Discussion of "Stress Testing with Multi-faceted Liquidity: the Central Bank Collateral Framework as a Financial Stability Tool" by Angelo Cuzzola, Claudio Barbieri and Ulrich Bindseil

Frances Shaw

1 Central Bank of Ireland

29 September 2022

ECB Working Group on Stress Testing - 2022 Research Workshop

Disclaimer: These views are those of the presenter and are not necessarily those of the Central Bank of Ireland or the ESCB
**Objective:** To explore the role of the central bank collateral framework as a financial stability tool

**The model:** A stress testing framework where banks respond to endogenous liquidity shocks by accessing distinct channels of market and funding liquidity

**Using a simulation approach they:**
- Analyze the effect of reducing central bank collateral haircuts during an adverse event
- Show the impact across different bank business models
Contribution to the literature

• **Main contribution:**
  • Extends the stress testing frameworks of Greenwood et. al. 2015, Cont and Schaanning 2017, Coen et al. 2019 and Cont et. al. 2020
  • Realistic cost of funding through central bank and repo collateral haircuts
  • Heterogenous behaviour of banks in the funding market dependent on collateral availability and funding cost

• **Main findings:**
  • Reducing haircuts results in lower defaults due to insolvency with little impact on defaults due to illiquidity.
  • Impact differs across business model types.
Comment 1: Empirical application

- Can be hard to draw conclusions on simulated data - could benefit from expanding the analysis on the EBA dataset
  - Impact of collateral haircut tightening/loosening and expansion/contraction of collateral availability
  - Differences across different business model types

- How to measure the impact?
  - Indicators of system vulnerability e.g. (AV) Duante and Eisenback 2021 or (ERI) Cont and Schaanning 2019.

- How do the results compare to those in the literature?
Comment 2: Bank behaviour

• Banks with different business models behave very differently in the stress test simulations.

• What drives bank behaviour when moving to restore regulatory ratios? Is it driven only by collateral availability and funding cost or other factors?

• How does this behaviour compare to previous stress periods for these types of banks e.g. in March 2020?

• Evidence of liquidity hoarding behaviour / unwillingness to deplete liquidity buffers during stress (Duncan et al. 2022). Could consider iterations targeting higher LCR targets to capture this behaviour.
Comment 3: Central bank lending

• Emergency liquidity assistance (ELA) was a prominent feature in the great financial crisis. Do you see a role for ELA in this framework?

• How does this interact with unconventional monetary policy (where assets are purchased to provide liquidity)? If the markets assume that outright purchases will again be used to relieve liquidity issues in any future crisis might these purchases keep market price impacts from occurring? (reducing second round effects).
Comment 4: Additional sources of risk

- **Derivatives**
  - Margin calls were a feature of both the GFC and recently in March 2020.
  - Potential for greater liquidity stress.

- **Non-banks**
  - Amplification of fire-sale losses
  - Investment funds (Sydow et al. 2021), Asset managers (Calimani et al. 2020)
  - Different constraints and no access to the central bank
Overall

- Very Interesting paper!
- Commend the authors on the ambitious modelling and data work.
- Potential for a wide range of scenario and counter factual analysis