



# Challenges in regulating cloud service providers in EU financial regulation: From operational to systemic risks, and examining challenges of the new oversight regime for critical cloud service providers under the Digital Operational Resilience Act



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## ABSTRACT

The use of cloud services by financial institutions has become increasingly prevalent due to its economic benefits. However, this comes with the inherent drawbacks of increased security risks and potential financial stability risks from the cloud market concentration. The EU has introduced specific legal instruments that place responsibilities on financial institutions to mitigate these risks. This paper analyses how the regulation of cloud service providers in the EU financial sector has evolved from the regulation of operational risk to the regulation of systemic risk. The Digital Operational Resilience Act, adopted in December 2022 and effective from January 17, 2025, plays a key role in enabling this transformation by recognizing the systemic risk aspect of the use of cloud service providers. It responds to this risk by creating a new oversight regime of critical cloud service providers. However, new oversight of critical cloud service providers brings about novel problems, particularly concerning the *ne bis in idem* principle in the case of overlapping oversight and enforcement by different authorities responsible for respective legislative instruments in cybersecurity and data protection. The overlapping oversight shall respect the principle. This paper evaluates to what extent the overlapping regime respects the principle under Article 50 of the Charter of Fundamental Rights of the European Union by analysing the Digital Operational Resilience Act and provides suggestions to improve coordination among different competent authorities in the case of overlapping supervision and enforcement to respect the principle.

## 1. Introduction

Financial institutions (FIs) rely heavily on technology to function, which is generally deployed on their local computer infrastructure. However, technological progress has accelerated dramatically, requiring FIs to embrace the advancement.<sup>1</sup> The finance industry is widely recognised as one of the most digitised sectors within the broader economy. The processes of digitisation involve the conversion of analogical information into digital form. These processes have had a profound impact on the financial industry. The integration of emerging data-intensive technologies, such as artificial intelligence and blockchain, has resulted in a strong interconnection between finance and data. Financial

transactions involve the transfer of data, while financial infrastructures, such as stock exchanges and payment systems, can be understood as data networks.

Financial regulation has been compelled to evolve in response to financial digitalisation. Simultaneously, new sets of rules and principles have been developed to assert control over the digital world. These regulations are increasingly encompassing all critical societal functions, ranging from privacy to national security.<sup>2</sup> However, the convergence of financial regulation, new regulatory frameworks for digital finance, and general data governance regimes are not always clear.<sup>3</sup> Conflicts arising from the intersection of disparate and uncoordinated regimes threaten to undermine core policy objectives of stability, integrity, and security,

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<sup>1</sup> Vittoria Barbieri, 'EBF Cloud Banking Forum Releases Three Technical Papers' (EBF, 9 June 2020) <<https://www.ebf.eu/innovation-cybersecurity/ebf-cloud-banking-forum-releases-three-technical-papers>> accessed 7 February 2023.

<sup>2</sup> Douglas W Arner, Giuliano G Castellano and Eriks Selga, 'Financial Data Governance: The Datafication of Finance, the Rise of Open Banking and the End of the Data Centralization Paradigm' (1 February 2022) <<https://papers.ssrn.com/abstract=4040604>> accessed 5 September 2023.

<sup>3</sup> ibid.