and/or recalibrate existing rules?
Is the pendulum moving towards equilibrium?



- Finalized European NSFR rules
- Limitation on collateral re-use
- Minimum HC & countercyclical requirements
- The idea of "counterparty" agnostic lending

"….. The FPC sees merit in further work being undertaken domestically and internationally to assess changes in the repo market and their economic consequences"(1)

"However, there are some indications that regulation, and the leverage ratio in particular, is at least one of the drivers of change in funding and market liquidity"(1)

"Nevertheless, the FPC judges it appropriate to adjust regulatory measures where opportunities exist to minimise their impact on the liquidity of core financial markets, without compromising their positive effect on resilience and stability"(1)

1. *Bank of England, Financial Stability Report, July 2016, Issue No.39.*

BARCLAYS

BCBS268 Proposed Revisions to the Basel III Leverage Ratio

Highlights from the Consultation

Settlement Balances

- Most European banks adopt a trade date accounting approach which recognizes or derecognizes trading portfolio items bought and sold on trade date –i.e. cash execution activity.
- However, these trades do not settle until a few days later, e.g.T+2. As a result, IFRS accounting rules provide that a “settlement liability” (in the case of a security purchase) or a “settlement asset” (in the case of a security sale) is recognised for the cash payable /receivable between trade date and settlement date. BCBS consultation is seeking harmonisation with the US approach, no change in the accounting principles but even out in the leverage exposure measure.
- *US GAAP allows brokers to net down these settlement balances to a single item regardless of isin, counterparty, currency, etc.*

Secure Funding Transactions (SFTs)

- Basel proposed that open trades cannot net because they do not meet the criteria of having an explicit settlement date, but they request further evidence of the adverse impact of this treatment on open repos and any arguments for why further revisions may be warranted.
- Not addressed in this consultation:
  - In the E-C add-on for SFTs, there is a double count for cash collateralised stock borrow where the haircut is on the accounting balance sheet and double counted in the leverage exposure via the E-C add on.
  - Clarification around treatment of Forward Starting Reverse Repos.

Derivatives RC and PFE – ‘Big Help to Client Swap Clearing Banks’

- The PFE add-on - Basel proposes replacing CEM with SA-CCR however, the PFE cannot be reduced for any collateral posted by the counterparty or any negative mark-to-market of the derivative.
- Replacement Cost - Basel also proposes the SA-CCR calculations.

Allocation of Capital: Further Understanding is Needed

"In principle, leverage ratio requirements, as currently calibrated, would constrain only firms with relatively low risk-weighted assets on average. The impact will also depend on the business level at which it is applied. For the UK leverage ratio framework, this is currently at the consolidated level only"(2)

"However, if the leverage ratio were viewed as binding on individual business lines, this may create incentives for a dealer to increase margins, or reduce volumes, on lower-risk activities such as repo (Duffie 2016).(1)*"*

"Nevertheless, there is some market and supervisory intelligence that dealers are considering the marginal impact of a leverage ratio requirement at the level of individual business lines when making decisions about how to allocate balance sheet to different activities"(2)

"As set out in the Review of the FPC Direction on a leverage ratio requirement and buffers chapter, in the light of evidence of declining market liquidity in some core financial markets and of a decline in availability of repo financing, which supports market functioning more broadly, the FPC is restating its intention for its leverage ratio framework to be applied at consolidated level and not to individual activities"(2)

1. *Duffie, D (2016), 'Submission in response to US Treasury Notice seeking public comment on the evolution of the Treasury Market structure'; www.darrellduffie.com/uploads/policy/DuffieTreasuryRFIApril2016.pdf.*
2. *Bank of England, Financial Stability Report, July 2016, Issue No.39.*

Capital Allocation: a Top Down Process

Strengthening the weakest links

"Top of House"

Available RWA | Available LBS

Management Buffer

Budget Process
LBS & RWA Allocation

Business Line 1

Revenue & Cost Budget

Capital & Leverage Allocation

RoRWA
5%

RoLBS
20%

- The intention is to keep this business
- Needs improve its return on capital
- Reduce or cap its capital allocation, the risk it takes

Business Line 2

Revenue & Cost Targets

Capital & Leverage Allocation

RoRWA
20%

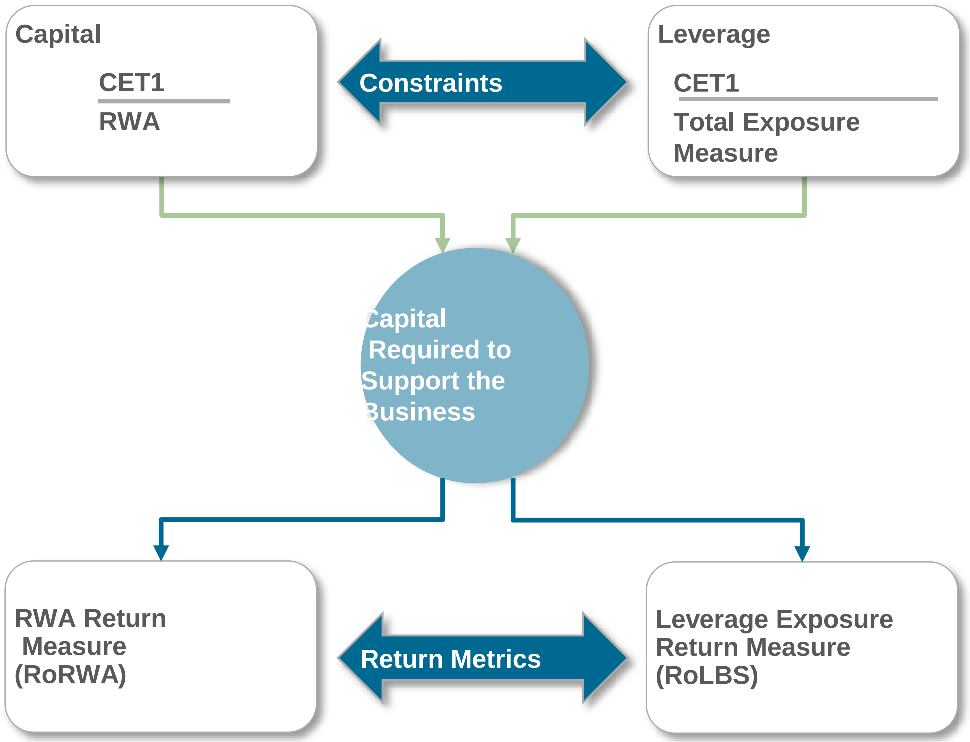
RoLBS
5%

- The intention is to keep this business
- Needs to improve its balance sheet consumption, leverage it uses
- Balance sheet allocation is capped

In the past business lines were allocated a revenue budget, influencing their behavior and decisions. Post 2008, revenue remains important but the focus has turned to risk & leverage. Which forms the foundation for how a banks' performance and stability is measured and assessed. Allocating financial resource to individual business lines forces them to either seek efficiencies and/or amend their business model to address their weaker return metric. This can include increasing prices or simply reducing activity to bring down the use of capital.

Assessing the Leverage Ratio: Blunt and Blind

Basel III is actually very simple.
Everything is about CAPITAL, the good stuff, loss absorbing, and expensive to raise. The amount of capital a bank holds will influence both the size and shape of businesses that can be supported. Businesses will be measured against their use of capital by both: how much they need to support required leverage and / or the amount of risk it takes.



Repo Returns Under Leverage Returns (RoLBS)?

Assumptions	
BCBS 270 Balance Sheet	£1bln
PnL Flat 1YR Run Rate	100bp
Operating Assumptions[1]	
Cost / Income (C/I) Ratio	55%
Tax Rate	35%

How much capital does a bank need to support £1bln of Repo?

$$4\% = \frac{X}{£1bln} \rightarrow X = £40m$$

How much gross revenue do I generate?

£1bln x 100bp = £10m

What is my NET revenue?

PBT: £10m – C/I Ratio = £4.5m

Net Income: £4.5m – 35% Tax Rate = £2.925m

What do my Repo returns on leverage balance sheet look like?

Return on Leverage Balance Sheet (LBS)

Gross	PBT[2]	NET
$\frac{£10m}{£40m} = 25\%$	$\frac{£4.5m}{£40m} = 11.25\%$	$\frac{£2.925m}{£40m} = 7.32\%$

1. *Note: Figures illustrative ONLY.*
2. *PBT = Pre Tax Profit.*

Repo Returns Under Capital (RoRWA)?

Assumptions	
BCBS 270 Balance Sheet	£1bln
PnL Flat 1YR Run Rate	100bp
Counterparty Risk Weight (CP-RW)	100%
FCCM Volatility Adjustment Haircut*	7%(2)
Hair Cut Applied to Client Trades	0%
Operating Assumptions(2)	
Cost / Income Ratio	55%
Tax Rate	35%

How many RWA's are produced with the given trade assumption?

RWA = EAD x CPRW
EAD: £1bln x 7% = 70m
CPRW: 100%
RWA = 70m

How much capital do I need to support 70mln of RWA?

$11\% = \frac{X70m}{£}$ → X = £7.7m

How much gross revenue do I generate?

£1bln X 100bp = £10m

What is my NET revenue?

PBT: £10m – C/I Ratio = £4.5mln

Net Income: £4.5 – Tax = £2.925m

What do my returns based on RWA exposure look like?

Return on RWA

Gross	PBT	NET
$\frac{£10m}{£7.7m}$ = 130%	$\frac{£4.5m}{£7.7m}$ = 58%	$\frac{£2.925m}{£7.7m}$ = 38%

1. Note: *Figures are illustrative ONLY.*
2. Source: *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0001:0337:EN:PDF Figure is a blended Rate to simply illustrate and example.*

Repo Returns Under Leverage Returns with an Asset Class & Activity Discount (RoLBS)?

Assumptions	
BCBS 270 Balance Sheet	£1bln
PnL Flat 1YR Run Rate	100bp
Apply an Asset Class & Activity Discount to the Leverage Exposure	50%
Operating Assumptions[1]	
Cost / Income (C/I) Ratio	55%
Tax Rate	35%

How much capital does a bank need to support £1bln of Gov't Repo?

$4\% = \frac{X}{£1bln} \rightarrow X = £40m$

Apply a 50% LR 'discount' for Gov't Repo?

$2\% = \frac{X}{£1bln} \rightarrow X = £20m$

How much gross revenue do I generate?

£1bln x 100bp = £10m

What is my NET revenue?

PBT: £10m – C/I Ratio = £4.5m

Net Income: £4.5m – 35% Tax Rate = £2.925m

What do my Repo returns on leverage balance sheet look like?

Return on Leverage Balance Sheet (LBS)

Gross	PBT[2]	NET
$\frac{£10m}{£20m} = 50\%$	$\frac{£4.5m}{£20m} = 22.5\%$	$\frac{£2.925m}{£20m} = 14.6\%$

1. Note: Figures illustrative ONLY.
2. PBT = Pre Tax Profit.

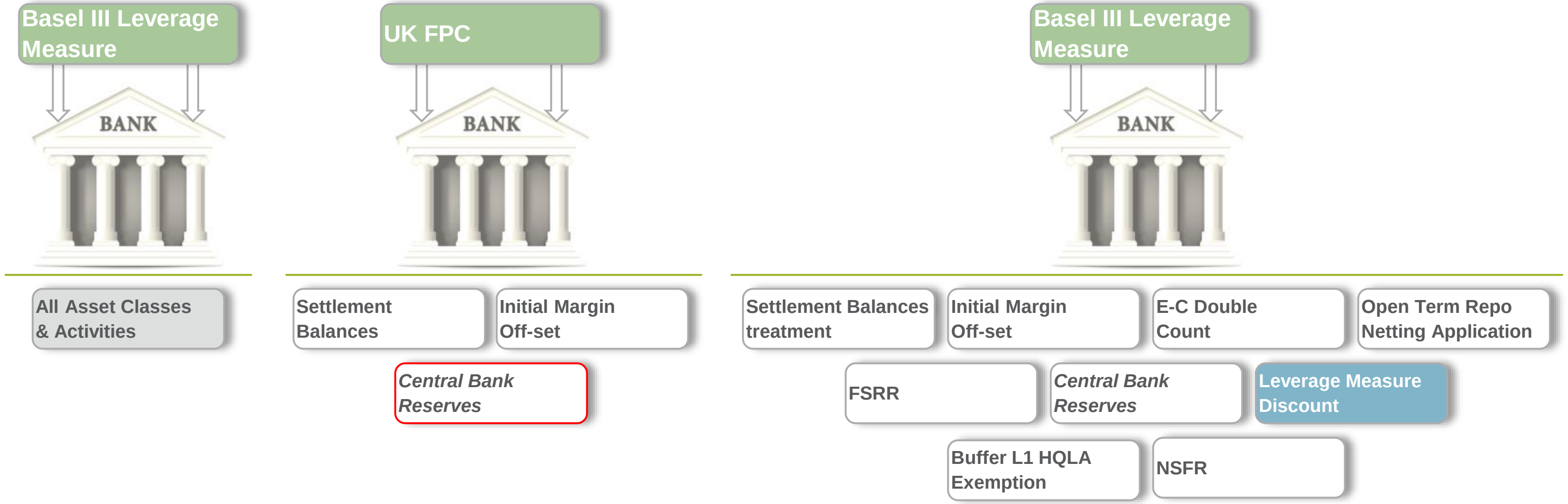
Proposed Changes will help but Might not be Enough

The FPC's recommend adjustments to the Leverage Ratio will have a positive effect in reducing the leverage exposure measure footprint for STFs and cash trading. What it doesn't change is the actual quantum or cost of capital needed to support these activities. Recalibrating the overall leverage ratio target could be one solution but may have undesirable effects. A more targeted approach maybe to apply a leverage measure discount, which considers activities and asset classes that are vital to macro prudential stability.

Comparing the Return Outcomes to 12% Return on Equity Target

REE Metrics	Results	Pass/Fail Return Hurdle
Return of LBS (RoLBS)	7.3%	✗
Return of Capital (RoRWA)	38%	✓
Discounted Return of LBS (RoLBS)	14.6%	✓

✗ Fail ✓ Pass

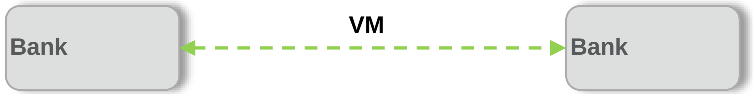


Margin Requirement for Uncleared Derivatives: *The wait is Finally Over*

Increased Demand for Collateral but How Much?

Even though the regulatory decision is still pending regarding which risk model can be used to calculate the required initial margin, an important aspect, which will have a large influence is the fact that the collateral will be segregated and cannot be rehypothecated. This will have a lasting effect on its availability and price.

Bi-lateral Margin Requirements



Cleared Product CCP Margin Requirements

Estimated Collateral Requirements[1]

Non-Cleared Product Segregated IA

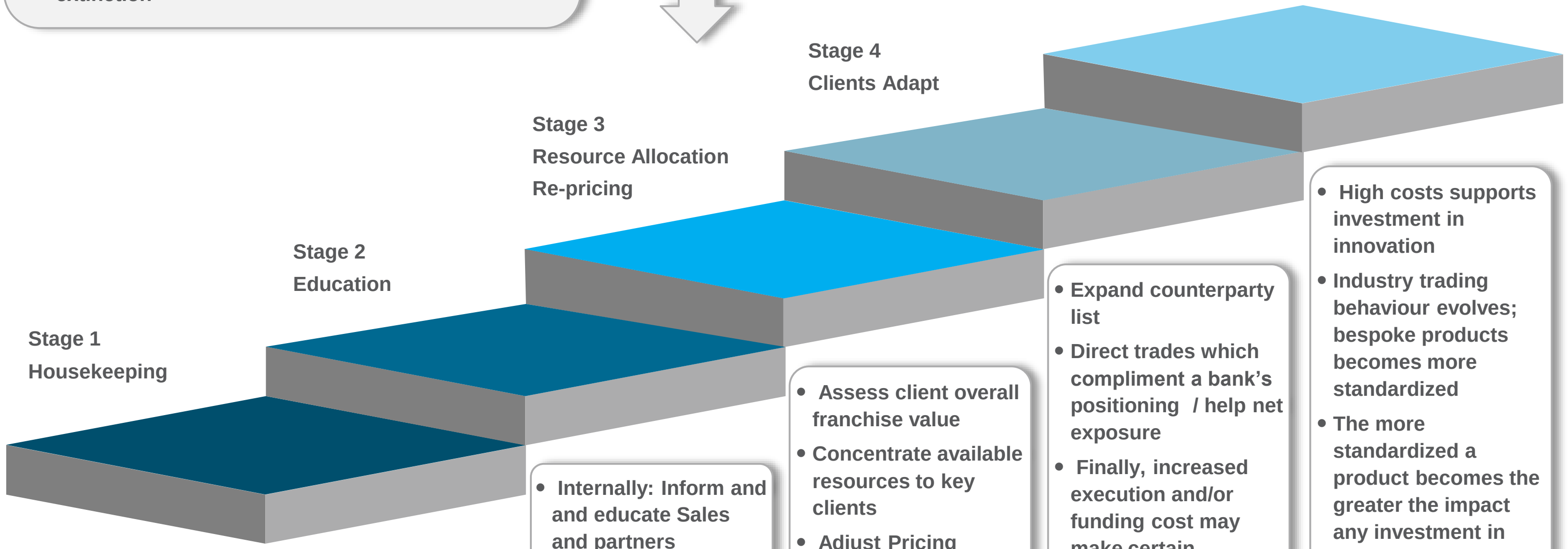
Businesses will gain a benefit though reduced capital requirements (RWA) but will be introduced to new costs and the relationship between collateral and balance sheet, which will unless they can increase revenue, have a drag on their RoE

1. *Source: Barclays Estimates.*

Collateral Demand: Have we Considered Everything?

Inject a large cost to any product or service without the ability to pass on a majority of the cost and two possibilities occur:

1) Triggers a process of product or service evolution
2) Start down the path of product and service extinction



Stage 1
Housekeeping

Stage 2
Education

- Adjust KPIs
- Eliminate "lazy trades"
- Develop MIS
- Seek out efficiencies

Stage 3
Resource Allocation
Re-pricing

- Internally: Inform and educate Sales and partners
- Externally: inform clients, explain the reasons, and manage expectations
- Give them time to adjust.

Stage 4
Clients Adapt

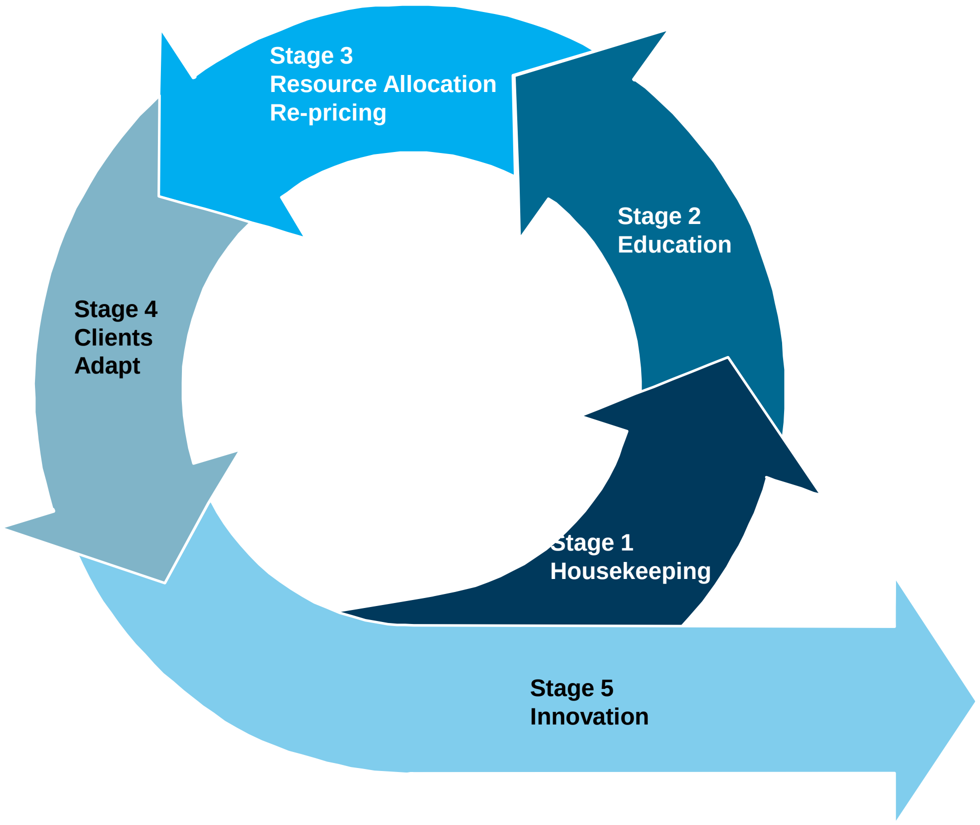
- Assess client overall franchise value
- Concentrate available resources to key clients
- Adjust Pricing strategy

Stage 5
Innovation

- Expand counterparty list
- Direct trades which compliment a bank's positioning / help net exposure
- Finally, increased execution and/or funding cost may make certain strategies obsolete

- High costs supports investment in innovation
- Industry trading behaviour evolves; bespoke products becomes more standardized
- The more standardized a product becomes the greater the impact any investment in innovation will have
- Standardized OTC products may move to central clearing

Collateral Demand: Only Time will Tell……

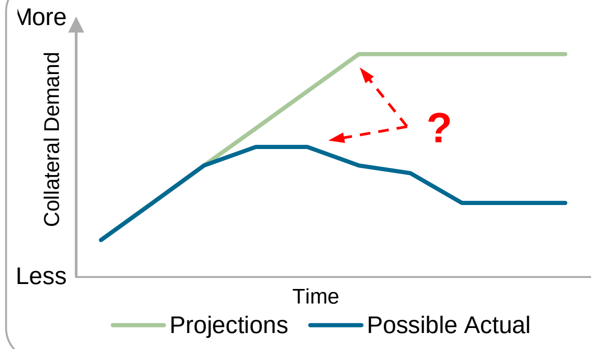


Successful Product and Service Evolution

Results in:

- Activity levels decrease and/or innovation takes root
- Both outcomes reduces the need for capital to support exposure and improves the return profile
- Less exposure, requires less collateralization
- The reduced need to collateralize exposure leads to reduced demand for collateral
- So how accurate are the forecasts for collateral?

Collateral Forecasting



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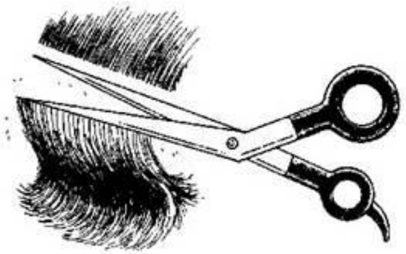
Perspectives from the eye of the storm

- ICMA report published 18 November 2015
- Reviews the **European repo market's current state and future evolution**
- Reports broad concern as to the extent to which the repo market can continue to perform its various roles, efficiently and effectively
- Basel III, incorporating Risk Capital Requirements, Leverage Ratio, LCR and NSFR, is the single greatest regulatory driver of change
- **Structure and dynamics of the repo market are being transformed**

Commission's call for evidence on the EU regulatory framework for financial services

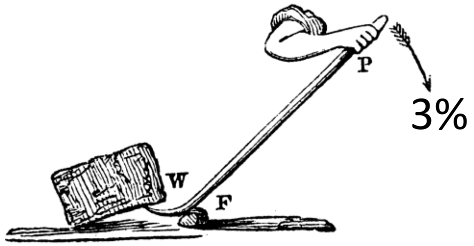
- Examination of the cumulative impact of regulation, in context of the Capital Markets Union (CMU) project
- ICMA responded on 20 January 2016
  - Focussed primarily on the issue of market liquidity, citing published ICMA studies in evidence & detailing concerns in respect of three specific elements:
    - European corporate bond secondary market liquidity
    - **Repo market liquidity and collateral fluidity**
    - CSDR mandatory buy-ins and fixed income liquidity
- Concerns regarding repo market liquidity and collateral fluidity lie at the heart of much of ICMA ERCC's work relating to the impact of regulation on repo and collateral markets



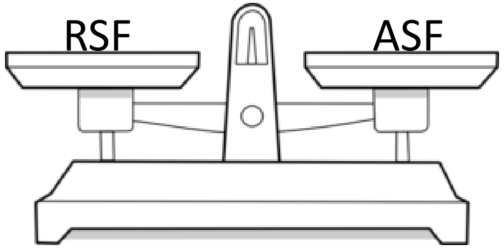
Haircuts

- In October 2014, the FSB published its regulatory framework for haircuts on non-CCP cleared SFTs
  - Aims to limit excessive leverage build-up outside the banking system & to reduce its procyclicality
  - Consists of:
    - Qualitative standards for methodologies used by SFT market participants to calculate haircuts on the collateral received; and
    - **Numerical haircut floors** that will apply to non-CCP 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")
  - Expanded framework in November 2015 also out numerical haircut floors to apply to non-bank-to-non-bank SFTs
- Article 29.3 in the EU SFTR anticipates possible EU introduction of specific SFT haircut rules
  - ESMA shall, by 13 October 2016, submit a report advising on certain risks in SFTs & the potential need for further rules
    - In preparation, ESMA has solicited information from ICMA ERCC on haircuts in the European repo market
  - Then, by 13 October 2017, the Commission shall submit a report and any appropriate proposals on EU haircut rules
- ESRB considers there is **a case for powers to make countercyclical changes to required haircuts**
- But remember, haircuts protect one party to a repo and create exposure for the other
- Markets could be disrupted if the EU adopts haircut rules which go beyond the FSB proposals

Leverage Ratio



- BCBS consulted, on 6 April, on **revisions to the Basel III leverage ratio framework**
  - ICMA ERCC submitted a detailed, 6 July, response
    - Cumulative impact of the pressures being imposed on the repo market, most particularly by the leverage ratio, are such that it is already a market under significant stress
    - A number of ways in which its details could be calibrated to better smooth its effects on repo and collateral markets
    - More detailed specific treatments for special asset types such as HQLA, or in relation to desirable financing activities
    - **Suggested need to introduce specific refinements to:**
      - Exempt central bank reserves from the leverage exposure measure;
      - Exclude potential grossing up when conducting repos with central banks;
      - Eliminate double counting stemming from the required current exposure add on;
      - Reduce, or eliminate the leverage ratio impact of forward starting repos;
      - Allow for open and callable repos to be netted on the basis that they end on their earliest possible closure date
      - Ensure that detailed provisions concerning CCP activities are applied across asset classes
- EU (Capital Requirements Regulation) CRR will be updated to include applicable EU leverage ratio rules
  - Currently anticipate applicable Commission proposal in November 2016



Net Stable Funding Ratio (NSFR)

- BCBS NSFR standard endorsed 31 October 2014, to become a minimum standard by 1 January 2018
- EU (Capital Requirements Regulation) **CRR will be updated to include applicable EU NSFR rules**
  - Currently anticipate applicable Commission proposal in November 2016
  - Official sector, as reflected in the EBA's December 2015 report to the Commission, seemingly consider that NSFR will not have significant implementation impact – as most EU banks already appear BCBS compliant
  - On 26 May, Commission published a targeted consultation to collect further perspectives on this
    - ICMA ERCC submitted a detailed, 24 June, response
      - NSFR, if adopted exactly as per BCBS, would create significant additional stress & weaken the repo market effectiveness
      - Group level impact is very different from standalone subsidiary / business line / trading desk impacts
      - A number of ways in which its details could be calibrated to better smooth its effects on repo and collateral markets
      - Further refine the applicable ASF/RSF proportions in order to rebalance their asymmetry driven behavioural effects
      - More detailed specific treatments for special asset types such as HQLA, or in relation to desirable financing activities
      - Exempt short-term – in this context, say those of up to six months – SFTs, such as repo
      - Relax conditionality for SFT netting, and/or allowing for more offsets of "interdependent assets and liabilities"
    - **Commission will make some adaptation from Basel**, but details remain to be seen

Revised Markets in Financial Instruments Directive (MiFID) & new Regulation (MiFIR)

- MiFID governs the provision of investment services in financial instruments by banks and investment firms and the operation of traditional stock exchanges and alternative trading venues
- MiFID was focussed on equities markets, but is now being extended to full cover non-equities markets
  - As repos are typically comprised of trades in fixed income securities, they are partially impacted by this extension of MiFID
  - In mid-2016, SFTs have been **exempted from both pre- and post-trade transparency requirements**
  - SFTs are also exempt from MiFIR transaction reporting requirements (rather being covered by SFTR reporting
    - But for now must still MiFIR transaction report repos with ESCB counterparties (as they are exempt from SFTR reporting)
  - **Best execution requirements apply**, both for execution venues and for investment firms executing client orders
  - MiFID II states that an investment firm shall not conclude TTCAs for the purpose of securing obligations of retail clients
    - GMRA repos are TTCAs – it seems these will not therefore be allowed with retail clients
    - The definition of retail clients encompasses entities such as local authorities and municipalities – but subject to applicable procedures these types of clients may be able to elect for treatment as professional clients

EU SFT Regulation (SFTR): Timeline

SFTR proposed by Commission 29.01.2014

SFTR entry into force
12.01.2016

Reuse requirements apply
13.07.16

UCITS & AIFs begin periodic reporting
13.01.17

Transparency in pre-contractual documents for UCITS & AIFs
13.07.17

Up to one year for ESMA to develop draft technical standards (RTS) on reporting

Final RTS enter into force
Q2 2017 (est)

Required **reporting** of SFTs
to trade repositories

Banks & investment firms
Q2 2018 (est)

UCITS, AIFs & pension funds
Q4 2018 (est)

CCPs & CSDs
Q3 2018 (est)

Non-financial counterparties
Q1 2019 (est)

SFTR Level 2: Where do we stand?

- Level 1 text requires counterparties to report the details of all SFTs concluded, modified or terminated no later than on T+1 to specifically authorised TRs
- ESMA mandated to prepare regulatory technical standards (RTS) detailing the reports for each type of SFT – to be submitted by **13 January 2017**
- First ESMA discussion paper published on 11 March 2016:
  - 75 reporting fields suggested for each repo trade
  - Questions around reporting of collateral pools and margining
  - Proposals on the tracking of re-use particularly problematic
  - Consistency with FSB standards on global SFT data aggregation?
  - Detailed ICMA ERCC response prepared by our SFTR TF and submitted on 22 April
- Second ESMA consultation, including draft RTS and ITS, expected in late September/early October 2016

EU Commission: European Post Trade Forum (EPTF)

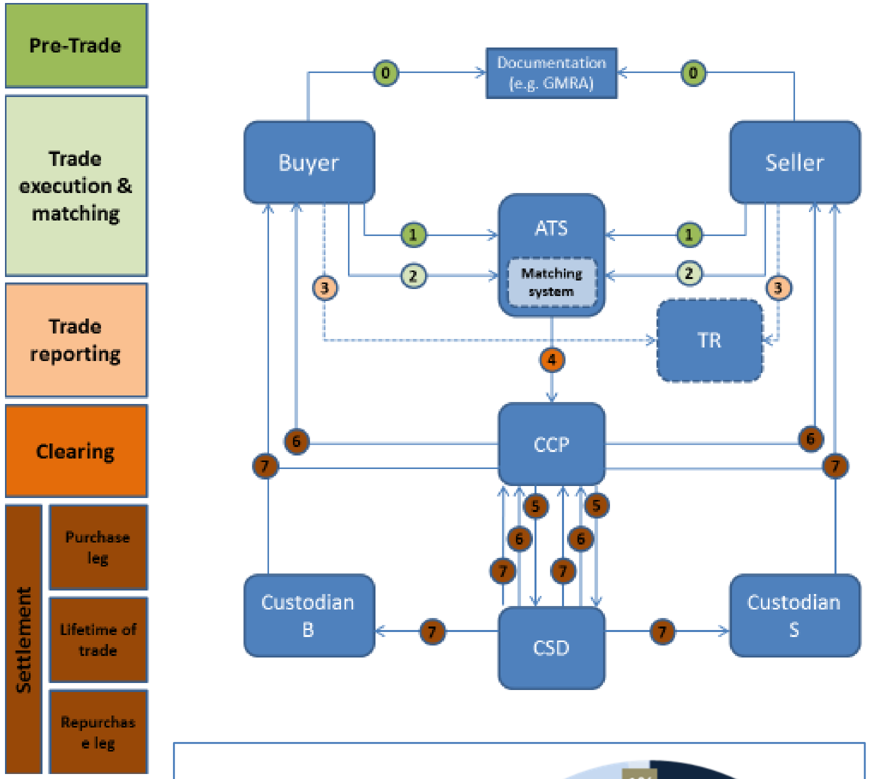
"(…) to support more efficient and resilient post-trading systems and collateral markets, the Commission will undertake a broader review on progress in removing Giovannini barriers to cross-border clearing and settlement, following the implementation of recent legislation and market infrastructure developments."
***Action Plan on Building a Capital Markets Union*, European Commission (Sep 2015)**

- EPTF created in early 2016 to assist the Commission in this review
- Members include mainly European financial industry associations as well as a few independent experts – ICMA and ISLA were added to the membership in Sep 2016
- Work is split in 2 phases:
  1. **Stocktaking exercise:** Draft report submitted to the Commission, including chapter on collateral
  2. **Identification of remaining barriers:** Based on 2 questionnaires circulated in July 2016
- Final EPTF report including Phase 1 and 2 to be delivered by Spring 2017

ECB: COGESI work on collateral management

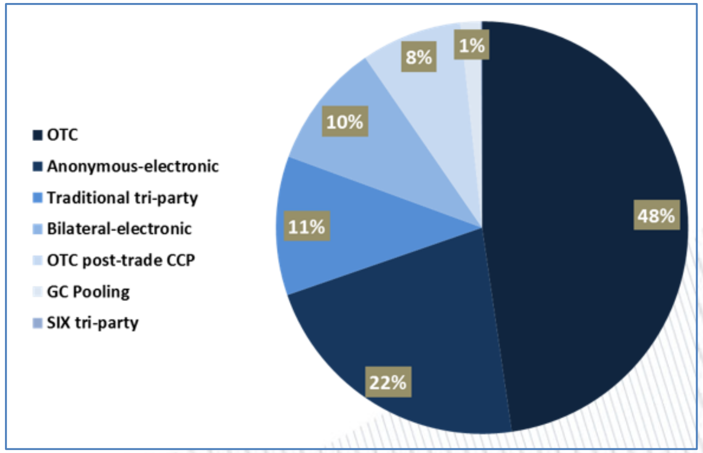
- ECB's Contact Group on Euro Securities Infrastructures (COGESI) brings together representatives from Eurosystem, commercial banks & infrastructures – ICMA ERCC is represented through its Chairman
- Group decided in Nov 2015 to "explore further key elements of collateral management activities, which are key for harmonisation (from an operational perspective)"
- 3 work streams created as a result:
  - **Collateral mobility:** prompt access, effective cross-border connections, tri-party interoperability
  - **Collateral holding and segregation:** collateral transparency, asset segregation, insolvency
  - **Collateral messaging** – ERCC Ops in the lead
- Objective is to put forward guidance for harmonisation of business processes, workflows, and messaging in the course of 2017

ERCC Ops work on collateral messaging



2. Anonymous-electronic
- ✓ ATS
- ✓ CCP

#	Process	Repo product identified? [Yes/ No]	Messaging standard [ISO15022/ ISO20022/ FpML/ IBML/ SWIFT proprietary/ FIX 4.4/ Other/ None]	Message syntax (where applicable) [XML/ proprietary/ other]	Message type (where applicable) [e.g. MTxxx]	Message transmission [Telephone/ Fax/ email/ FTP/ proprietary system (e.g. SWIFT, Bloomberg)/ proprietary interface (CCP, custodian)/ Third Party]
0	Legal documentation					
1	Trade execution					
2	Matching/ confirmation					
3	Trade reporting					
4	Trade feed to CCP					
5	Settlement instruction (PoA)					
6	Matching & settlement status					
7	Lifecycle management					



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)
- Alexander Westphal: Associate – Market Practice and Regulatory Policy
  – Alexander.Westphal@icmagroup.org
  – Tel: +44 (0)20 7213 0333 (Direct Line) / +44 (0)7469 159961 (Mobile)

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- ICMA quarterly report provides detailed updates on these matters and ICMA's broader work http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/Regulatory-Policy-Newsletter

Panel: Liquidity – taking stock of the debate

- Moderator: **Mr. Godfried De Vidts,** Chairman, ICMA ERCC Committee
- Panellists: **Mr. Romain Dumas,** Managing Director, Credit Suisse

  Mr. Nicola Danese, Managing Director, Head of EMEA Fixed Income Financing, JP Morgan

  Mr. Phil McCabe, Head of Collateral Management, Bloomberg L.P.

Any other business and next meetings