

L45: Global Regulatory Landscape

Module G: Regulation & Future

Blockchain & Cryptocurrency Course

December 2025

Why Regulate Cryptocurrencies?

Regulatory Concerns

- **Money Laundering:** Anonymous transactions facilitate illicit finance
- **Terrorist Financing:** Funding illegal activities
- **Consumer Protection:** Scams, rug pulls, exchange failures
- **Market Manipulation:** Pump-and-dump schemes, wash trading
- **Tax Evasion:** Unreported capital gains
- **Systemic Risk:** Contagion to traditional finance

Tension: Innovation vs consumer protection vs financial stability

Industry Arguments for Clarity

- **Legitimacy:** Legal certainty attracts institutional capital
- **Innovation:** Clear rules enable compliant products
- **Consumer Trust:** Regulated exchanges reduce fraud risk
- **Financial Inclusion:** Regulated stablecoins for payments
- **Competition:** Level playing field with traditional finance

Hostile	Restrictive	Permissive
China (2021 ban) Algeria, Bangladesh Nepal, Morocco	India (30% tax) South Korea (strict KYC) Brazil (no DeFi clarity) Russia (payment ban) Turkey (payment ban)	Switzerland (clear framework) Singapore (licensing) UAE (crypto-friendly zones) Portugal (tax-friendly) El Salvador (legal tender)
Approach Outright ban Capital controls	Approach High compliance burden Uncertain legal status	Approach Tailored regulation Innovation sandboxes

Trend: Most jurisdictions moving from hostile/restrictive toward regulated permissiveness

- **No Unified Framework:** Multiple agencies with overlapping jurisdiction
- **Key Regulators:**
 - **SEC (Securities and Exchange Commission):** Securities regulation
 - **CFTC (Commodity Futures Trading Commission):** Commodities and derivatives
 - **FinCEN (Financial Crimes Enforcement Network):** AML/CTF
 - **OCC (Office of Comptroller of Currency):** Banking charters
 - **IRS (Internal Revenue Service):** Tax treatment
 - **State regulators:** Money transmitter licenses (e.g., NY BitLicense)
- **Uncertainty:** SEC vs CFTC jurisdiction over crypto tokens
- **Enforcement-by-lawsuit:** Regulation through enforcement actions

SEC Position

- Most tokens are **securities** (Howey Test)
- ICOs = unregistered securities offerings
- Exchanges must register as securities exchanges
- Recent enforcement: Ripple, Coinbase, Binance

Howey Test (investment contract):

- 1 Investment of money
- 2 Common enterprise
- 3 Expectation of profits
- 4 From efforts of others

CFTC Position

- Bitcoin and Ethereum are **commodities**
- Jurisdiction over crypto derivatives
- Fraud and manipulation enforcement
- Lighter regulatory touch

Congressional Debate:

- Multiple bills proposed (FIT21, DCCPA)
- Goal: Clarify SEC vs CFTC jurisdiction
- Status: Stalled in Congress (as of 2024)

- **Ripple Labs (2020-2023):** SEC sued for \$1.3B unregistered XRP sales
 - Court: XRP sales to institutions = securities, public sales = not securities
 - Partial victory for Ripple, appeals ongoing
- **Coinbase (2023):** SEC sued largest US exchange for operating unregistered exchange
- **Binance (2023):** SEC + CFTC sued for multiple violations, \$4B settlement with DOJ
- **Terraform Labs (2023):** SEC sued Do Kwon for \$40B UST/LUNA collapse fraud
- **FTX (2022):** Criminal fraud charges against Sam Bankman-Fried, convicted 2023

- **Pattern:** Regulation by enforcement, creates legal uncertainty

- **IRS Classification:** Cryptocurrency = *property*, not currency
- **Tax Implications:**
 - Every crypto-to-crypto trade is taxable event (capital gains)
 - Payment with crypto triggers gain/loss calculation
 - Mining income = ordinary income at fair market value
 - Staking rewards = ordinary income when received
- **Reporting Requirements:**
 - Form 8949 for capital gains/losses
 - Schedule 1 for mining/staking income
 - FBAR disclosure if foreign exchange holdings ≥10k
- **Infrastructure Bill (2021):** Expanded broker reporting requirements (delayed to 2026)
- **Compliance Challenge:** Tracking cost basis across thousands of transactions

- **MiCA (Markets in Crypto-Assets Regulation):** Comprehensive EU framework
- **Timeline:** Approved 2023, phased implementation 2024-2025
- **Scope:**
 - Crypto-asset service providers (CASPs)
 - Stablecoin issuers (e-money tokens, asset-referenced tokens)
 - NFTs excluded (unless fungible or fractionalized)
- **Key Requirements:**
 - Authorization and prudential requirements for CASPs
 - Capital requirements and custody standards
 - Market abuse prohibitions (insider trading, manipulation)
 - Consumer protection (disclosure, conflict of interest)
 - Stablecoin reserve requirements and redemption rights
- **Impact:** Single crypto regulatory framework across 27 EU countries

- **E-Money Tokens (EMTs):** Pegged to single fiat currency (e.g., USDC, USDT)
 - Issuers must be authorized credit institutions or e-money institutions
 - 1:1 reserve backing in segregated accounts
 - Redemption at par value at any time
- **Asset-Referenced Tokens (ARTs):** Pegged to basket or non-fiat asset
 - Stricter requirements (capital, governance, reserves)
 - Liquidity management and stress testing
- **Significant Tokens:** Daily transactions $\geq 1M$ or users $\geq 10M$
 - Enhanced supervision (EBA oversight)
 - Interoperability requirements
 - Limits on use as means of exchange (prevent systemic risk)
- **Algorithmic Stablecoins:** Effectively banned (post-Terra/LUNA collapse)

- **Singapore (MAS - Monetary Authority):**

- Payment Services Act (PSA): Licensing framework for exchanges
- Strict AML/CFT requirements
- Retail investor protections (e.g., leverage limits)
- Supportive of institutional DeFi pilots

- **Hong Kong (SFC - Securities and Futures Commission):**

- Mandatory licensing for crypto exchanges (2023)
- Retail access to approved tokens only
- Positioning as Asian crypto hub post-China ban

- **Japan (FSA - Financial Services Agency):**

- Early regulatory framework (2017 Payment Services Act)
- Strict custody and cybersecurity standards (post-Mt.Gox, Coincheck hacks)
- Conservative approach: Limited token approval list

- **2013-2017:** ICO boom in China
- **2017:** ICO ban, exchange closures
- **2021:** Complete ban on crypto transactions and mining
 - All crypto transactions deemed illegal
 - Mining banned (environmental concerns, capital outflow)
 - Exchanges and service providers prohibited
- **Rationale:**
 - Capital controls (prevent yuan outflow)
 - Financial stability (prevent speculation)
 - Energy consumption (carbon neutrality goals)
 - CBDC strategy (digital yuan monopoly)
- **Result:** Mining exodus to US, Kazakhstan, Russia; offshore trading persists via VPNs

- **Crypto Valley (Zug):** Global blockchain hub
- **Legal Framework:**
 - DLT Act (2021): Tailored regulation for digital assets
 - Token classification: Payment, Utility, Asset tokens
 - Securities law applies to asset tokens only
- **FINMA Guidance:** Clear regulatory treatment
 - Licensing categories (banks, securities dealers, DLT trading facilities)
 - AML/CFT compliance for exchanges
 - No blanket prohibition on specific activities
- **Advantages:**
 - Regulatory clarity attracts global crypto firms
 - Innovation-friendly environment
 - Strong rule of law and political stability

- **Bitcoin Law (September 2021):** First country to adopt Bitcoin as legal tender
- **Key Provisions:**
 - Bitcoin accepted for all payments (alongside USD)
 - Tax payments accepted in Bitcoin
 - No capital gains tax on Bitcoin
 - Merchants must accept Bitcoin (if technically able)
- **Implementation:**
 - Chivo Wallet: Government-provided Bitcoin wallet
 - \$30 BTC airdrop to citizens to encourage adoption
 - Bitcoin ATMs deployed nationwide
- **Results:** Mixed adoption, IMF concerns over fiscal risk, price volatility challenges
- **Geopolitical Experiment:** Other countries watching (Central African Republic briefly adopted, then reversed)

- **FATF (Financial Action Task Force):** Global AML/CFT standard setter
- **Travel Rule (FATF Recommendation 16):**
 - Apply to Virtual Asset Service Providers (VASPs)
 - Collect and transmit customer information for transactions $\geq 1,000$ EUR/USD
 - Originator name, address, account number
 - Beneficiary name, account number
- **Challenge:** Decentralized protocols (DeFi) have no intermediary
- **Implementation:**
 - Centralized exchanges: Implemented (e.g., Coinbase, Kraken)
 - Cross-border: Technical solutions (TRP, TRUST, Notabene)
 - Self-hosted wallets: Controversial (EU proposed ban on anonymous wallets)
- **Privacy vs Compliance Tension:** KYC requirements conflict with crypto ethos

- **FATF (Financial Action Task Force):**
 - Sets global AML/CFT standards
 - Updated guidance for virtual assets (2019, 2021)
 - Travel Rule enforcement
- **BIS (Bank for International Settlements):**
 - Research on CBDCs, stablecoins, crypto risks
 - Prudential treatment of crypto exposures for banks
- **FSB (Financial Stability Board):**
 - Monitors systemic risk from crypto
 - Recommendations on stablecoin regulation (post-Libra proposal)
 - Coordination of national regulatory approaches
- **Challenge:** Crypto is borderless, regulation is national
- **Regulatory Arbitrage:** Firms relocate to favorable jurisdictions

- **Problem:** Traditional regulation assumes intermediaries (banks, exchanges)
- **DeFi Reality:** Smart contracts, no central operator
- **Regulatory Questions:**
 - Who is liable for smart contract bugs or exploits?
 - How to enforce AML/KYC without custodian?
 - Are DeFi protocols securities, commodities, or something new?
 - Can anonymous developers be held accountable?
- **Enforcement Actions:**
 - Tornado Cash (2022): US Treasury sanctioned mixer protocol
 - Uniswap Labs: SEC Wells Notice for potential enforcement
 - Ooki DAO (2022): CFTC sued DAO itself as legal entity
- **Debate:** Code is speech (First Amendment) vs code is conduct (regulation)

- **Rapid Growth:** Stablecoin market cap \$150B+ (2024)
- **Use Cases:** Trading pairs, DeFi collateral, payments, remittances
- **Regulatory Concerns:**
 - **Run risk:** Bank-like runs if confidence lost (UST/LUNA collapse)
 - **Reserve quality:** Are reserves truly liquid and segregated? (Tether opacity)
 - **Systemic contagion:** Redemptions could destabilize money markets
 - **Payment system competition:** Threatens central bank monetary sovereignty
- **Proposed Frameworks:**
 - EU MiCA: Banking-like regulation for large stablecoins
 - US proposals: Bank charter requirement or OCC oversight
 - Singapore: MAS licensing with reserve and audit requirements

- **NFT Classification:**
 - Art NFTs: Generally exempt from securities regulation
 - Fractionalized NFTs: May be securities
 - Gaming NFTs: Unclear (utility vs investment)
- **Regulatory Gaps:**
 - Consumer protection (fake/stolen art)
 - Copyright and IP enforcement
 - Money laundering (high-value art trades)
 - Tax treatment (collectible vs property)
- **Play-to-Earn Gaming:**
 - Are in-game tokens securities?
 - Gambling regulation if random rewards (loot boxes)
 - Tax implications of earning crypto in games
- **Trend:** Regulators focusing on high-value financial NFTs first

- **Trend 1: Convergence:** Countries adopting similar frameworks (MiCA as template)
- **Trend 2: Stablecoin Focus:** Banking-like regulation for systemic stablecoins
- **Trend 3: DeFi Reckoning:** Regulatory clarity (or crackdown) coming
- **Trend 4: CBDC Competition:** Central banks competing with private stablecoins
- **Trend 5: Global Coordination:** FATF, FSB harmonizing standards
- **Trend 6: Enforcement First:** US regulation by lawsuit continues
- **Trend 7: Licensing Regimes:** Most jurisdictions requiring VASP licenses
- **Trend 8: Privacy Restrictions:** KYC/AML tightening, anonymous tools restricted

- **Uncertainty Remains:** Technology evolves faster than regulation

- **Regulatory Arbitrage:** Moving operations to favorable jurisdictions
- **Crypto-Friendly Jurisdictions:**
 - UAE (Dubai): Virtual Asset Regulatory Authority (VARA), no corporate tax
 - Cayman Islands: Popular for fund domiciles, light regulation
 - Malta: Early mover, “Blockchain Island” branding
 - Bermuda: Clear regulatory framework, insurance hub
- **Consequences:**
 - Talent and capital migrate to clear regulatory environments
 - Regulatory race to bottom (vs race to top for legitimacy)
 - Enforcement challenges (cross-border operations)
- **Countertrend:** Jurisdictions tightening (e.g., Binance ejected from multiple countries)

- **FTX Collapse (November 2022):** \$8B customer funds missing
- **Regulatory Failures:**
 - FTX US: Operated without proper state licenses
 - FTX International (Bahamas): Light oversight, commingling of funds
 - Alameda Research: Unregulated sister company used customer funds
 - Audits: Lack of proper financial audits (auditor was tiny firm)
- **Aftermath:**
 - Criminal charges against SBF (fraud, money laundering)
 - Renewed calls for exchange regulation
 - Proof-of-reserves movement (Merkle tree attestations)
 - Regulatory scrutiny of offshore exchanges
- **Lesson:** Self-regulation insufficient, need strong custody and audit requirements

- **January 10, 2024:** SEC approves 11 spot Bitcoin ETFs
 - First spot Bitcoin ETFs in US history (after decade of rejections)
 - Issuers: BlackRock (IBIT), Fidelity (FBTC), Grayscale (GBTC), others
 - Grayscale GBTC converted from trust to ETF
- **Impact:**
 - \$50B+ inflows in first year
 - Institutional access via traditional brokerage accounts
 - Bitcoin legitimized as investable asset class
 - Price catalyst: BTC reached new ATH ↗\$100k in late 2024
- **July 2024:** SEC approves spot Ethereum ETFs
 - Similar structure to Bitcoin ETFs
 - Staking not included (regulatory uncertainty)
- **Significance:** Major shift from SEC's historically hostile stance

- **Ripple (XRP) Final Resolution:**
 - August 2024: \$125M penalty (reduced from \$2B SEC request)
 - Programmatic sales to retail confirmed NOT securities
 - Institutional sales were securities violations
 - Major precedent for token classification
- **Coinbase Case Progress:**
 - Case ongoing through 2024
 - Key issue: Is staking a security?
 - Coinbase argues SEC overreach, no clear rules
- **Binance Settlement:**
 - November 2023: \$4.3B DOJ settlement
 - CZ (founder) resigned, pled guilty, served prison time
 - Binance.US operations severely limited
- **Terraform Labs:** Do Kwon extradited, civil penalties \$4.5B

- **Timeline Completed:**

- June 2024: Stablecoin provisions in force
- December 30, 2024: Full MiCA implementation
- All CASPs must be licensed to operate in EU

- **Practical Impact:**

- Tether (USDT) delisted from some EU exchanges (compliance issues)
- Circle (USDC) obtained e-money license, MiCA compliant
- Major exchanges obtained EU licenses (Coinbase, Kraken, Bitstamp)

- **Stablecoin Rules Active:**

- Reserve requirements enforced
- Daily transaction limits for non-EU stablecoins
- Algorithmic stablecoins effectively banned

- **Global Template:** Other jurisdictions studying MiCA as model

- **2024 Election Impact:**
 - Crypto emerged as political issue
 - Industry PACs spent \$100M+ on elections
 - Pro-crypto candidates elected to Congress
- **Trump Administration (2025):**
 - Promised to make US “crypto capital of the world”
 - SEC Chair Gensler resigned (replaced with crypto-friendly nominee)
 - Executive order on crypto policy coordination
 - Strategic Bitcoin Reserve proposal discussed
- **Legislative Outlook:**
 - FIT21 (Financial Innovation and Technology Act) revival
 - Stablecoin legislation priority
 - CFTC vs SEC jurisdiction clarity expected
- **Regulatory Reset:** Shift from enforcement to rulemaking approach

- **Global Status:**

- EU: MiCA fully operational, clear framework
- US: Transitioning to pro-crypto administration
- Asia: Hong Kong, Singapore competing for crypto hub status
- UK: Developing own framework post-Brexit

- **Key Trends:**

- Stablecoin regulation: Global priority
- DeFi: Still largely unregulated, guidance expected
- NFTs: Case-by-case treatment, no comprehensive rules
- Travel Rule: Broader implementation, compliance tools maturing

- **Remaining Challenges:**

- Cross-border coordination
- Privacy vs compliance balance
- Regulating truly decentralized protocols
- Keeping pace with technological innovation

- **Global regulatory landscape:** Highly fragmented, evolving rapidly
- **US:** Fragmented (SEC vs CFTC), regulation by enforcement
- **EU:** Comprehensive MiCA framework, stablecoin focus
- **Asia:** Diverse (Singapore/HK permissive, China ban, Japan conservative)
- **Switzerland:** Clear framework, crypto-friendly (Crypto Valley)
- **AML/CFT:** Travel Rule, KYC requirements tightening globally
- **DeFi challenge:** No intermediaries, enforcement difficult
- **Stablecoins:** Systemic risk, banking-like regulation emerging
- **Trend:** Convergence toward licensing regimes, global coordination
- **Tension:** Innovation vs consumer protection, privacy vs compliance