



EUROPEAN CENTRAL BANK

EUROSYSTEM

Navigating Monetary
Tightening Through Fragile
Markets: Introductory
presentation

February 2023



Martin Scheicher

The views expressed in this presentation are those of the authors only and do not necessarily reflect the views of the European Central Bank, SSM or the Eurosystem.

The role of the bond market

*“I used to think if there was reincarnation, I wanted to come back as the president or the pope or a .400 baseball hitter. But now I want to come back as the **bond market**. You can intimidate everybody.”*

James Carville, February 25, 1993 (Wall Street Journal)

Introduction

- Well-functioning financial markets are vital for stable funding of the real economy and an effective conduct of monetary policy
- 2022 saw unprecedented global tightening of monetary policy
- Losses in global stocks and bonds in 2022 exceeded \$30tn, highest since the global financial crisis (GFC) in 2007/2008
- Stress emerged in many segments of financial markets, ranging from highly risky (crypto) to supposedly "safe assets" (UK gilts)
- Given fragility in many markets, unique set of concerns for central banks in Europe and North America is emerging
- **Purpose of this presentation: Overview of market environment, recent structural changes and policy challenges for central banks**

Turbulent end of low-rate era: **Three themes** for today

- Since GFC: Loose monetary policy = low rates and Quantitative Easing (QE)
- Global trend of **rising valuations**: Hunt for yield -> Prices of many traded/private assets steadily rising since 2000s (“*bubble in everything*”)
- Growth of private asset markets and non-banks (e.g. trading firms)
- Infrastructure (“**Plumbing**”) of markets also changing: Electronic trading replaces bank-centred markets; Increased central clearing leads to mechanical margining of volatility and “dash for cash” to pay margin calls
- Policy Challenge: Tightening monetary policy while preserving financial stability
- Key concern (and a main theme for today): Support **resilience of market functioning, in particular for bond market**

1. The long-run view of asset prices: US case

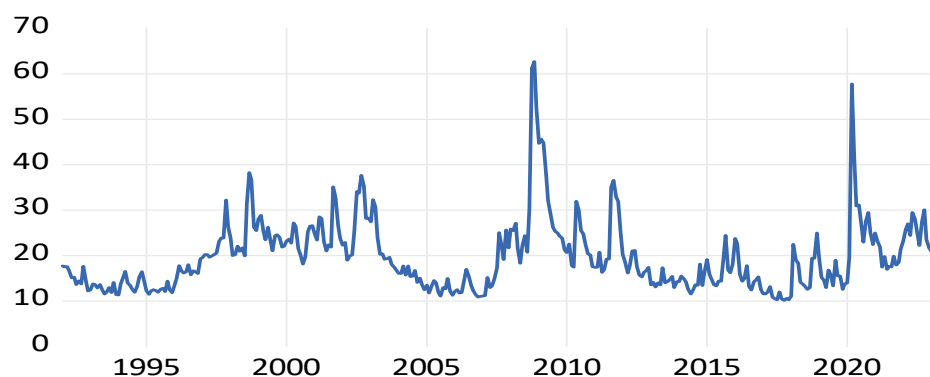
US Treasury 10Y yield



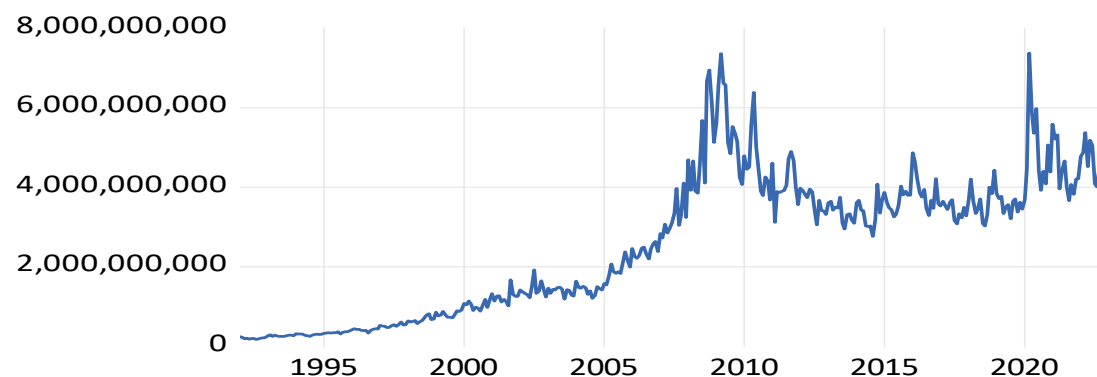
S&P 500 level



VIX



Volume S&P500



Data source: SDW

1. Current valuations challenged by rising rates

- Prudent portfolio management requires investors to discount future cash flows with realistic risk premia and consider risk-return trade-off
- Last decade brought us many cases of “irrational exuberance”:
 - Tech bubble (e.g. *WeWork* episode)
 - Crypto (“*the bubble of a generation*”)
 - Valuation of private assets, e.g. Venture Capital and Private Equity (-> is high premium of private investment vs stock market sustainable?)
 - Housing: A bubble in certain countries = “*sitting on a volcano*”?
- After initial tightening, strong optimism of market participants about Monetary Policy path has recently led to **loosening of financial conditions** in major economies

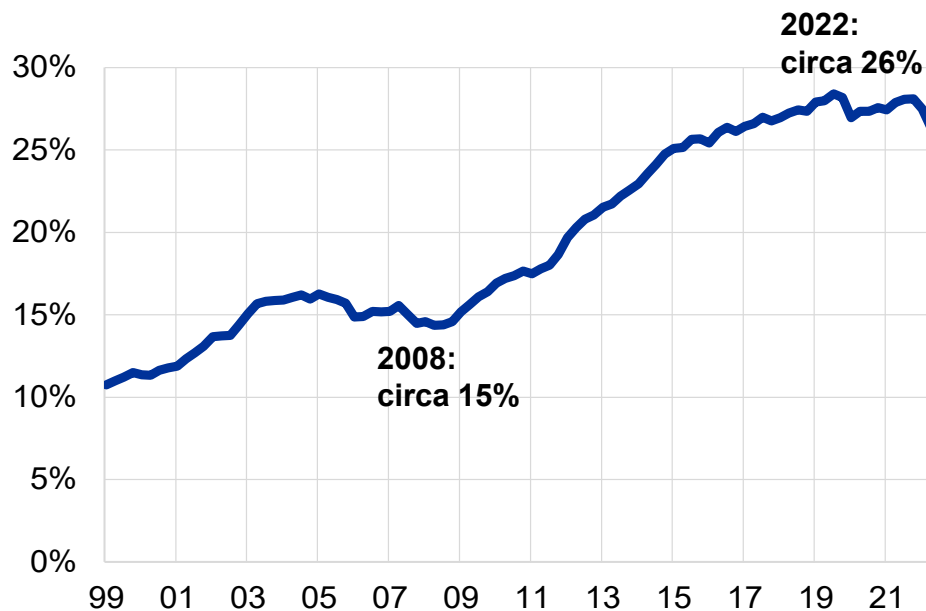
2. Zooming in on selected structural changes

- Key changes in “**plumbing**” of financial markets:
 - Growth in **Non-Banks** who entered lending, asset management and trading (fostered by low rates)
 - Fragmented **intermediation** and changed liquidity provision: Electronic trading centred on trading firms (=non-banks) is replacing bilateral intermediation by bank Dealers (e.g. US corporate and Treasury bonds; US / EU bond futures)
 - **Central counterparties** (CCPs) lead to mechanical margining of volatility (a driver of GameStop equity volatility and UK gilt stress last year)
- **GENERAL IMPACT:** Faster (e.g. High Frequency trading in US Treasury bonds), but rising liquidity risk -> both **funding liquidity** (need to pay margin calls; funding more expensive with higher rates) and **market liquidity** (can't sell government bonds)

2. Growing non-bank financial sector in US and also in EU

Share of non-bank credit to NFCs in the euro area

(Q1-1999 – Q2-2022)



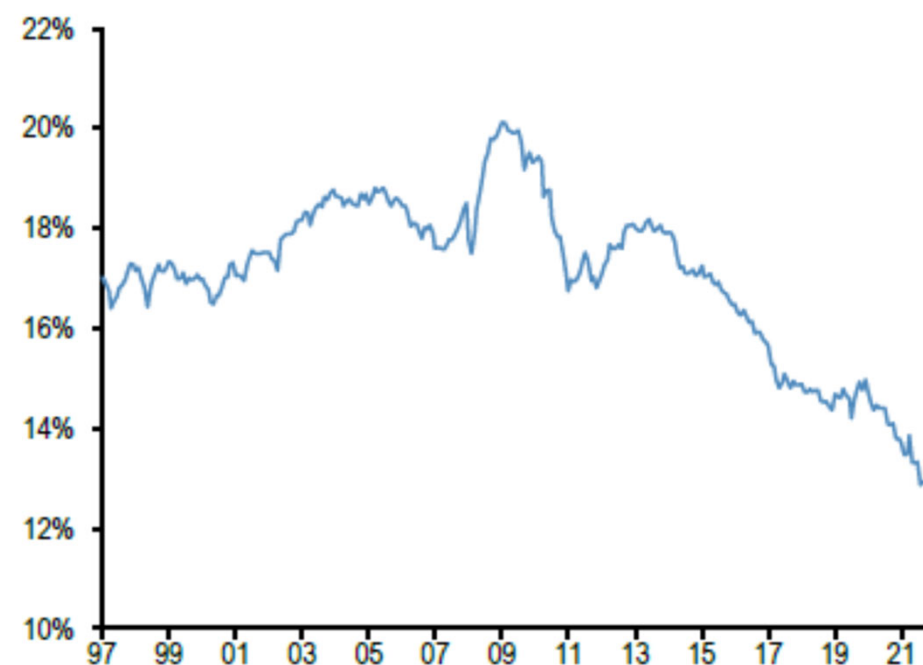
Data source: ECB ("Financial Integration and Structure in the Euro Area", 2022)

- Total assets of non-banks: Almost doubled over last decade and now exceed SSM banks
- NBFIs have been key actors in US and UK government bond stress
- Systemic role of non-banks also highlighted by energy stress (e.g. utilities)
- Policy question: Hidden leverage and liquidity risks?

2. Bond market: Who provides market-making?

- “*Balance sheet space is treated like expensive real estate, available only to positions that can afford to pay rental fees that are now much larger.*” (Duffie, 2018)
- Bank dealers are moving from market making to match making
- Active **electronic trading**
- Non-bank Dealers = “**Principal Trading Firms**” grow strongly
- Bank Dealers still dominate Dealer-Client trading

EA banks' bond holdings as % of TA



Source: ECB, J.P. Morgan.

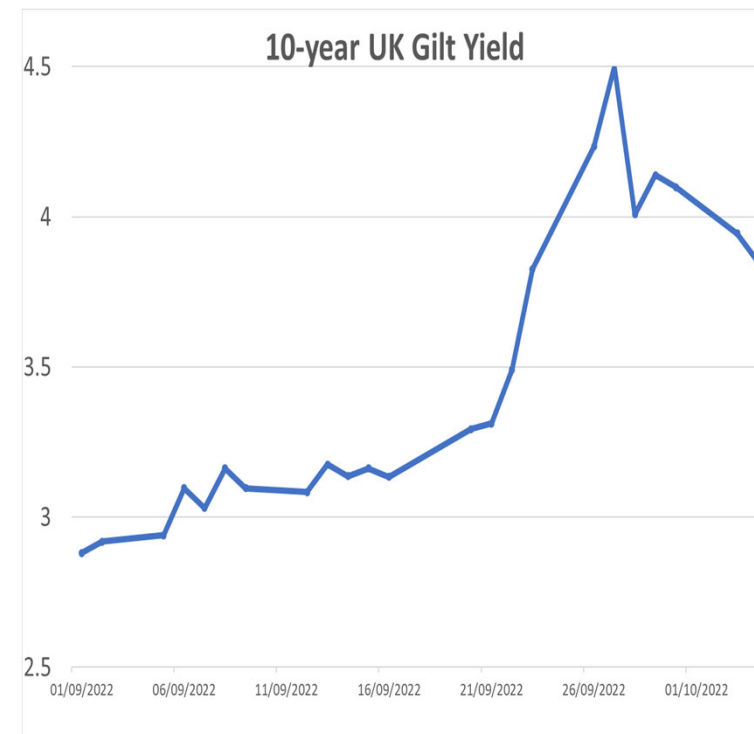
2. Stress in UK gilts

What happened? “*Dislocation*” in gilt trading

- Market for “safe asset” is fragile (cf. US Treasury in March 2020)
- **Cause: Fiscal policy shock by new UK government leads to very high volatility**
- **Margin calls** to LDI Pension Funds -> **non-banks** forced to sell gilts to raise cash but constrained intermediaries: Many sellers but too few buyers and pressure on intermediaries
- **End result: BoE intervention** (QE to mitigate side-effects of earlier QE, ie PF risk taking)

Implications

- Main ingredients also relevant for EU: Political risks, non-bank traders vulnerable to liquidity risks, Monetary Policy tightening and fragile bond market structure (OTC primarily)



3. Numerous policy challenges for central banks

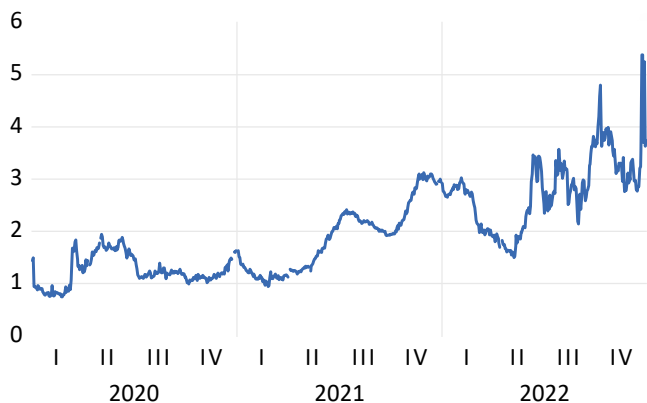
- Policymakers and investors facing a **highly challenging market environment**
- Monetary policy: **Strong investor optimism vs continuing risks for price stability** (e.g. wage pressures, inflation in services vs goods)
- Post-GFC financial system has recently weathered two large shocks: Covid in 2020 and inflation / energy in 2022
- No globally systemic event so far, but several stress events in last decade (“tantrums”)
- Financial stability policy to tackle e.g. liquidity risks at non-banks
- In parallel to financial stability and monetary policy also **climate risk** as a vital new concern for policymakers: “*Sticking to our knitting*”?

3. Managing Central Bank footprint in bond market

- Central banks acting resolutely to bring inflation back to target
- Rising policy rates, but also tapering of bond purchases
- Around \$27 trillion of bonds held by Fed, ECB, Bank of Japan, Bank of England and Swiss National Bank in 2022 (before GFC holding ~ \$4 trillion)
- Effect of QE: Fed owning ~ 30% of all US Treasuries; Eurosystem around 40% of euro area public debt
- **Bond market now facing headwind** = challenging **imbalance** of demand / supply: High and rising public debt burden in EU and US but central banks withdrawing their support for bond market -> **Rising pressure on intermediaries = “Dealers”**
- Case study: Japan = Managing inflation and a bond yield cap with very high debt burden?

3. Fragile market liquidity in government bonds

Germany



France



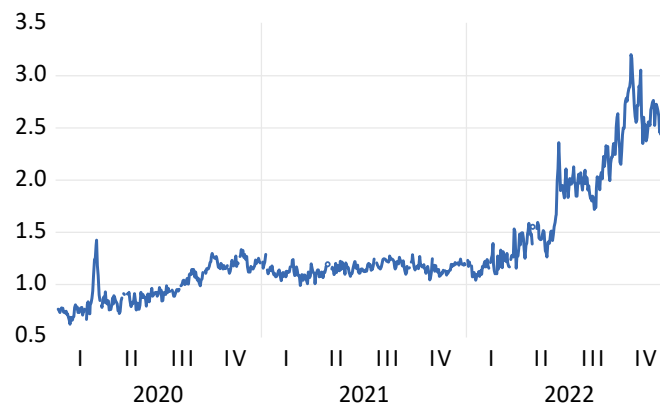
UK



Italy



Japan

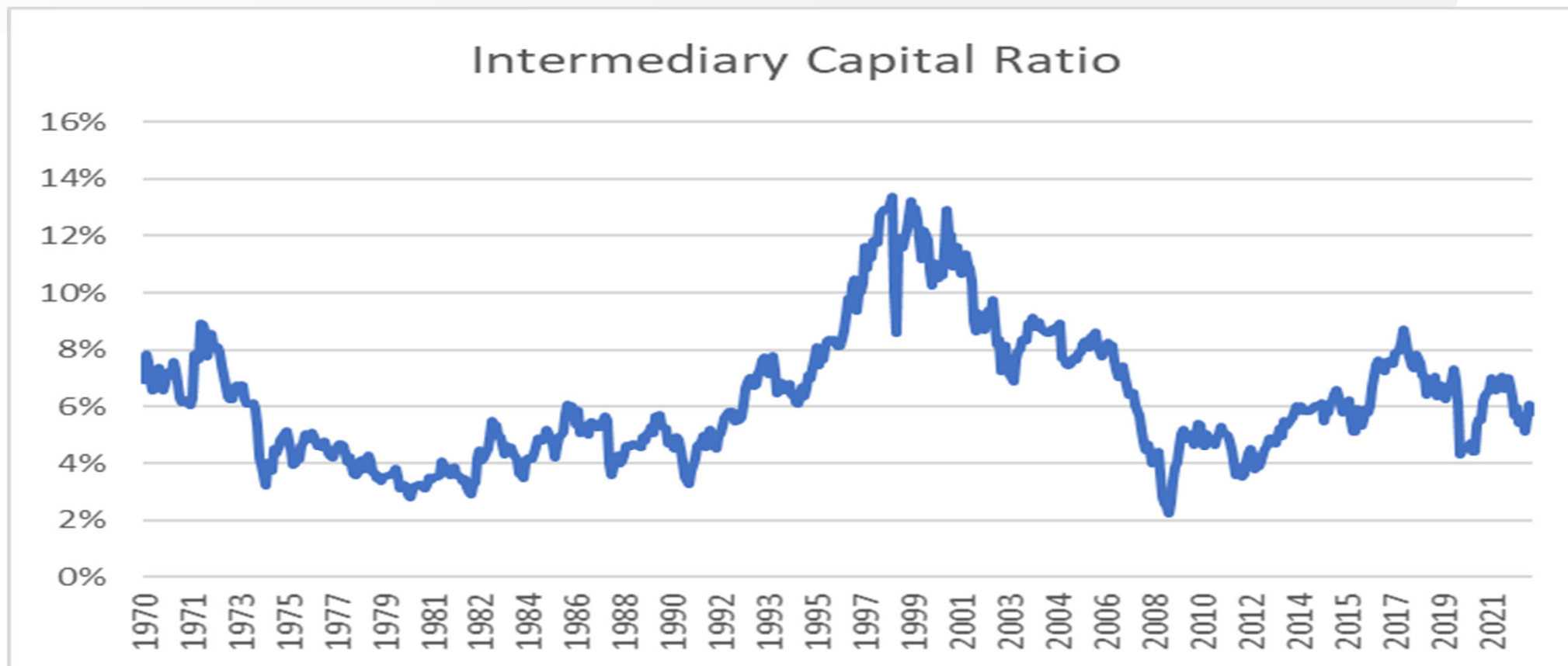


US Treasuries



Data source: Bloomberg

3. What about resilience of Dealer banks?

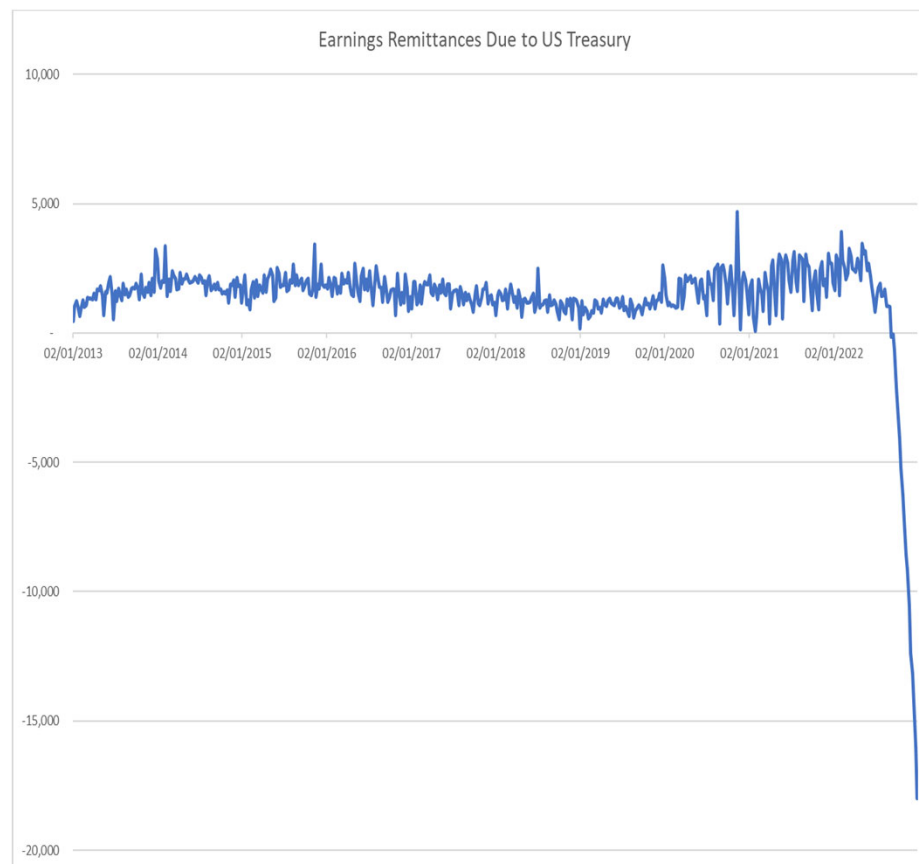


Data source: Z. He

3. Direct impact of rising IR on CBs

- Rising rates directly affect central bank balance sheets: Paying more on banks' reserves plus mark to market losses on bond portfolios bought via QE
- *“The Fed’s balance sheet now appears similar to that of a hedge fund whose long-term assets are financed by short-term liabilities, except that such funds routinely hedge their interest rate risk whereas the Fed’s portfolio is effectively “naked.””* (Levin and Nelson, 2022)

Data source: St Louis Fed



3. Ongoing work on financial stability (e.g. FSB)

- **Goal: Strengthen decentralised intermediation in bonds** (In parallel: Very extensive work on monetary policy)
 - CCPs: Reduce pro-cyclicality in margin calls to avoid “dash for cash”
 - Bank Dealers: Adjust Leverage Ratio to reduce balance sheet burden?
 - Market structure: “All to all” trading and central clearing of cash bonds
 - Transparency: Publish comprehensive data on transactions
 - Central Banks: Review design of “Market Maker of last Resort”
 - NBFIs: Tackle NBFi leverage, OEF and MMF vulnerabilities

3. Policy challenges: TRANSITION TO PANEL

Darrell

- How can we make the UST market “safe”?
- Does rising electronic trading increase systemic risk?
- Key challenges for risk management in the current environment

Dan

- Do banks hold enough capital given the current risks?
- What can regulators & supervisors do in the current environment to increase systemic resilience [how can stress testing help?]
- Any additional observations on US environment and policy challenges?

Peter

- QE: A „dangerous addiction“
- What are the links between Monetary Policy, Financial Stability and fiscal policy and how do they affect central banks’ fight against inflation?
- Any additional observations on EU environment and policy challenges?