

12 - 14 March 2026

Berlin , Germany

Fintech adoption and Financial Institution Performance in the UK

Iyanu Olatunbosun

University of York, UK

Abstract

This study investigates the impact of fintech adoption and digital inclusion on the performance of the UK banking sector, exploring how technological advancements enhance efficiency, competitiveness, and profitability. Employing secondary data from national and international sources over a 34-year period, it applies a robust ARDL and GMM econometric framework to examine the dynamic relationships between fintech adoption proxies—such as adult bank account ownership and internet penetration—and financial institution performance measured by return on assets. Stationarity and lag length diagnostics underpin model reliability, ensuring credible assessment of fintech’s evolving influence amid economic shocks. Results demonstrate that increasing fintech adoption has a positive association with improved financial performance, particularly through expanded market access, operational efficiency, and customer trust. While short-run effects show gradual materialization, lagged internet penetration and digital account growth contribute meaningfully to profitability over time. Although evidence of long-run cointegration is inconclusive, the findings underscore fintech’s role in strengthening the intermediary functions posited by Financial Intermediation Theory, reducing transaction costs and fostering financial inclusivity. These dynamics collectively propel the banking sector toward greater resilience and competitiveness amid the Industry 4.0 transformation. This research contributes to literature by detailing fintech’s nuanced temporal effects on UK banking performance and highlighting policy-relevant implications for digital infrastructure expansion and financial literacy enhancement. Such insights are vital for stakeholders aiming to capitalize on fintech’s potential to drive sustainable financial sector growth. The study advocates a balanced approach emphasizing technological innovation combined with human capital development to secure inclusive progress and robust institutional performance within a digitized global economy.

Keywords: Digital Inclusion; Banking Sector; Artificial Intelligence; Industry 4.0; Profitability