

## Lesson 11: Regulatory Frameworks

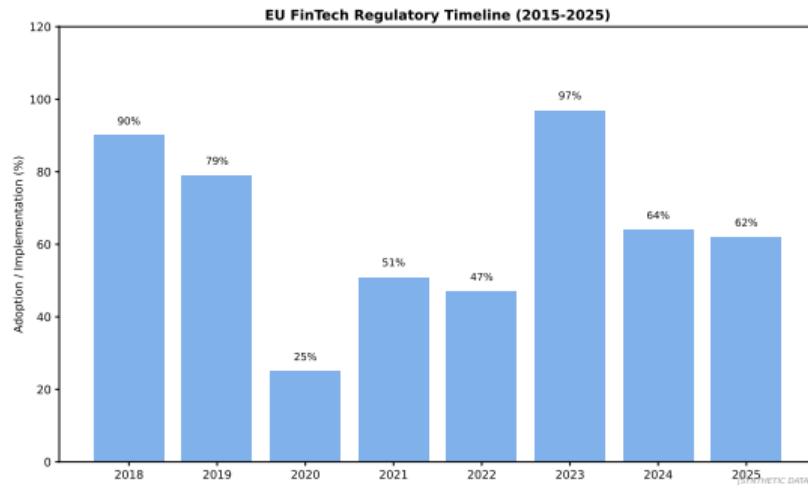
### Module 1: FinTech Fundamentals

Digital Finance

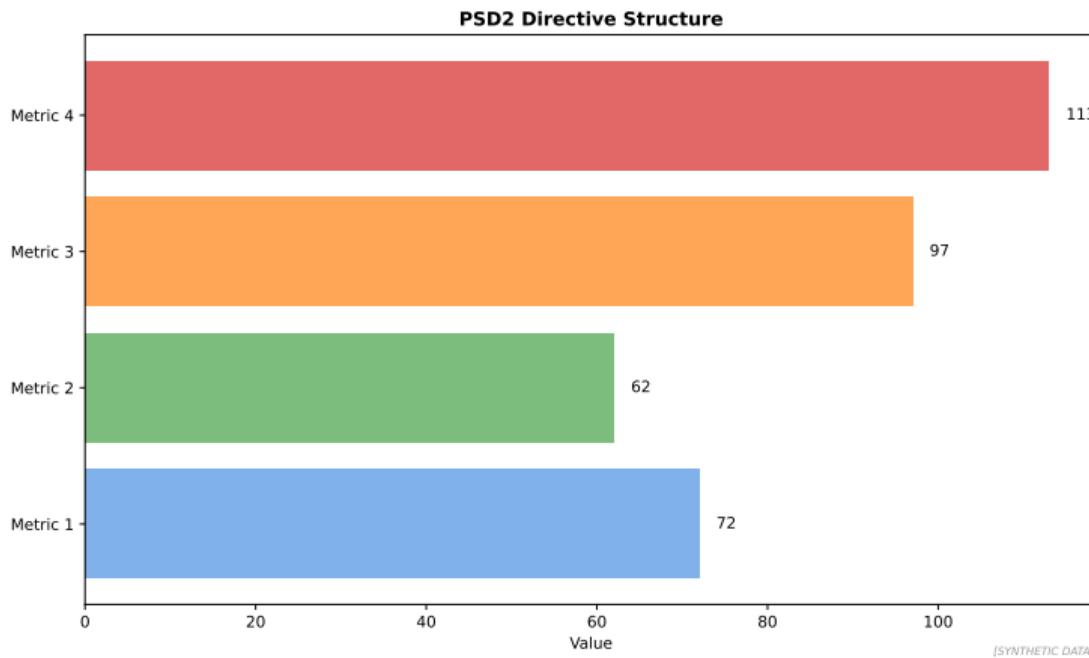
# Regulatory Landscape

## Key Frameworks

- PSD2: Open banking
- MiCA: Crypto assets
- DORA: Digital resilience
- GDPR: Data protection



Four key EU regulations: PSD2 (open banking), MiCA (crypto), DORA (resilience), GDPR (data protection).

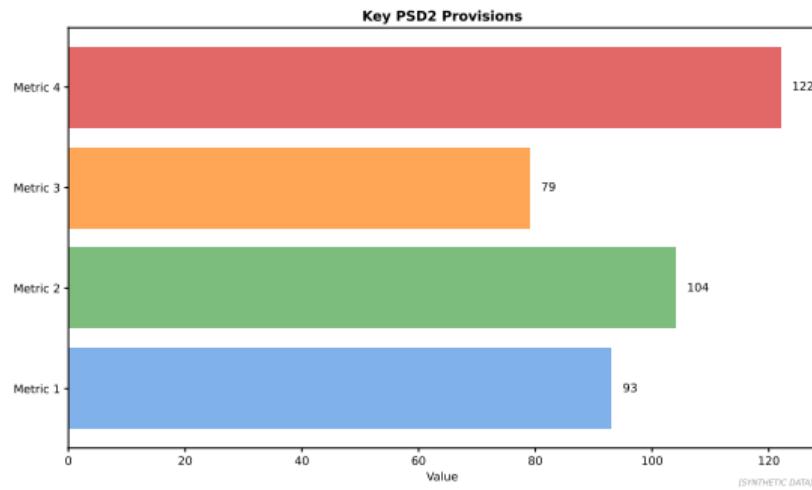


**PSD2 mandates open banking APIs—enabling third-party access to bank accounts with customer consent.**

# PSD2 Key Provisions

## Core Requirements

- Strong Customer Authentication
- Open API access
- Third-party provider licensing
- Liability framework

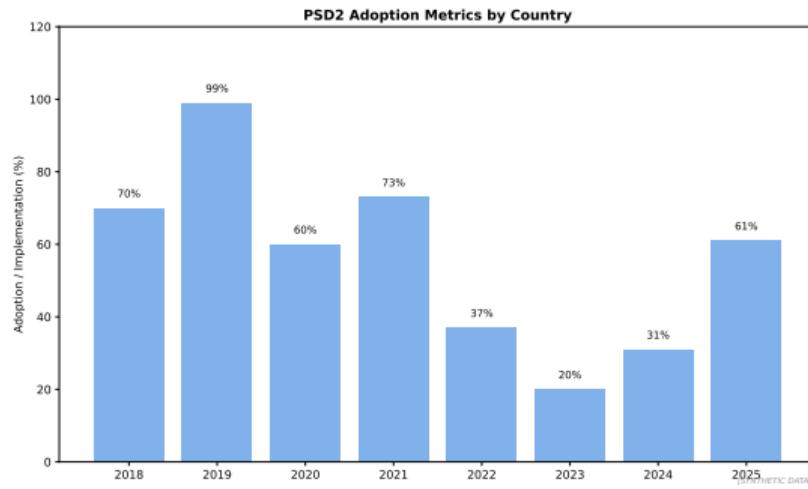


**PSD2 requires strong customer authentication (SCA), open APIs, and TPP licensing with clear liability rules.**

# PSD2 Impact Assessment

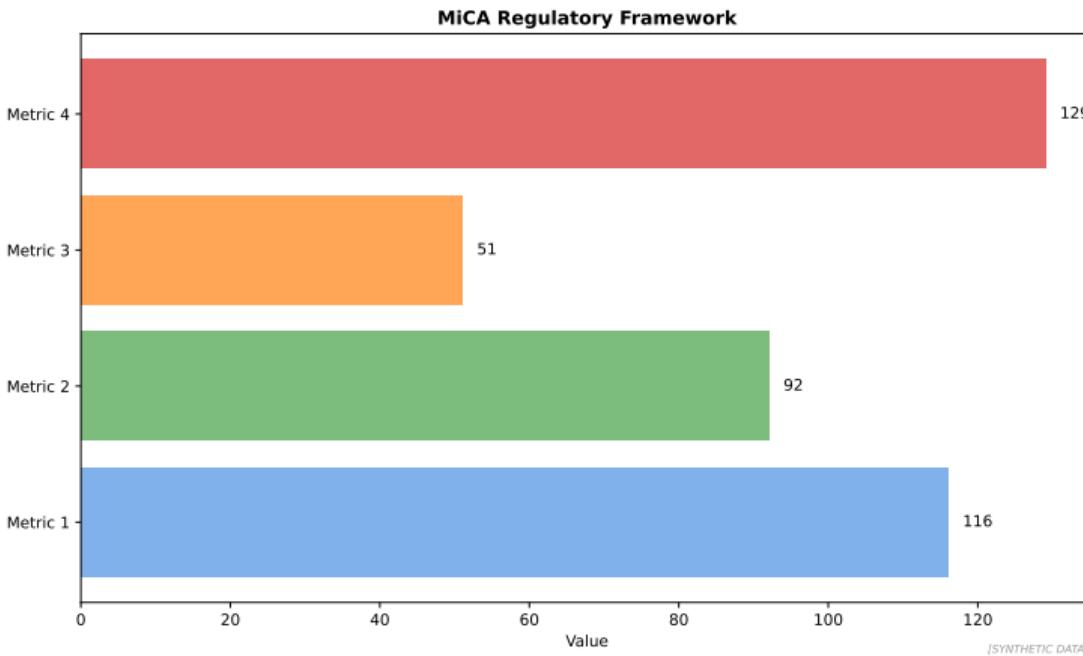
## Market Effects

- 12M UK users (2023)
- 350+ registered TPPs
- £6B transaction value
- Innovation acceleration



**PSD2 impact: 12M UK users, 350+ registered TPPs, 6B pounds in transaction value—driving innovation.**

# Markets in Crypto-Assets (MiCA)

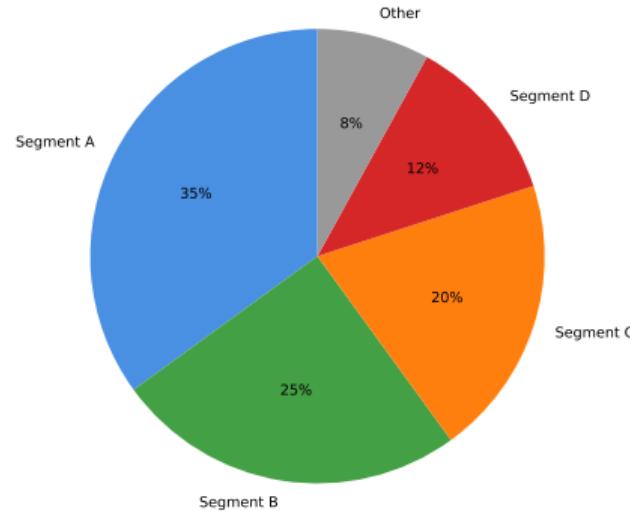


MiCA is the EU's comprehensive crypto-asset regulation—covering issuance, trading, and custody.

## Three Categories

- E-Money Tokens (EMTs)
- Asset-Referenced Tokens (ARTs)
- Other crypto-assets
- Different regulatory tiers

## MiCA Crypto Asset Classifications



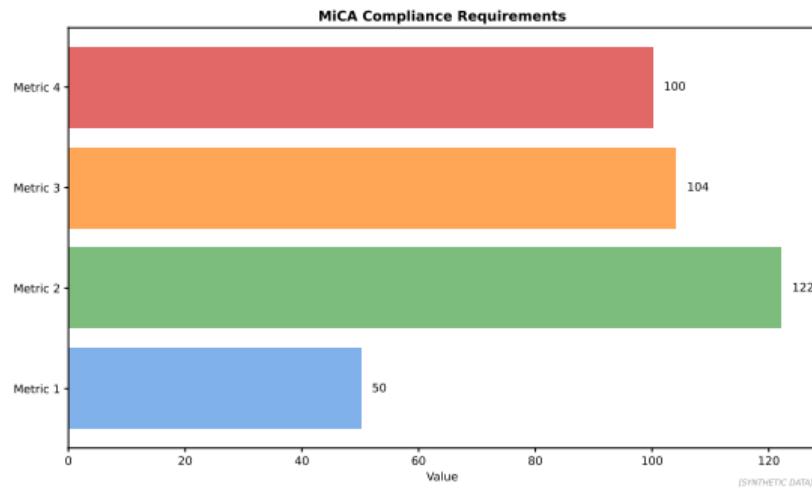
[SYNTHETIC DATA]

MiCA classifies crypto into EMTs (e-money), ARTs (asset-backed), and other tokens—each with different rules.

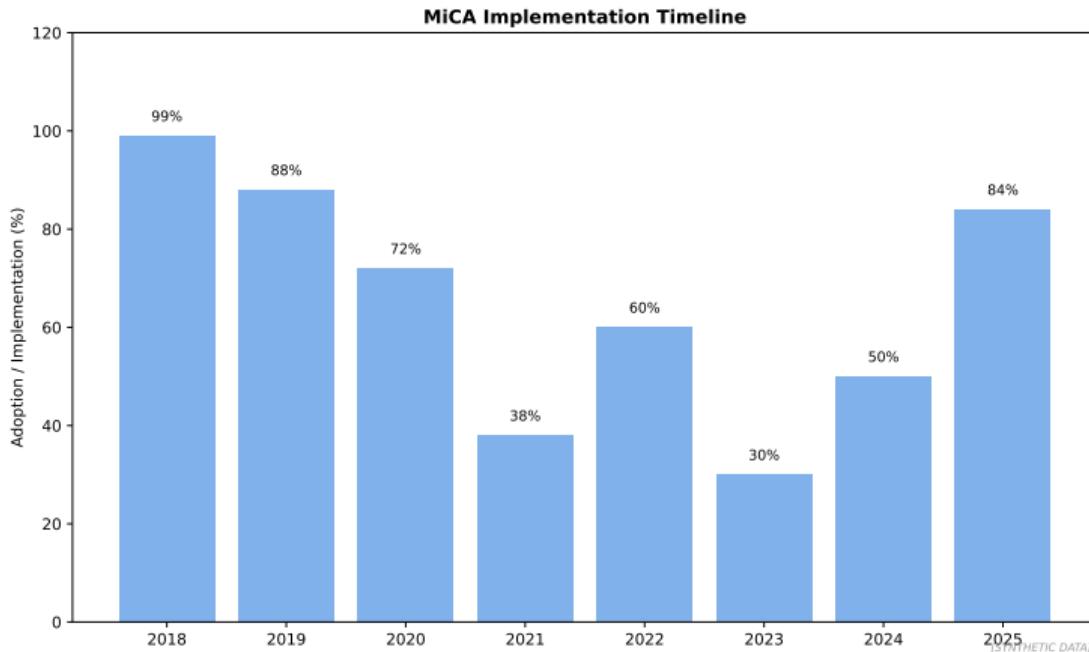
# MiCA Requirements

## Issuer Obligations

- White paper mandatory
- Reserve requirements
- Capital adequacy
- Consumer protection



MiCA requires white papers, reserve requirements, capital adequacy, and consumer protection measures.

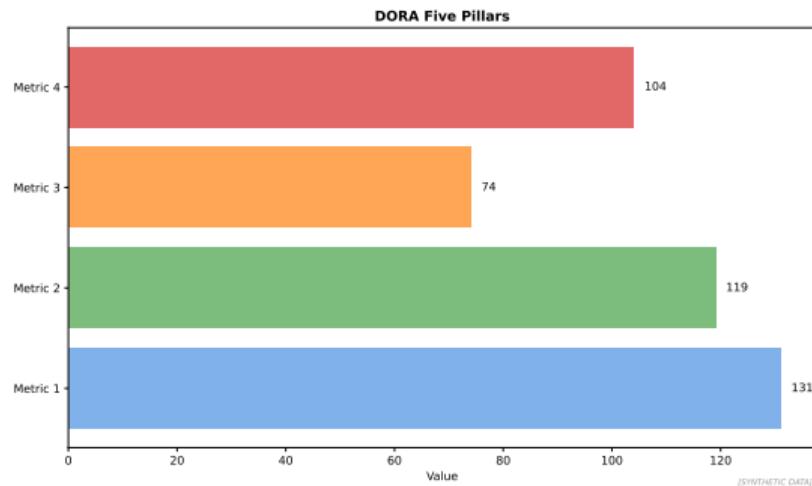


MiCA implementation: stablecoin rules June 2024, full implementation December 2024—EU single market.

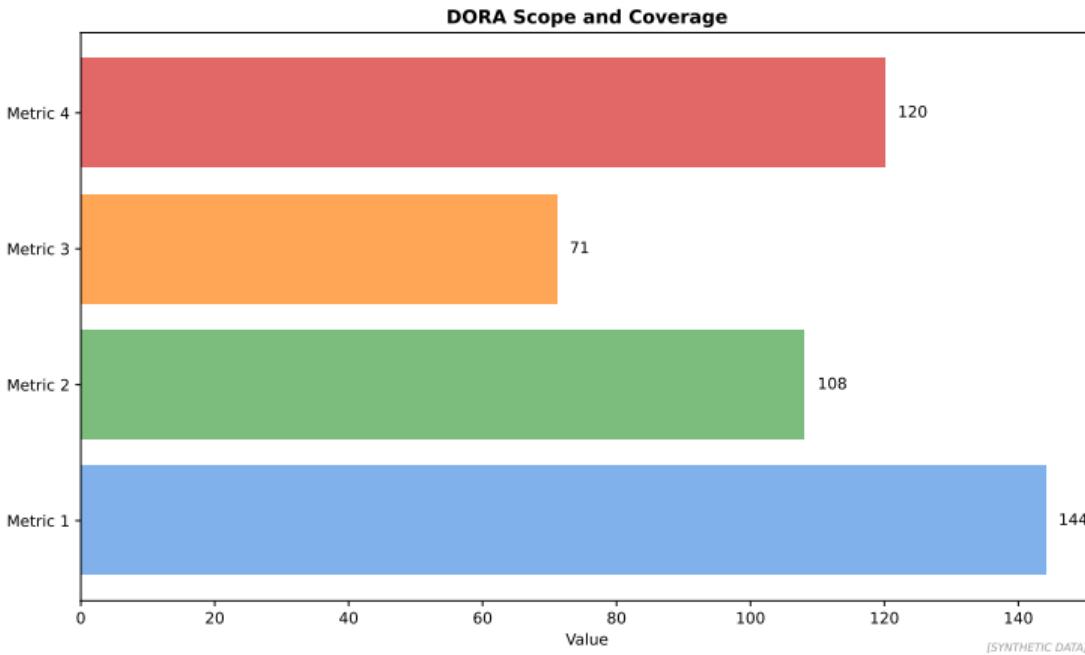
# Digital Operational Resilience Act (DORA)

## ICT Risk Management

- Cyber resilience standards
- Third-party risk oversight
- Incident reporting (72h)
- Testing requirements



**DORA mandates cyber resilience, third-party oversight, 72-hour incident reporting, and testing requirements.**

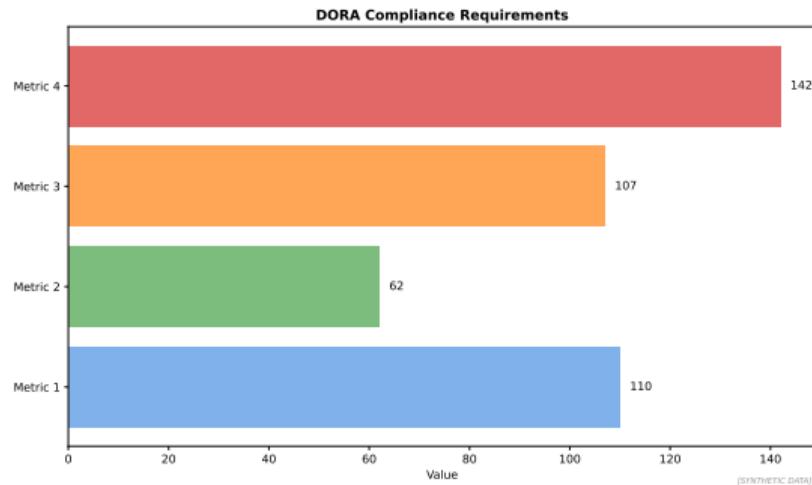


DORA applies to all financial entities—banks, insurers, asset managers, and critical ICT providers.

# DORA Compliance Requirements

## Key Obligations

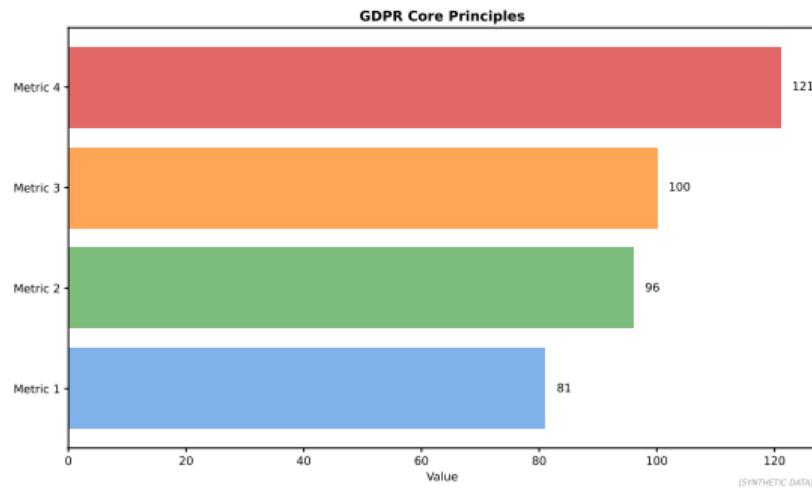
- ICT governance framework
- Threat-led penetration testing
- Business continuity plans
- Critical service oversight



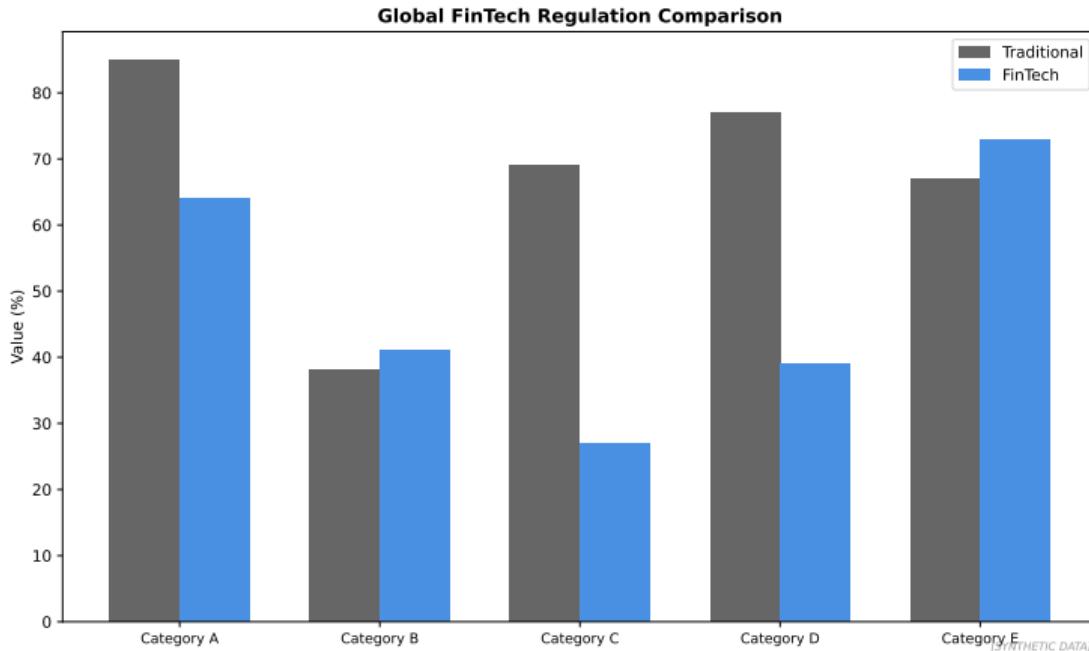
**DORA requires ICT governance, threat-led penetration testing, business continuity, and service oversight.**

## Data Protection

- Explicit consent required
- Right to be forgotten
- Data portability
- 4% turnover fines



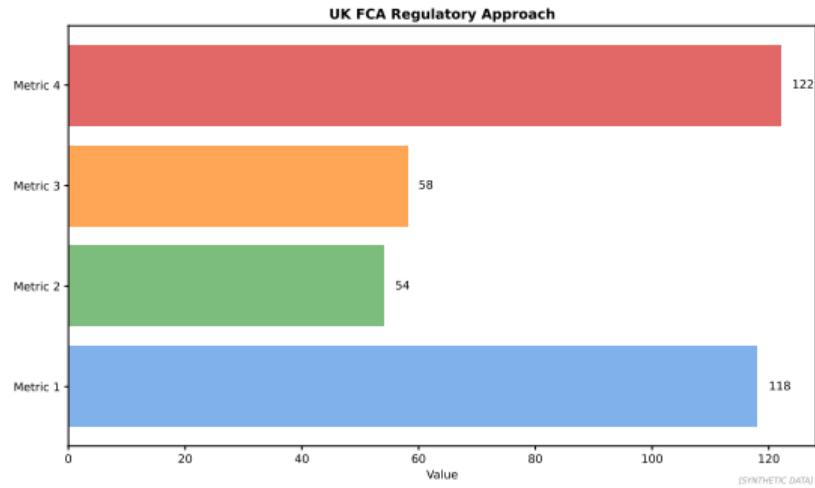
**GDPR requires explicit consent, right to erasure, data portability—fines up to 4% of global turnover.**



Global regulatory approaches vary widely—EU unified market vs US fragmented vs UK innovation-focused.

## Divergence Strategy

- Financial Services Act 2023
- Edinburgh Reforms
- Sandbox expansion
- Equivalence negotiations

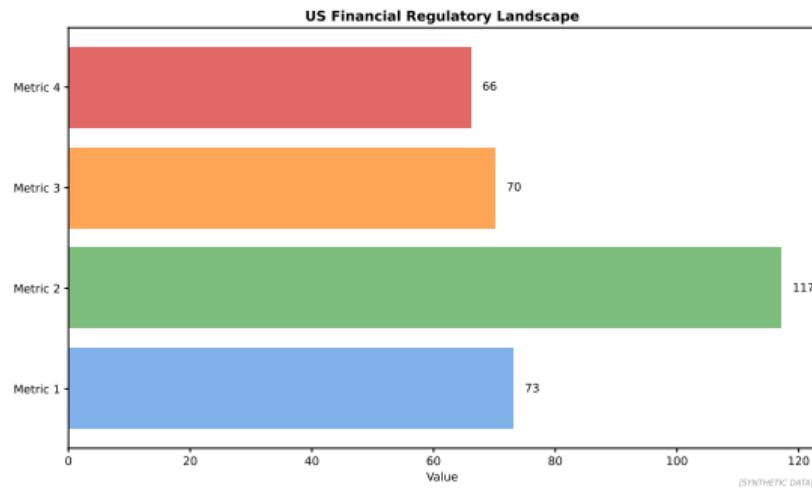


Post-Brexit UK pursues regulatory divergence—Edinburgh Reforms and expanded sandbox foster innovation.

# US Regulatory Fragmentation

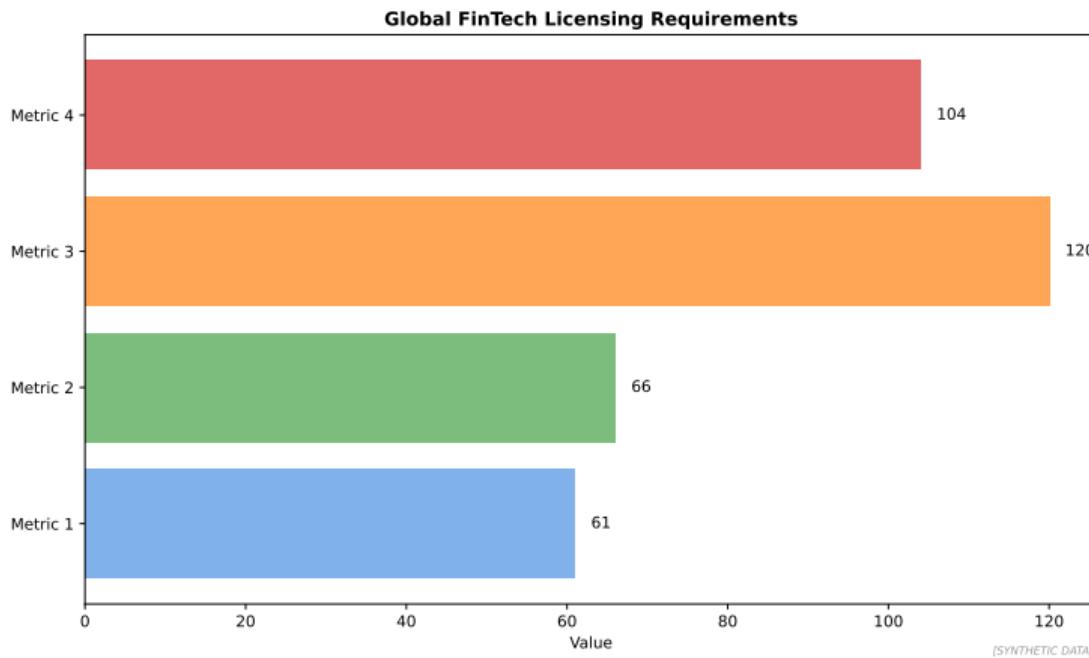
## Multiple Regulators

- Federal: OCC, Fed, FDIC
- State: Money transmitter licenses
- SEC vs CFTC crypto debate
- 50 state compliance burden



US has fragmented regulation—federal agencies (OCC, Fed, SEC) plus 50 state licensing requirements.

# Licensing Requirements

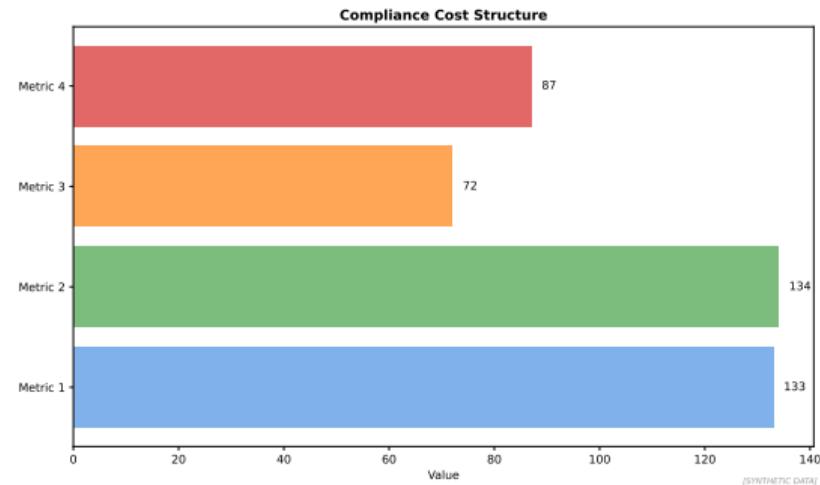


FinTech licensing varies by jurisdiction and service type—payment services, lending, and custody each have requirements.

# Compliance Costs

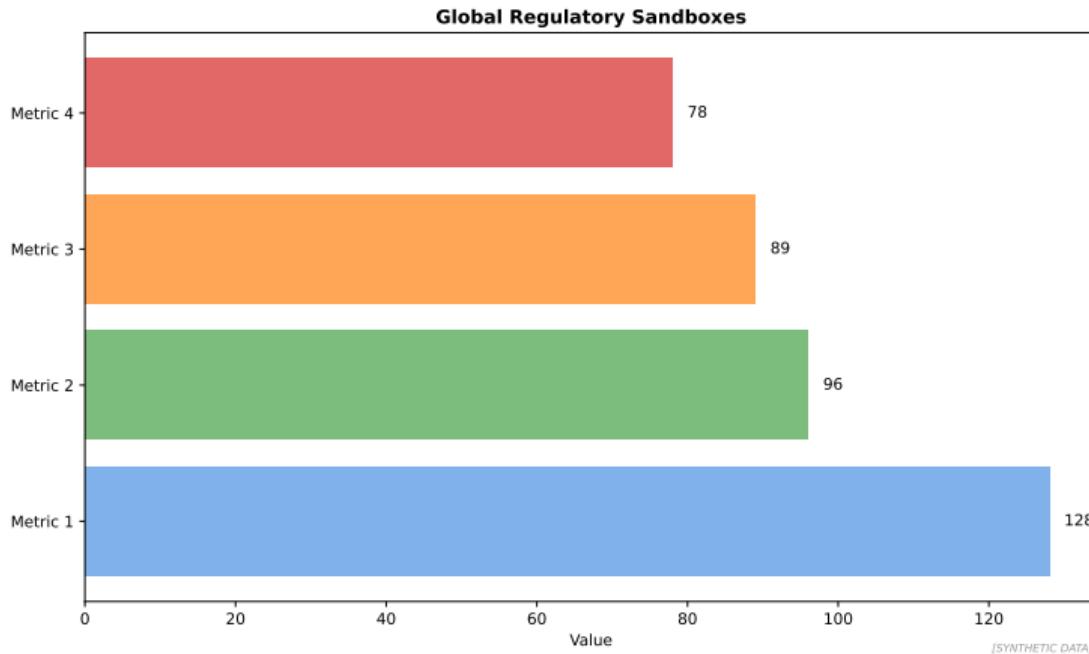
## Cost Breakdown

- Initial licensing: \$500K-2M
- Annual compliance: \$200K-1M
- Staff: 10-15% headcount
- Technology: \$100K-500K



Compliance costs significant: \$500K-2M initial licensing, \$200K-1M annual, 10-15% of headcount.

## Regulatory Sandboxes Globally

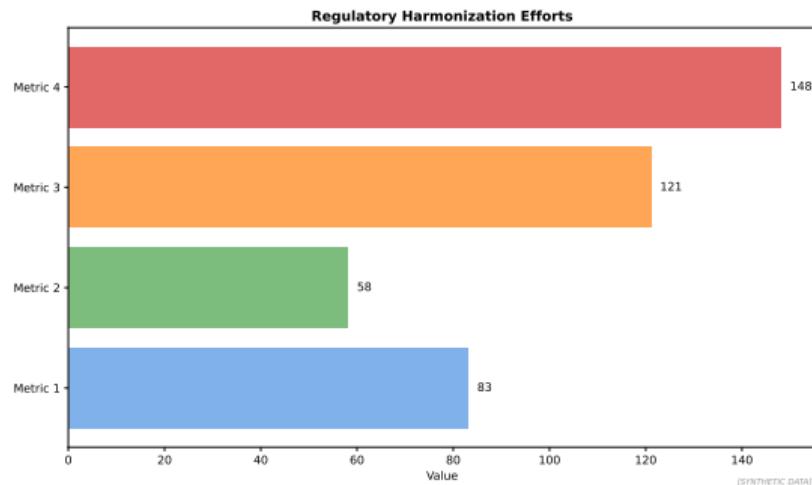


**80+ countries have launched regulatory sandboxes—testing innovation under regulatory supervision.**

# Future: Harmonization Efforts

## International Coordination

- Basel Committee guidance
- FSB crypto recommendations
- IOSCO principles
- Cross-border challenges



Basel Committee, FSB, and IOSCO work toward global standards—but cross-border challenges remain.

## Key Takeaways

- **PSD2:** Enables open banking, 12M users in UK alone
- **MiCA:** Comprehensive crypto regulation, 2024 implementation
- **DORA:** ICT resilience, 72-hour incident reporting
- **Fragmentation:** US 50-state vs EU single market
- **Costs:** \$500K-2M initial + \$200K-1M annual

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Regulatory frameworks balance innovation with protection—compliance is a strategic capability for FinTechs.