Central clearing in fixed income markets

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How we got here: trading & clearing mandate for OTC derivatives …

In the aftermath of Lehman, G20 leaders in 2009 declared in Pittsburgh that…

*"All standardized **OTC derivative contracts** should be **traded** on exchanges or **electronic trading platforms**, where appropriate, and **cleared through central counterparties** by end-2012 at the latest. OTC derivative contracts should be **reported to trade repositories**. Non-centrally cleared contracts should be subject to higher capital requirements."*

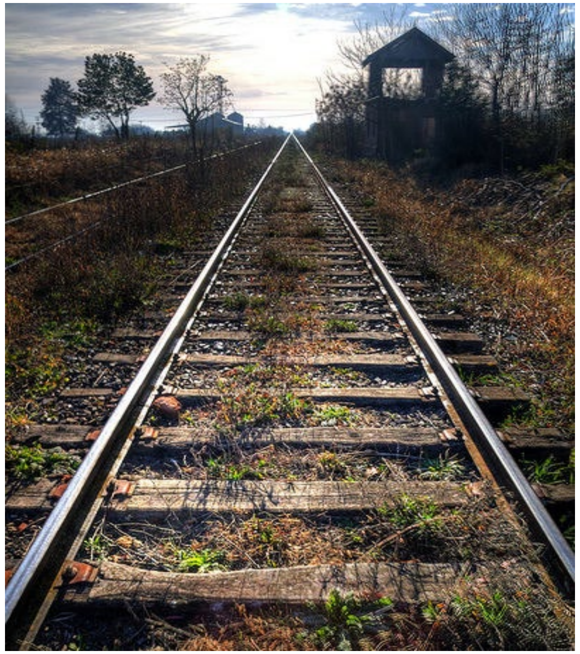
- Main rationale:
  - Remove complex web of opaque bilateral relationships
  - Enhance transparency of OTC markets
- Substantial progress, but not yet fully there (clearing mandate applied in 17 FSB jurisdictions)
- Other major OTC markets, like **cash government bonds & repo** have seen limited take-up, despite potential fin. stab. benefits, and them being at the **epicenter of several market stresses**

Bilateral vs central clearing: key differences & implications

Bilateral clearing	Central clearing
Netting (can) take place across markets in which **counterparties** are trading with each other	**Netting** takes place within the market where the CCP is active -> frees up **intermediation space**
Risk is (mainly) **counterparty credit risk** (to the extent margining practices are not as stringent as CCP margining): exposure to a defaulting counterparty	Risk is (mainly) **liquidity risk**: access to cash at short notice to pay margin changes
Opaqueness: very difficult to have a view of the complex net of exposures of different entities	• Increased **transparency** • CCP itself becomes a **'single point of failure'…** (and netting benefits imply that participants will want a single, large CCP (LCH for IRSs…))

➔ **Key risk exposures** are **much reduced**, but **risks morph** …

Rise of PTFs and the fact that IDBs take on greater principal risk gives great urgency to expand the scope of central clearing in the US Treasury market…



- Discrepancy between the **trading technology** and **“plumbing”** on which it is running (TMPG (2019))

  - Need to make sure the **tracks** (ie the clearing & settlement process) are **fit-for-purpose** for bullet trains (PTFs) running on them …

  - And that necessary **rules to ensure operational and financial resilience** are in place …

But no one size fits all in cash sovereign bond clearing …

Cash government bond market

Centrally cleared (only interdealer)	Bilaterally cleared
US (but not PTFs!)	US D2C
Japan	Japan D2C
Italy	Italy D2C
	Germany (D2D &D2C)
	France (D2D &D2C)
	UK (D2D &D2C)

Source: FSB (2022)

State of affairs in other core markets (Europe/Japan):

- No penetratation by PTFs (unlike US on-the-run)
- Primary dealers retain a strong grip and have shied away from central clearing (except Italy and Japan)
- Push towards central clearing perhaps less urgent from counterparty credit / operational resilience point of view …
- …but to the extent that **limited intermediation capacity** is a problem, central clearing could still be beneficial
- Central clearing as conducive to **all-to-all** trading

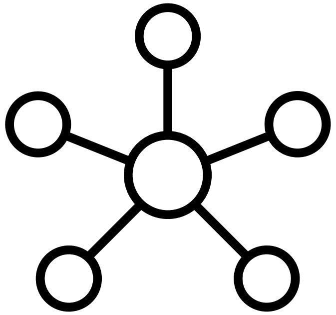
How will market liquidity in fixed income evolve?

- Expect **benefits for market liquidity** in terms of ... [+]
  - Reduced counterparty risks and improved operational resilience
  - Greater intermediation capacity by dealers (especially for repo): more elastic liquidity supply
  - Conducive to market structural shifts: all-to-all

- **Cross-currents**, potentially reducing liquidity: [-]
  - Greater funding liquidity needs of the system (higher margins)
  - Client access to central clearing & costs
  - Certain trading strategies that foster market liquidity (relative-value trades) less viable

→ **Trade-off** between (slightly) less liquid markets in **normal times** and **more resilience at times of stress** (but jury is still out ...)

Financial stability: we need to brace for a greater prevalence of liquidity as opposed to credit crises …



- A CCP for a "fully-cleared" government bond market will be:
  - **The** systemically important entity
    - Crucial on its own – as it clears the "risk free" asset
    - Massively interconnected – CCP members on the hook in case of member default
    - Linked with multiple markets (repo, futures, etc), where members will be active
    - Likely to be in trouble only at times of large price declines (*wrong way* risk)

➔ **A doomsday scenario if such a CCP goes under** and cannot continue to perform its obligations as expected

Access to central bank lending facilities (ie going beyond deposits) would need to be formalized …

… subject to very stringent supervisory requirements

Thanks much for your attention !

- Appendix -

Research on the impact of the trading/clearing mandates in OTC derivatives: what have we learnt?

Liquidity:

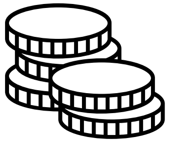
- Duffie et al (2005) **pre-trade transparency** is necessary for competitive liquidity provision… and clearing may be a **pre-requisite to all-to-all trading** (Duffie 2020)
- Loon & Zhong (2014 , 2016) central clearing resulted in **improved liquidity in CDS** (no analysis of implications for overall systemic risk)
- Benos et al (2020): centralised trading of US IRS **improved liquidity** metrics by ~15% as dealers compete more

Financial stability / dealer balance sheet capacity:

- UST market: Fleming & Keane (2021) find that central clearing would have lowered dealers' daily gross settlement obligations by 60 percent during March 2020 turmoil
- Baranova et al (2023): central clearing could materially enhance dealer intermediation capacity in gilt-repo market, but benefits are more limited in gilt cash market

Competition issues for CCPs active in the fixed income space

- A CCP for government bonds & repo will also likely be **a natural monopolist**:
  - How should **prices/fees** be set?
  - **Who should benefit** from the profits? Should it be a user-owned utility?
  - How should **access** to the CCP be **governed/regulated?**



- For resiliency and fairness, multiple CCPs may be beneficial …
- But… that would be costly as netting benefits would be reduced (Benos et al, 2023)

Design decisions will have **consequences for the topology of financial markets** as participants adjust to the new situation …

References

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State of affairs in clearing of repos across core markets

Repo market

Centrally cleared	Bilaterally cleared
US - D2D + sponsored repo via FICC	US – D2C
Japan - all D2D, some D2C	Japan - rest of D2C
Italy - most D2D	Italy - some D2D and D2C
UK - most D2D	UK – some D2D and D2C
Germany – most of D2D	Germany - some D2D and D2C
France – about 50%	France – about 50%

Source: FSB (2022)