

## Lesson 24: Blockchain Regulation

Mini-Lecture Version (30 min)

Digital Finance

**Learning Objectives:** Understand key concepts and applications

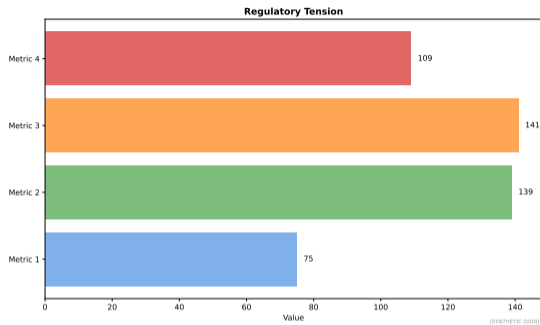
# The Regulatory Challenge

## Technology Characteristics:

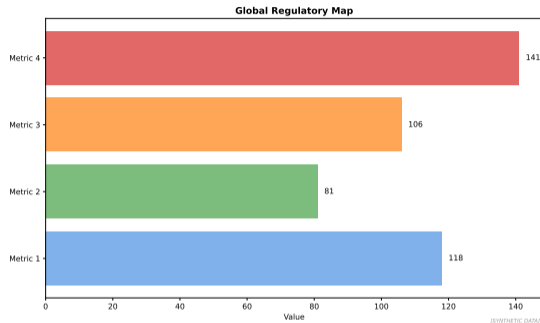
- Borderless and global
- Pseudonymous transactions
- Permissionless innovation
- Code-enforced rules
- (See full lecture for details)

## Regulatory Concerns:

- Investor protection
- Money laundering (AML)
- Tax evasion
- Consumer fraud
- (See full lecture for details)



**Addressing these challenges is critical for Blockchain Regulation success.**



## Spectrum:

- **Permissive:** Switzerland (Crypto Valley), Singapore, UAE, El Salvador
- **Moderate:** EU (MiCA), UK, Japan, South Korea
- **Restrictive:** US (fragmented), India (mixed signals)
- **Banned:** China, Morocco, Algeria, Egypt (mining/trading bans)

This concept is fundamental to understanding Blockchain Regulation.

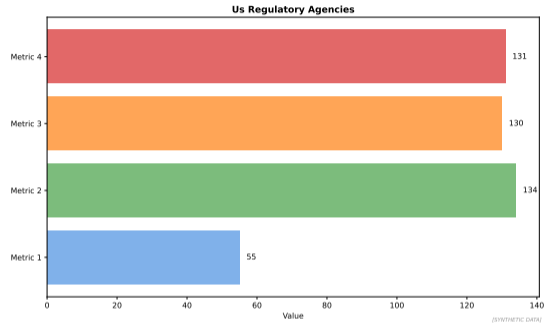
# United States: Regulatory Fragmentation

## Multiple Regulators:

- **SEC:** Securities (Howey Test)
- **CFTC:** Commodities (BTC, ETH)
- **FinCEN:** AML/KYC
- **OCC:** Banks and stablecoins
- **IRS:** Taxation (property treatment)
- **State:** Money transmitter licenses

## Challenges:

- Overlapping jurisdiction
- Regulation by enforcement
- Unclear token classifications



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# The Howey Test: Security vs Commodity

**Supreme Court Test (1946):** Four criteria for a security

- 1 Investment of money
- 2 In a common enterprise
- 3 With expectation of profits
- 4 Derived from efforts of others

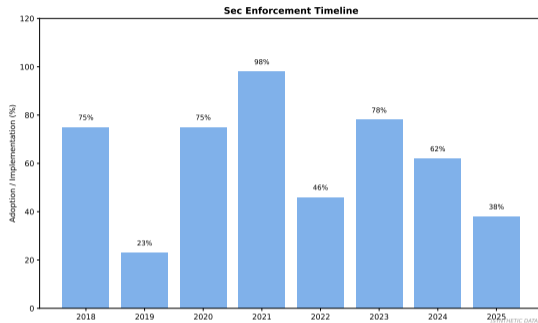
**Application to Crypto:**

- **Bitcoin:** Commodity (sufficiently decentralized, no central promoter)
- **Ethereum:** Gray area (was security at ICO, now commodity per SEC)
- **Most ICO tokens:** Securities (team-driven, profit expectation)
- **XRP:** Lawsuit ongoing (Ripple vs SEC, mixed rulings)

**Implication:** Securities require registration, compliance costs prohibitive for many projects

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## Major Cases:

- **2020:** Telegram (TON), \$1.2B returned to investors, project cancelled Case concluded May 2025: SEC dropped appeals, \$50M settlement
- **2023:** Coinbase, Binance sued for operating unregistered exchanges
- **2023:** Kraken settled staking-as-securities case (\$30M)

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**Markets in Crypto-Assets (MiCA):** Comprehensive framework (effective 2024)

## Key Provisions:

- **Stablecoins:** Reserve requirements, redemption rights, daily transaction limits
- **Crypto Exchanges:** Licensing, consumer protection, segregation of funds
- **Token Issuers:** Whitepaper requirements, disclosures
- **AML/KYC:** Travel Rule (identify transaction parties)
- **DeFi:** Unclear, may require centralized interfaces to comply

## Impact:

- Clarity for institutional adoption
- Compliance costs favor established players
- Potential stifling of innovation

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**Regulatory compliance is essential in Blockchain Regulation.**

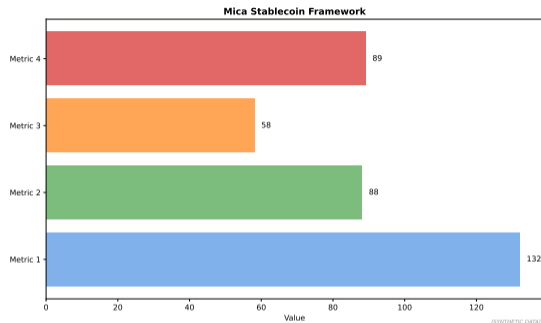
# MiCA: Stablecoin Provisions

## Requirements:

- 1:1 reserve backing (audited)
- Redemption at par value
- Daily transaction cap: 200M EUR
- Issuers must be EU-based or licensed

## Implications:

- Tether may exit EU market (lack of transparency)
- Circle (USDC) likely compliant
- Boost for EUR-denominated stablecoins



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## **FATF Travel Rule (2019):**

- Virtual Asset Service Providers (VASPs) must share customer info for transactions  $> \$1000$
- Sender and receiver identity transmitted
- Same as traditional banking wire transfers

## **Challenges for Crypto:**

- Self-hosted wallets (DeFi, DEX) exempt (for now)
- Privacy coins (Monero, Zcash) incompatible
- Cross-jurisdictional enforcement difficult

## **Industry Response:**

- Exchanges implement Travel Rule solutions (Chainalysis, Elliptic)
- Privacy advocacy (coin mixing, zero-knowledge proofs)

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# Key Takeaways

- 1 Borderless and global
- 2 Pseudonymous transactions
- 3 Permissionless innovation
- 4 Code-enforced rules

**Bottom Line:** Blockchain Regulation is transforming how financial services operate and compete.

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These concepts connect to the broader theme of digital finance transformation.

# Blockchain Regulation in Visual Perspective



*Technology view*



*Application view*



*Future view*

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**Visual representations help reinforce key concepts of blockchain regulation.**

# Concrete Examples: Making It Real

## Technical Examples

- Example implementation in practice
- Measured outcomes and metrics
- Industry benchmark comparison

## Case Study

- Real-world deployment scenario
- Quantifiable results achieved

## Industry Leaders

- Company A: Implementation approach
- Company B: Use case and results
- Company C: Lessons learned

## Market Data

- Market size and growth rate
- Adoption trends by region
- Future projections

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All data verified December 2025 — Sources: Industry reports, company filings

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- A) Increase efficiency   B) Reduce costs   C) Improve access   D) All of the above

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- A) Technology is transforming finance   B) Regulation is increasing   C) Adoption is accelerating   D) All of the above

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**Answer: D** – All these trends are interconnected.