Financial Stability in Focus: Artificial Intelligence in the Financial System

Bank of England Financial Policy Committee (2025)

Context

The AI adoption in UK financial services is accelerating, as 75% of the surveyed firms already use AI (up from 58% in 2022) with 17% of use cases involving foundation models like large language models. However, 55% of AI use cases include automated decision-making, while half of firms report only "partial understanding" of the AI they deploy, which creates systemic risk.

This report examines how shared models, vendor concentration and autonomous decision-making could amplify shocks across institutions and markets, even where individual firm controls appear robust.

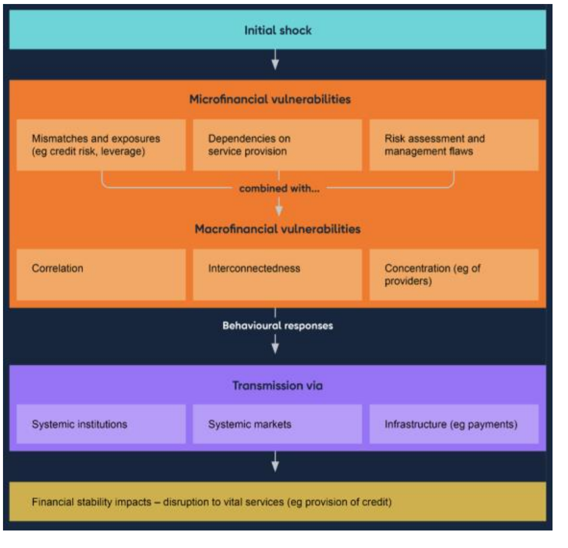
Key Insights

Shared AI models can create correlated failures

- Widespread use of similar AI models can lead to synchronized mispricing if hidden biases emerge
- Risk increases in algorithmic trading and under market stress, when institutions respond similarly

Vendor concentration increases operational fragility

- Reliance on a small number of cloud and AI providers can create cascading failures
- Outages at key providers can disrupt critical services simultaneously, even where individual firms meet resilience standards



These risks interact and transmit through the financial system via the pathways shown above.

Implications

- Which AI models or vendors could become single points of failure if widely adopted across your institution and the broader sector?
- Does your vendor due diligence assess concentration risk (whether your AI providers also serve multiple competitors, creating sector-wide infrastructure dependency)?
- Do your stress tests evaluate how AI models perform during unprecedented market events they have no historical reference for?

Bank of England. (2025, April). Financial stability in focus: Artificial intelligence in the financial system. https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-in-focus/2025/financial-stability-in-focus-artificial-intelligence-in-the-financial-system.pdf