# ADVANCED ANALYTICAL CONSULTING GROUP

SESSION 2: WHO'S WATCHING THE CRYPTO BANK AND WHAT ABOUT THE CRYPTO DERIVATIVES?

PRODUCTS, EXCHANGES, REGULATORS, PENDING GOVERNMENT LEGISLATION AND ENFORCEMENT TRENDS

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#### **Topics**

- 1. Cryptocurrency Regulation
- 2. Cryptocurrency Products
- 3. Cryptocurrency Exchanges
- 4. Cryptocurrency Regulatory Enforcement and Litigation

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#### Crypto Regulators



**Treasury:** Responsible for flow of money

**IRS:** Collects income taxes



Federal Executive Departments



DOJ: Enforces the law, including prosecuting financial crimes

**G20:** World's top 20





IMF: Oversees each of world's economies



**Crypto Regulators** 



**SEC:** Regulates securities exchanges

Federal Agencies



**CFTC:** Regulates derivatives of tangible assets

**BIS:** Global conglomerate of central banks



Congress: Passes laws that apply to all states



**Legislatures** and Courts



**States:** Laws vary greatly by state



**Supreme Court:** Ultimate authority in

interpreting laws passed by Congress

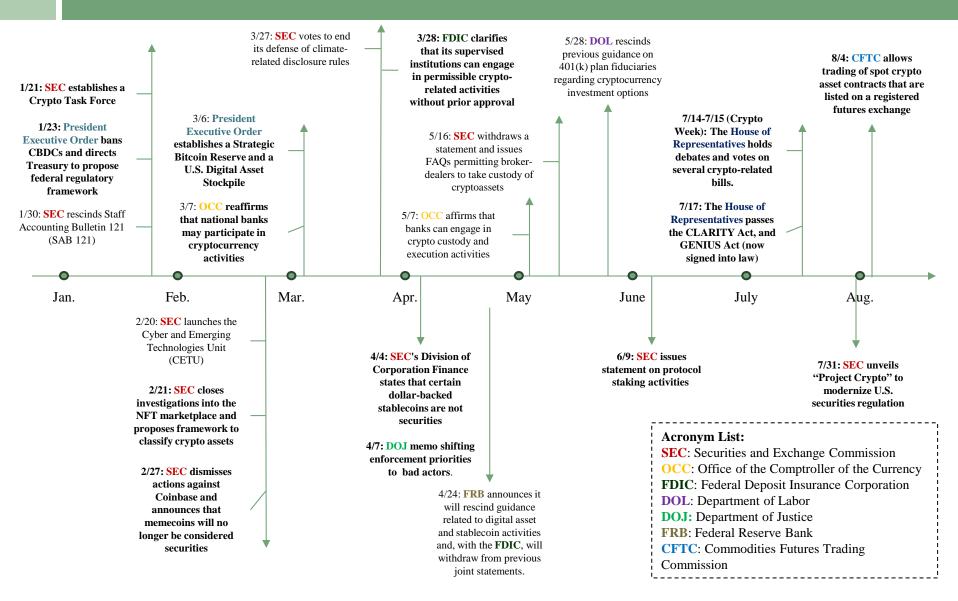


# U.S. vs. U.K. vs E.U. Crypto Regulation

| Aspect of Regulation                    | European Union<br>(MiCA)         | United Kingdom<br>(UK)  | United States (US)                                 | Other<br>Jurisdictions                             |
|---|----------------------------------|---|--|--|
| Regulatory<br>Framework                 | Customized regulatory framework  | Regulatory<br>equivalence under<br>FSMA                                     | Lack of federal-level regulation                   | Varied approaches<br>based on local<br>regulations |
| Primary Focus                           | Wide range of crypto-<br>assets  | Regulations will cover all crypto-assets, starting with payment stablecoins | Varied crypto-assets                               | Varied crypto-assets                               |
| Regulatory<br>Authority                 | European<br>Commission, ESMA     | Financial Conduct<br>Authority (FCA),<br>Bank of England                    | Securities and Exchange Commission (SEC)           | Country-specific authorities and regulatory        |
| Approach to Digital<br>Assets           | Comprehensive                    | Comprehensive   | Lack of clear federal regulation                   | Diverse approaches                                 |
| Ensuring Stability in<br>Crypto Markets | Focused on maintaining stability | Prioritizes market stability for stablecoins                                | Limited federal efforts to ensure market stability | Varied approaches                                  |
| Coordination with Other Jurisdictions   | International cooperation        | International cooperation   | Lack of federal coordination                       | Varies depending on jurisdictions                  |

Source: BlockReg Advisors

#### Key U.S. Crypto Regulatory Developments in 2025



# Key Recently-Passed & Pending Crypto Legislations

- ➤ **GENIUS Act** (**signed into law**): Establishes clear regulatory framework for issuance of "payment stablecoins":
  - Financial stability: Requires stablecoins be backed by high-quality assets
  - ➤ Cross-border parity: Ensures foreign issuers are subject to same rules as U.S issuers
  - ➤ **Regulatory clarity**: Establishes coherent framework for stablecoin market in U.S
- ➤ CLARITY Act (passed by House): Aims to clarify regulatory framework for digital assets, focusing on market structure. Defines digital assets and delineates SEC (permitted payment stablecoins) vs. CFTC (spot digital commodities) supervision.

**Source:** WilmerHale, July 18, 2025, What the GENIUS Act Means for Payment Stablecoin Issuers, Banks, and Custodians

#### Key Takeaways

- > Overall, new administration has taken a far more permissive approach to crypto-related regulation and enforcement:
  - The SEC has moved to ease its crypto-related regulations not expected to take action going forward unless pertaining to fraud.
  - Newly established Task Force is focusing on clarifying the regulatory framework around crypto assets.
- > Project Crypto is latest Commission-wide initiative to modernize securities regulation:
  - > SEC plans to offer clearer rules to classify crypto assets into categories such as digital commodities, stablecoins, and digital collectibles.
  - ➤ Initiative would also support the creation of tokenized securities under U.S. jurisdiction.
  - > SEC will allow broker-dealers to offer a full suite of crypto and traditional financial products under a single license, eliminating need for complex state and federal approvals.
  - > SEC will rewrite outdated rules to embrace on-chain infrastructure.

**Source:** Dechert, July 10, 2025, <u>Crypto Chronicles: Navigating Legal Developments in the UK and U.S.</u>; Bernstein says SEC's Project Crypto could rewrite the rules of Wall Street | The Block

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#### **Cryptocurrency Products**

#### Cryptocurrencies – The Range of Products

- 1. Spot Cryptocurrency
- 2. Cryptocurrency Exchange-Traded Funds (ETFs)
- 3. Cryptocurrency Futures (and Forwards)
- 4. Cryptocurrency Swaps
- 5. Cryptocurrency Options (Listed and OTC)
- 6. Cryptocurrency-Linked Structured Products

#### Types of Cryptocurrencies and Digital Assets

- "Coins" Cryptocurrencies are used to make/receive payments using its own blockchain and are their "native asset". Cryptocurrencies are meant to be used as currency.
- "Tokens" are built on an existing blockchain and are generally intended to represent an interest in an asset. Token types: asset, utility, reward, security, governance,...
- AltCoins: Any cryptocurrency that is not Bitcoin.
- StableCoins: Coins pegged to "real" assets (USD, Treasuries)
- Smart Contracts: self-sufficient, written in code, on network.
- Other Things: Meme Coins, Non-Fungible Tokens (NFTs), ...

#### Spot Cryptocurrency

Spot Cryptocurrency refers to the "underlying" cryptocurrency itself.

In the last webinar, Pavithra mentioned that there are currently around 25,000 different cryptocurrencies and digital assets.

Spot Cryptocurrency: Bitcoin, Ethereum, XRP, Tether (USDT),

BNB - Binance Coin USD, Solana, USDC,

DogeCoin, TRON, Cardano, Hyperliquid,

Stellar, Sui, Chainlink, Hedera, Bitcoin Cash,

Avalanche, Litecoin, UNUS SED LEO,

Shiba Inu, Toncoin, Etherna, Polkadot, ...

BUT... the "big four": Bitcoin [BTC]: (61.2%),

Ethereum [ETH]: (11.7%),

XRP (Ripple) [XRP]: (4.7%),

Tether [USDT]: (4.4%) account for over 80%.

(The next, BNB [Binance], is under 3%, with only two more over 1%.)

Cryptocurrency Quotes (from Bloomberg Television):

BITCOIN
ETHEREUM
LITECOIN
XRP
BIT. CASH or BITCOIN CASH
ETH. CL. or ETHEREUM CLASSIC

How can "BITCOIN" be up +0.82% and "BIT. CASH" be down -1.02%?

In Brazil: Cruzeiros, Cruzado, Novo Cruzado, Real



More recently, . . .

Cryptocurrency Quotes (from Bloomberg Television):

BITCOIN ETHEREUM LITECOIN XRP (RIPPLE)

BIT. CASH or BITCOIN CASH ETH. CL. or ETHEREUM CLASSIC

As the primary provider of electronic financial news, it is always good to see what Bloomberg is saying.



More recently, . . . Cryptocurrency Quotes

BITCOIN [XBT]
ETHEREUM [XET]
XRP (RIPPLE) [XRP]
LITECOIN [XLC]

Of course, Bloomberg provides an array of tools for crypto analysis (as do other providers of technical trading software and analytical tools).

Amazon: Over 30,000 crypto books. "Crypto New Rich" "How To Get Filthy Rich" "Cryptocurrency Rich Logbook" and "Cryptocurrency and NFT Investing for Teenagers"



Cryptocurrency Quotes <u>FX</u>

XBT (Bitcoin) USD

XET (Ethereum) GBP

XLC (LiteCoin) JPY

XRP (Ripple) XAU

XBN (Binance) XAG

XDH (Dash/Dilithium)

XEO (Xeory)

XTH (Xthereum/Ethereum Classic)

XMR (Monero)

XZC (Firo/formerly Zcoin)



#### And Just To Make It Worse, . . .

Crypto Exchanges, Trading Firms, Trading Platforms, Banks, . . .

For example, OANDA\* (which will let you trade Cryptocurrencies) refers to their Spot Bitcoin as BTCUSD.SPOT.US

Because Bitcoin is quoted around USD 120,000 (say, USD 114,270) the default quantity is 0.001 (i.e., one one-thousandth of a Bitcoin – e.g., USD 114.27) . . . though exchange multipliers may differ.

The symbology is not a settled matter, and there can be confusion based on things like forks (Bitcoin Cash is a spin-off or altcoin of Bitcoin) – though we've often seen superseded foreign currencies.

<sup>\* -</sup> OANDA is a well-known and well-respected foreign exchange trading platform and website which allows trading of Cryptocurrencies (via a joint OANDA-PAXOS Trust/Brokerage business).

#### Who Owns Spot Cryptocurrency

Spot crypto is the most common form of crypto ownership.

Crypto ownership estimates for the U.S. range from 2% to over 70%

All of the other cryptocurrency products (except maybe ETFs) can be thought of as "derivatives" (though a derivative is an industry term and may not be associated with any given product or contract).

In short, . . .

crypto futures, forwards, swaps, and options are all "derivatives".

These derivative products derive their value from the price of the "underlying" asset.

To put this into perspective,

there are around 4,300 to 6,000 listed U.S. ("spot") stocks. [Four to six times more "opportunities" for errors, failures, and abuse.]

#### Bitcoin: The Mother of All Cryptocurrencies

- ➤ Bitcoin is trading around USD 120,000.00 per 1 Bitcoin.
- $\triangleright$  How many Bitcoins are there? Currently (mid-2025),  $\approx 19,800,000$ Where did they come from? They were "mined".
- > Who decides whether there will be more Bitcoins (mined)? Satoshi Nakamoto (decided up front)
- > Is there a cap on the maximum number of Bitcoins? Yes Hard Cap at 21,000,000 Bitcoins
- ➤ People talk about inflationary and deflationary cryptocurrency. Inflationary cryptos have a continuously increasing supply over time. Deflationary cryptos have continuous decreasing supplies over time. Of course, for "store of value", growth greater or less than inflation? And sometimes "the rules" change (e.g., 2014 Dogecoin).

#### Does McDonald's Accept Bitcoin?

In Switzerland, . . . Yes!

In the U.S., . . .



#### What is Spot Cryptocurrency?

- Cryptocurrencies can serve as money (medium of exchange, unit of account, and store of value)
- ➤ Many vendors now accept cryptocurrency in payment (PayPal, Starbucks, Microsoft, McDonalds, Whole Foods, AT&T, Home Depot, Shopify)
- ➤ One can transact in the cryptocurrency directly (i.e., pay Bitcoin from your wallet or via your crypto exchange)
- > One can use crypto credit and debit cards . . . and even crypto gift cards

➤ What else is out there? Can I own Bitcoin without owning Bitcoin? (Can I gain an economic exposure to Bitcoin without a "wallet"?)

#### Cryptocurrency Exchange-Traded Funds [ETFs]

- > Can you buy an S&P 500? Not when I got into this business.
- ➤ But investors wanted an easy way to buy the S&P 500 (like stock).
- ➤ State Street Global Advisors created SPDRs or "Spiders" (SPY)
- Essentially, a fund/trust that holds, manages, and tracks an asset.
- ➤ August 2023: Bitcoin ETF: SEC No, Court of Appeals Yes October 2023: ProShares issued ETF based on value of Ethereum January 2024: BlackRock issued eleven (11) Spot Bitcoin ETFs May 2024: BlackRock issued first Spot Ethereum ETF
- ➤ Exchange Traded Funds are recognized as securities . . . and so are regulated by the Securities and Exchange Commission (SEC)
- https://etfdb.com/etfs/currency/cryptocurrency/

#### Cryptocurrency Exchange-Traded Funds [ETFs]

- More on Cryptocurrency ETFs and ETPs (Exchange Traded Products)
  Schwab Crypto Thematic ETF
  - iShares Bitcoin Trust
  - Franklin Bitcoin ETF
  - Bitwise Ethereum ETF
  - VanEck Digital Transformation ETF
- ➤ Bitwise 10 Crypto Index Fund [BIT] (USD 1.4 Billion AUM) [with 78.7% Bitcoin, 11.1% Ethereum, 5% XRP, 3% Solana, 0.8% Cardano, 0.4% SUI, 0.3% Chainlink 0.3%, Avalanche 0.3%, Litecoin 0.2%, and Polkadot 0.2%] morphing into an ETF.
- ➤ What about an ETF made up of Bitcoin Futures? Security or Derivative?

#### Cryptocurrency Futures

- ➤ Bitcoin Futures were first listed on the CBOE in 2017 (but de-listed)
- ➤ CME listed cash-settled Bitcoin futures in December 2017 and was followed by Ethereum futures (which trade on the Globex platform)
- ➤ Like any futures contract, involves a standardized contract size, margin (good faith deposit initial and variation), and maturity.
- ➤ In January 2024, CBOE (re-)introduced margined Bitcoin futures and margined Ethereum futures contracts (FBT and FET)
- ➤ Cryptocurrency Futures are (unquestionably) futures/derivatives and so regulated by the Commodity Futures Trading Commission (CFTC)
- https://www.cmegroup.com/markets/cryptocurrencies.html
- https://www.cboe.com/us/futures/cryptocurrency/financially-settled-futures/

#### Cryptocurrency (Bitcoin and Ethereum) Futures Specs

#### Cryptocurrency Futures on CME

The table below highlights the contract details for Bitcoin and ETH futures offered by the CME:

|                        | Bitcoin Futures  | ETH Futures  |
|------------------------|--|--|
| Contract Unit          | 5 bitcoin (as defined by the<br>CME CF Bitcoin Reference<br>Rate)              | 50 ether (as defined by the<br>CME CF Ether Reference<br>Rate)                 |
| Price Quote            | USD  | USD  |
| Trading Hours          | Sunday to Friday 5 p.m. to 4 p.m. CT   | Sunday to Friday 5 p.m. to 4 p.m. CT   |
| Product Code           | втс  | ЕТН  |
| Margin<br>Requirements | 50% cash of the contract<br>amount   | 60% cash of the contract<br>amount   |
| Listed<br>Contracts    | Contracts listed for six<br>consecutive months and<br>two additional Decembers | Contracts listed for six<br>consecutive months and<br>two additional Decembers |
| Settlement<br>Method   | Financially settled  | Financially settled  |

#### and XRP and Solana Futures



| <b>Financiall</b> | y Settled     |
|-------------------|---------------|
| Cryptocui         | rency Futures |

| PRODUCT                           | FINANCIALLY SETTLED BITCOIN FUTURES   | FINANCIALLY SETTLED ETHER FUTURES     |  |
|-----------------------------------|---|---------------------------------------|--|
| Contract Symbol                   | FBT   | FET                                   |  |
| Contract Size                     | 0.10 bitcoin  | 1 ether                               |  |
| Price Quotation                   | USD per 1 bitcoin   | USD per 1 ether                       |  |
| Minimum Price<br>Increment        | \$ 1.00 (\$0.10 per contract)   | \$ 0.10 (\$0.10 per contract)         |  |
| Settlement                        | Financially-settled. The final settlement value of an expiring FBT or FET futures contract shall be the value of the applicable Cboe Kaiko Rate Index, as determined by Kaiko, at 10:00 a.m. CT on the final settlement date of that FET or FBT futures contract. |                                       |  |
| Trading Hours                     | Type of Trading Hours   | Monday - Friday                       |  |
|                                   | Extended  | 5:00 p.m. (previous day) to 8:30 a.m. |  |
|                                   | Regular   | 8:30 a.m. to 3:00 p.m.                |  |
|                                   | Extended  | 3:00 p.m. to 4:00 p.m.                |  |
|                                   | All times are CT  |                                       |  |
| View full contract specifications | Download FBT Specifications   | Download FET Specifications           |  |
|                                   |   |                                       |  |

Settlement may be a point of dispute.

#### Cryptocurrency Futures

- ➤ How do these (CBOE Financially Settled Bitcoin Futures) work?
- ➤ If you wanted to buy 60 of the December 2025 FBT Bitcoin Futures, you might obtain a price quote of F = \$114,300 (per one Bitcoin), but a future covers only 1/10 of a coin. How much must you "pay"?
- > But you must post "margin". \$2,275 per future (though your FCM) may make you post margin 115% of that amount, if so required).
- Explain variation, leverage, and cash-settlement. Crypto margin: 50%.
- $\triangleright$  For one gold future contract: 100 Ounces GCU5 F = \$3,340.00 Margin: \$15,000
  - Can control \$334,000 of Gold for \$15,000 (over 20x leverage)

#### Cryptocurrency Swaps

- A Swap: I'll pay you SOFR + 120 bps and you pay me the S&P 500 returns (on some notional amount, scaled for frequency, over some time horizon).
- ➤ Who would do that? And why?
- A Swap: I'll pay you SOFR + 120 bps and you pay me the returns from Bitcoin (on some notional amount, scaled for frequency, over some time horizon).
- You can agree to exchange some number of Bitcoin for some number of Ethereum at a certain rate (over some time horizon). Referred to as "atomic swaps".
- > Typically done "Over The Counter" (or "OTC") supported by ISDA documentation.
- ➤ Not that big a part of the cryptocurrency market (yet).
- ➤ Inherently involve (sometimes significant) leverage.

#### Cryptocurrency Options (Calls and Puts)

- ➤ Are there listed (exchange-traded) options on spot cryptocurrency?
- > There are listed (exchange-traded) options on cryptocurrency ETFs
- ➤ There are listed (exchange-traded) options on cryptocurrency futures
- ➤ There are over-the-counter (OTC) options on cryptocurrencies
- The options typically trade where the underlying trades (e.g., crypto futures options trade on crypto futures exchanges).
- > Crypto options will allow investors to trade crypto "volatility".
- ➤ In the world of options, "Sellers are stayers." "Harvesting volatility."



#### Cryptocurrency-Linked Structured Products

- ➤ Often, Structured Products are "package deals" that afford tailored risk-return profiles (through the use of derivative "building blocks").
- > One could gain an exposure to a cryptocurrency or digital asset . . .
  - with limited downside (an embedded protective put)
  - with yield enhancement (an embedded short call option)
  - with a limited upside and a limited downside (i.e., a "collar")
  - with levered returns (two-times the exposure)
  - with a short exposure

These do not require an investor to own a cryptocurrency and can often be structured (financially engineered) to be tax-efficient.

#### Cryptocurrency Spot and Derivatives Regulators

- ➤ Internal Revenue Service declares cryptocurrencies to be "property" (not "currency") for U.S. Federal Income Tax purposes (capital gains)
- > For purposes of "issuance", SEC requires an ETF security prospectus.
- ➤ Where do Cryptocurrencies come from?

  Initial Coin Offering (ICO) and Initial Exchange Offering (IEO) and Security Token Offering (STO)

  Like stock IPOs?
- For purposes of "trading", the CFTC requires crypto futures margin (though if you trade via a brokerage account, your margin may differ)
- ➤ There are over-the-counter (OTC) options on cryptocurrencies?

  Legally-binding contracts. Who oversees/regulates these options?

#### What is the Cryptocurrency Products "Take Away"?

- ➤ Attorneys are not expected to be crypto product and/or market experts.
- ➤ Be aware that regulators, with the force of law, will lead enforcement.
- ➤ Of course, the U.S Federal Government wants to be in charge. U.S. Constitution: "The Congress shall have Power to coin Money."
- ➤ This is truly being sorted out RIGHT NOW! This Monday (8/4/25), CFTC approved trading Spot Crypto on registered futures exchanges.
- > CFTC (commodities/derivatives): fraud, market manipulation, bad trading practices, reporting violations, . . . (can be referred to the DoJ).
- > SEC (securities: stocks, bonds, investments): securities laws (DoJ too)
- > Exchanges have historically been SROs (Self-Regulating Organizations)
- > Stablecoins may still be subject to State Money Transmission Laws.
- Class Action Suits

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#### Cryptocurrency Exchanges

- ➤ What do Cryptocurrency Exchanges do?
- ➤ Mt. Gox (Japanese Crypto Exchange largest in the world [2011])
- > FTX (Sam Bankman-Fried's Crypto Exchange 2<sup>nd</sup> largest [2022])

#### Cryptocurrency Exchanges

- ➤ What do Cryptocurrency Exchanges do? Go out of business!
- ➤ Mt. Gox (Japanese Crypto Exchange largest in the world [2011])
- > FTX (Sam Bankman-Fried's Crypto Exchange 2<sup>nd</sup> largest [2022])
- Some Crypto Exchanges have been incredibly diligent in trying to satisfy ALL potential regulators (like "Coinbase" Exchange).
   Other Crypto Exchanges: Binance, Kraken, Gemini, Crypto.com, Bitstamp, Bitfinex, KuCoin, CoinCheck BitMart, Bybit, Upbit, UniSwap, . . .
- Crypto Exchanges and Brokerages could serve as custodians, provide for the borrowing and lending of cryptocurrencies, use crypto as margin, pay interest in crypto, . . . (Prime Broker)

  [Raises issues of rehypothecation, sufficient capital, stress testing,...]

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#### Key Crypto Regulatory and Enforcement Trends

- ➤ Enhanced AML/KYC Compliance: Focus on money laundering, terrorist financing, other financial crimes
- Focus on specific crypto products and services:

  ICOs (are they securities offerings?), crypto exchanges, fraud (Ponzi schemes, rug pulls, crypto investment scams)
- ➤ Increased regulatory review of DeFi and Stablecoins: Ensuring stability and transparency of stablecoins
- ➤ Banks exploring crypto services (stablecoin issuance, asset tokenization, etc., which require regulatory frameworks)
- > Focus on cybersecurity and data governance
- ➤ Global regulatory coordination
  (harmonizing regulations for cross-border crypto transactions)
- > Shift towards more balanced regulatory approach: Clearer guidance, innovation support, while ensuring consumer protection

#### Drivers of Different Litigation Across Crypto Products

- ➤ Classification uncertainty of different crypto products (currency vs. commodity vs. security) drives differing regulations
- ➤ Diverse product functionality:

  Facilitating transactions (currencies) vs. enabling access to services (utility tokens) vs. investment in a project (securities) contributes to differing legal analyses and potential litigation
- ➤ **Regulation by enforcement**: Crypto regulation has stemmed mostly from enforcement actions rather than via creation of clear legal rules upfront generates ambiguity and differing legal suits and outcomes depending on specific products and circumstances
- ➤ Jurisdictional complexity: Differing legal approaches and outcomes depending on location of involved parties and assets
- > Technological nuances of different products

#### Questions?

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#### **Next:** Crypto Crimes and Crypto Litigation

#### Session 3: So Many Crypto Crimes, So Little Time: Previous and Likely Future Crypto Litigation

Cryptocurrency litigation trends from fraud/misrepresentation, money laundering, theft, market manipulation, insider trading, tax evasion, and more.

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