Pills

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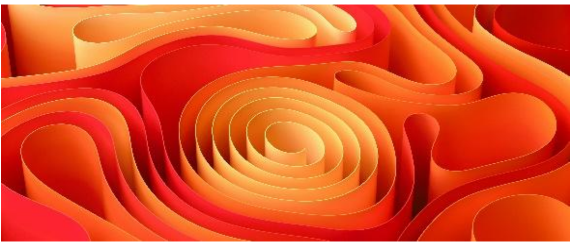

TOPICS:

Stress Test

SOURCE:

Bank of Italy

Bankit: System-Wide Stress Tests - a Survey of Empirical Evidence, Concepts, and Methodologies

- This paper **reviews the literature on system-wide stress testing**, a macroprudential tool used to assess the resilience of the financial system under severe but plausible adverse scenarios. Unlike institution-level stress tests, system-wide approaches account for the interconnectedness of banks and non-bank financial intermediaries (NBFIs), feedback loops and contagion mechanisms that can amplify financial shocks.
- The paper examines **major episodes of financial instability** - including the 2008 Global Financial Crisis, the COVID-19 market turmoil, the Archegos collapse, the UK LDI crisis and the 2023 banking turmoil - to illustrate how liquidity shortages, leverage, fire sales and confidence shocks can transform localized disruptions into systemic crises.
- It reviews **key methodologies** for system-wide stress testing, including indicator-based surveillance, bottom-up supervisory exercises, top-down structural models, network models and agent-based models, highlighting their respective strengths and limitations.

  The survey also categorizes the main shocks considered in stress tests, such as macroeconomic, sovereign, market, liquidity, climate, geopolitical and funding shocks, and explains the channels through which they spread across the financial system.
- The paper concludes that **systemic risk is driven primarily by amplification mechanisms rather than initial shocks alone**. It emphasizes the growing systemic importance of NBFIs and the need for more integrated, data-rich stress-testing frameworks to better support macroprudential supervision and financial stability.