International Capital Market Association

ICMA
Welcome Remarks

Godfried De Vidts
Chairman
ICMA ERCC
The financial crisis – the role of repo

How did problems in the subprime mortgages cause a systemic event? Our answer is that there was a run in the repo market.


The crisis came when crashing housing prices raised doubts about securitisations and when chains of inside liquidity created by repos with re-hypothecation and re-use of the same securities collapsed with rising haircuts and resulting illiquid markets.

Vítor Constâncio, Vice-President of the ECB, at the second ECB Macroprudential Policy and Research Conference, Frankfurt am Main, 11 May 2017

If the repo market wouldn´t have grown as it did, the crisis that followed the demise of Lehman Brothers would have been, at least in Europe, even more damaging or the burden on the ECB to attenuate its effects would have been even heavier.

Belief no 1: Collateral is good

Regulation defines and requires ‘good quality’ collateral for:

- Secured lending and borrowing
- Margining centrally cleared transactions
- Margining non-cleared derivative transactions
Belief no 2: Repo is bad

The repo and securities lending markets are a source of:

- Excessive leverage
- Procyclicality
- Interconnectedness
If only there was a market for collateral....

Some participants sit on collateral and do nothing with it

Some participants are long cash but need collateral

Sovereign Wealth Funds

Insurance Funds

Investment Banks

Central Banks

Corporate Treasuries

Money Market Funds

Asset Managers

Pension Funds

Commercial Banks

Hedge Funds

Some participants have the wrong kind of collateral

Some participants are long collateral but need cash
Some participants sit on collateral and do nothing with it.

Some participants are long cash but need collateral.

Some participants are long collateral but need cash.

Some participants have the wrong kind of collateral.

Some participants are long collateral but need cash.

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**Wait, there is!**

- Sovereign Wealth Funds
- Investment Banks
- Corporate Treasuries
- Asset Managers
- Commercial Banks
- Money Market Funds
- Pension Funds
- Insurance Funds
- Central Banks
- Hedge Funds
Collateral fluidity

Collateral Demand \equiv \text{Available collateral supply} \times \text{Collateral fluidity}

The repo market is the ‘pump’ that sources, prices, and mobilizes collateral through the financial system.

If we want efficient and resilient markets underpinned by collateral, then we need a vibrant and liquid repo market. You can’t have one without the other.
Tilting at windmills...
Monetary Policy and Repo Market in the Euro Area

ICMA European Repo and Collateral Council General Meeting

Mahmood Pradhan
Deputy Director
European Department, International Monetary Fund (IMF)

Brussels/Belgium
14 November 2017

Disclaimer: The views expressed in this presentation are those of the presenter and do not necessarily represent those of the IMF or IMF policy. Any errors are those of the presenter.
Euro Area: a strong recovery

Euro Area Real GDP Growth (Percent)

Source: World Economic Outlook (October 2017).
All countries growing: lowest dispersion since inception

Euro Area Real GDP Growth (Percent)

Source: World Economic Outlook (October 2017).
Note: includes all 19 countries. Ireland growth rate in 2015 is excluded.
ECB price stability objective: widening dispersion

Euro Area Inflation (percent)

Source: World Economic Outlook (October 2017).
Money markets dominated by secured lending

Euro Area: Secured vs. Unsecured Money Market Lending
(Cumulative Quarterly Turnover, Trillions of Euros)

Source: ECB - Money Market Survey.
Scarcity premium due to lower collateral availability (esp. for non-banks but also CCPs) and persistent arbitrage opportunities as banks have limited balance sheet capacity (e.g., lower basis trading).

Source: Bloomberg L.P. and IMF staff calculations. Note: PSPP = public sector purchase program; 1/ composite of German, French and Italian GC repo.
PSPP expected to displace $\approx$470 billion of government debt in 2017 but less next year ($\approx$83 billion) amid positive net debt issuance.
Collateral: Target 2 imbalances widening again

![Euro Area: TARGET2 Net Balances](image)

- **DEU, NED, AUT, BEL, FIN**
- **FRA, ITA, ESP, PRT, GRC**

Source: Bloomberg L.P., ECB, and IMF staff calculations.

Pradhan (2017)  Monetary Policy and Repo Market
Collateral: ECB asset purchases contributing to Target 2 imbalances?

This puts a premium on the efficient movement of collateral (via repo markets) to help reduce fragmentation by reversing cross-border flows of (excess) liquidity.

Euro Area: Rising Financial Fragmentation, Jan. 2015-Sept. 2017

(absolute change, EUR billion)

Source: Bloomberg L.P., ECB, Haver, NCBs, and IMF staff calculations. Note: *The use of ECB liquidity reduces the Target 2 balance and is subtracted. 1/ public sector purchase program (PSPP); 2/ expected based on changes in balance of payments after accounting for general “leakage” from Target 2 due to non-euro area trade and portfolio flows.
Market Functioning: liquidity and collateral flows improving

ECB SESFOD Survey: Changes in the Liquidity and Functioning of Euro Area Collateral Markets
(Percentage change over the preceding three months) 1/

Source: ECB Survey on credit terms and conditions in euro-denominated securities financing and over-the-counter (OTC) derivatives markets (SESFOD) and IMF staff calculations. Note: 1/ boxplots include the mean (black dot), the 25th and 75th percentiles (grey box, with the change of shade indicating the median), and the maximum and minimum (whiskers). Out of 10 collateral types included in the survey, the following are considered here: domestic government bonds, high-quality and other government/sub-national/supra-national bonds, high-quality financial corporate bonds, high-quality non-financial corporate bonds, and covered bonds.
Negative repo rates are **not** a new phenomenon (→ specials), and **NIRP/QE have not** caused material market disruptions.

But some aspects of Eurosysten securities lending and infrastructure raise issues:

- Develop **common active securities lending solution** for all (or most) NCBs (esp. for those weakly integrated in custodial network through central securities depositories (CSDs))
- **Harmonized modalities** (e.g., pricing, haircuts, eligibility) and **higher limits** on lending per issue
- Resolve **interoperability challenges of trading platforms** (CCP/tri-party repo): **integrated securities settlement** under T2S for “central bank money” not available for “commercial bank money”

Dysfunctional repo market would result in:

- Less efficient **cash markets**
- Limited market access by **non-banks for hedging**, and

**Difficulties for eventual monetary policy normalization**
Panel 1: Macro-financial Linkages of Repo Markets and Financial Stability Implications

Moderator: Andreas Jobst, Adviser to the Managing Director and CFO, World Bank

Panellists:

Peter Grasmann, E1 Unit Head, Directorate E, DG FISMA, European Commission
Steffen Kern, Head of Risk Analysis and Economics Department, ESMA
Michael Manna, Head of Fixed Income Financing Trading Europe, Barclays
Alberto Gallo, Head of Macro Strategies, Algebris
The Algebris View | Volatility, Fragility and Repo Markets

ICMA Conference, November 2017

Alberto Gallo, CFA
Portfolio Manager, Algebris Macro Credit Fund (UCITS), Head of Macro Strategies

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A New Equilibrium in Monetary Policy
Credit Supercycle: How Did We Get Here?

Total Private Credit by Country ($trn)

Source: Federal Reserve, European Central Bank, Bloomberg, FRED, PBoC. Private credit calculated as the sum of household loans, corporate loans and bonds and bank debt.

US GDP
US total credit
Europe total credit
UK total credit
China total credit

- 1947
- 1952
- 1957
- 1962
- 1967
- 1972
- 1977
- 1982
- 1987
- 1992
- 1997
- 2002
- 2007
- 2012

- Privatisation of Fannie Mae
- Freddie Mac created
- Competition & credit controls introduced / Bretton Woods breaks down
- Fannie Mae issued first MBS
- Reserve requirement abolished (UK)
- Right to buy introduced under Thatcher
- Big Bang (UK)
- Glass-Steagall Act repealed
- Financial crisis & QE
- Introduction of the Euro
- Help to Buy (UK)

349% GDP
304% GDP
274% GDP
377% GDP

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Low Volatility and Asset Bubbles
From QE to Markets

How Loose Monetary Policy Has Reduced Risk Premia and Volatility

- Lower sovereign yields
- Reduced rates volatility
- Portfolio rebalancing
- Lower credit spreads
- Search for yield
- Sell volatility strategies
- Anticipation of more QE to mitigate volatility reversal (Buy on dips)
- Slow monetary normalisation
- Low volatility trap
- Lower credit volatility
- Compressed volatility risk premium

Source: Algebris (UK) Limited
Low Volatility and Asset Bubbles
How Investment Strategies Have Implicitly or Explicitly Benefited from QE

1. $3.2 billion in short-volatility strategies estimated from Bloomberg data.
2. $45 billion in pension short-volatility overwriting programs estimated as of 2017 in Deutsche Bank’s 2017 Tail Risk Monitor.
3. $8 billion exposure from option writing funds estimate from Macro Risk Advisers derivatives research by Pravit Chintawongvanich (April 7, 2017).
4. $400-600 billion estimate as of 2016 from Financial Times article by Makan and Wiggles (October 14, 2016) “Little Known Trading Strategy Exacerbates Market Turmoil”.
7. $250 billion exposure in Low Vol Risk Premia strategies estimated by Research Affiliates’ Rob Arnott based on 2017 interview in Grant’s Interest Rate Observer.
Low Volatility and Asset Bubbles
Global QE Has Dampened Volatility

Source: Algebris (UK) Limited, Bloomberg
Low Volatility and Asset Bubbles
Is Real World Uncertainty Rising?

Source: Algebris (UK) Limited, Bloomberg, BAML Indices. *G10 Economic Surprises Volatility calculated as annualised standard deviation of Citi G10 Economic Surprises Index; S&P Earnings Surprises Volatility calculated as annualised standard deviation of the sum of positive and negative surprises in S&P earnings.
Low Volatility and Asset Bubbles
The Bubble Galaxy

Bubble Size = Potential Loss From a Crash*

-500% 0% 500% 1000% 1500% 2000% 2500%

0 5 10 15 20 25 30 35 40

Duration of appreciation, years

Financial
Real assets

Source: Algebris (UK) Limited, Bloomberg, BAMI Indices, OECD, Savills, UK Gov. *Assumptions for potential loss from a crash: -60% decline for BitCoin/cryptocurrencies, as happened in 2013; -30% decline for London and Australian property market, as happened during the US housing market crash; for FAANGS, assuming their PE ratios converge to the market average; for short-dated Bunds, assuming a return to positive yield from around -60bp now; for long-end Gilts, assuming a catch-up with inflation and a 200bp widening in yield; for EM HY, assuming a 15% decline; for short VIX ETFs, assuming a -70% decline.
Introduction to Algebris
Investment Expertise

Financial Equity
- **Launch**: Oct 2006
- **Strategy**: Primarily financial stocks with a global remit. The aim is to generate attractive risk-adjusted returns, primarily through fundamental analysis
- **AUM**: EUR 0.6bn

Financial Credit
- **Launch**: Jan 2009
- **Strategy**: Senior and subordinated credit (e.g. CoCo and hybrid securities) of banks and insurance companies globally. The aim is to capture a high current income and generate modest capital appreciation
- **AUM**: EUR 7.0bn

Private Debt (NPL)
- **Launch**: Oct 2014
- **Strategy**: Non-performing loans in Italy, targeting first lien mortgage NPL portfolios secured by real estate assets
- **AUM**: EUR 1.3bn

Macro Credit
- **Launch**: Jul 2016
- **Strategy**: Focus on sovereign, financial and corporate debt (including hybrid instruments). Exposures are tactically managed and globally unconstrained
- **AUM**: EUR 0.7bn

Italian Securities
- **Launch**: Oct 2017
- **Strategy**: Primarily securities of listed Italian companies, focusing on small and mid capitalisation companies

*Private debt indicates committed capital to closed-end funds.
Data as of 30/09/2017

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Past performance is not necessarily a guide to future performance. The strategy employed may result in the NAV exhibiting a high level of volatility. This document is suitable for professional investors only. This fund may invest in contingent convertible securities (‘CoCos’). CoCos have unique risks, for example, due to equity conversion or principal write-down features which are tailored to the issuing entity and its regulatory requirements, which means the market value of CoCos may fluctuate. Additional risk factors associated with CoCos are set out in the fund’s prospectus.

Algebris (UK) Limited, 1 St. James’s Market, London SW1Y 4AH, UK. Company registration no: 10308570
Panel 2: Post-crisis Regulatory Reforms and the Functioning of Repo Markets

Moderator: Natasha de Teran, Head of Corporate Affairs, SWIFT

Panellists:
Benedict Roth, Senior Technical Specialist, Prudential Policy, Bank of England
Greg Markouizos, Global Head of Fixed Income Finance & Collateral Management, Citigroup
Richard Comotto, Senior Visiting Fellow, ICMA Centre
Richard Hochreutiner, Director, Head Global Collateral, SwissRe
Presentation: Asset purchases, financial regulation and repo market activity

Benoît Cœuré
Member of the Executive Board
European Central Bank

Speech and slides can be found here
Closing Remarks

Godfried De Vidts
Chairman
ICMA ERCC
Next ICMA ERCC General Meeting:

March 2018 (date tbc), hosted by BNY Mellon in London

Regular ICMA courses and workshops on Repo:

- ICMA Workshop: **GMRA Masterclass – a clause-by-clause analysis & Annex I negotiation**
  Next workshop: 20-21 November 2017 in London

- ICMA Seminar: **The ICMA Guide to Best Practice in the European Repo Market**
  Next seminar: 27 November 2017 in London

- ICMA course: **Securities Lending & Borrowing - Operational Challenges**
  Next course: 11-12 December 2017 in London

- ICMA Workshop: **Repo and securities lending under the GMRA and GMSLA**
  Next workshop: 7-9 March 2018 in London

- ICMA course: **Collateral Management**
  Next course: 9-10 April 2018 in London

- Annual ICMA Workshop: **Professional Repo and Collateral Management**
  Next workshop: Q1 2018 (date tbd)