



TOPICS:

Cyber Risk

SOURCE:

European Central Bank

ECB: Disciplining Digital Risk - Evidence from Cyber Stress Tests

- The paper examines whether supervisory scrutiny can correct **systemic underinvestment in cybersecurity** within the European banking sector. Using confidential supervisory data from 109 euro area Significant Institutions between 2019 and 2024, the authors analyse the impact of the ECB's 2024 Cyber Resilience Stress Test (CyRST), a qualitative supervisory exercise focused on operational resilience against cyberattacks.
- The paper is grounded in the premise that cybersecurity investment has **public-good characteristics**. While individual banks benefit from stronger cyber defences, these investments also reduce systemic risk for the broader financial network. Because institutions do not fully internalise these broader benefits, they may rationally underinvest in cybersecurity relative to the socially optimal level. To assess this problem, the authors identify **"laggard" banks**—institutions

- investing less in cybersecurity than predicted by their operational risk profiles and financial characteristics,
- Using a difference-in-differences and event-study methodology, the paper finds that the announcement of **the CyRST generated a substantial increase in cybersecurity investment** across the sector, with average spending rising by roughly 45%. The effect was significantly stronger among laggard banks, which increased investment by approximately 80% relative to peers. The response extended beyond expenditure increases, **including improvements in outsourcing management, retention of specialised cyber personnel, replacement of outdated IT systems and adjustments to cyber-insurance coverage**.
 - The study further demonstrates that **the strongest behavioural responses** occurred among banks subject to more intensive supervisory engagement, including detailed supervisory findings and inspections.

