

SECTION III

DIGITAL & CRYPTO ASSETS REGULATIONS

Since GSMI 1.0, we have seen an extraordinary growth of activity and innovation across the digital asset ecosystem, including in spot and derivatives markets, decentralized finance (DeFi), Non-Fungible Tokens (NFTs), Central Bank Digital Currencies (CBDCs), and adoption by financial institutions. This has heightened regulatory and policy attention globally, bringing with it new warnings, statements, proposals, and consultations on crypto-market activity.

DCAR assessed how these regulatory developments are shaping the current global digital asset landscape across eight categories. This year, we have focused on the G20 jurisdictions, as well as 31 countries with notable approaches.

Key categories are summarized below with the full report and text available [here](#)

REGULATION OF DIGITAL ASSETS

Warnings issued to consumers, investors, and businesses concerning digital assets.

REGULATION OF ILLICIT ACTIVITY & THE TRAVEL RULE

A look at illicit activity in crypto, and which jurisdictions have implemented the FATF Recommendation 16

MARKET SURVEILLANCE

The laws and guidance in place to ensure market integrity across digital assets

CONSUMER PROTECTION

Warnings issued to consumers, investors, and businesses concerning digital assets

INNOVATION: BARRIERS VS. ENCOURAGEMENT

The barriers to innovation, the regulatory sandboxes in place, and the innovative approaches to regulating digital assets

ADOPTION: INSTITUTIONAL PARTICIPATION

Regulations on banks interacting with digital assets and digital asset businesses, as well as pilot projects in the banking sector

CENTRAL BANK DIGITAL CURRENCIES (CBDC)

The active retail and wholesale CBDC projects

TAXATION

How regulation is being developed through taxation

REGULATION OF DIGITAL ASSETS

Approaches to digital asset regulation are split between those who have brought these assets under existing legislation, some with opt-in regimes, and those who have created new frameworks designed specifically for virtual asset service providers (VASPs). As a result of fragmented and unclear approaches, industry leaders have ranked a lack of regulatory clarity as one of the top challenges that their businesses face.

On 24 September 2020, following a comprehensive consultation, the European Commission published its proposed Markets in Crypto Assets Regulation (MiCA).⁻¹ To date, this is the most comprehensive framework for digital assets, proposing a harmonized and mandatory regime across the entire European Economic Area (EEA) that would replace existing national frameworks and allow cryptoasset issuers and VASPs to offer their services across the Single Market.

The increase in regulatory and policy attention has not necessarily been followed by concrete actions. Many public consultations have been issued in 2021, including from the FATF,² the UK HM Treasury (HMT),³ the Bank of International Settlements (BIS),⁴ and Dubai Financial Services Authority.⁵ A clear focus area for these consultations have been stablecoins, with special attention to consumer protection and monetary stability. MiCA includes substantial coverage of stablecoins.⁶ The UK HMT consultation regarding digital financial market infrastructure similarly focuses on stablecoins. This keen focus is reflected in the acceleration of many CBDC programs globally.

Other jurisdictions have issued blanket bans on cryptocurrency. Qatar has issued a ban on cryptocurrencies,⁷ citing price volatility, the possibility of financial crimes, and lack of central government support. The UK FCA ban on retail access to crypto derivatives became law in January of this year.⁸ and there is talk of “tough love” for the crypto sector from the Governor of the Bank of England. On September 24, 2021, China issued a blanket ban on cryptocurrency trading,⁹ declaring all forms of digital asset transactions and financing as illegal activities that are strictly prohibited due to the risks to consumers.

In the U.S., SEC Chairman Gary Gensler has testified multiple times that the cryptocurrency sector needs stronger investor protection,¹⁰ particularly in the instance of platforms that allow investors to borrow against cryptocurrencies. Chairman Gensler has told lawmakers that investor protection rules should apply to crypto exchanges,¹¹ and said that the SEC will regulate cryptocurrency markets to the maximum extent possible using its existing authority,¹² while asking for more scope and resources for the SEC to oversee the sector.¹³

DECENTRALIZED FINANCE (DEFI)

Additionally, the growth of DeFi caught many policy makers and regulators off guard, with the total value locked (TVL) in the global DeFi ecosystem rising from \$5 billion in August 2020 to \$80 billion in August 2021.¹⁴ In response, IOSCO organized a private call earlier this year with some DeFi market leaders and included other regulators. CFTC Commissioner Dan Berkovitz has indicated that many DeFi apps could be illegal,¹⁵ and SEC Chairman Gensler is concerned about protection for retail customers and has questioned the level of “decentralization” of DeFi, citing concerns about the nature of financial incentives of some of the networks. Chairman Gensler has kicked off an investigation into the DeFi industry using a software analytics firm to analyze industry transactions.¹⁶ This will remain a top emerging priority for regulators in the following year.

REGULATION OF ILLICIT ACTIVITY AND THE TRAVEL RULE

The increase in crypto activity has come with an increase in attention to the apparent risks of money laundering and terrorist financing activity across digital asset markets. However, market analysts estimate there was a decrease in illicit activity — from 1.1 percent of total market activity in 2019 to 0.34 percent in 2020¹⁷ — while market activity tripled in the same period.

Nevertheless, regulators and central banks have issued statements warning of the risks of illicit activity. In January 2021, U.S. Secretary of the Treasury Janet Yellen stated that cryptocurrencies were being used “mainly for illicit financing.”¹⁸

THE TRAVEL RULE

The FATF published updated guidance for virtual assets (VAs) and VASPs in October 2021.¹⁹ For the FATF guidelines to function effectively, there needs to be complete adoption to ensure that there are no regulatory gaps. Though it has been noted that the industry has made considerable efforts to develop and implement solutions in preparation for Travel Rule compliance, there are still concerns that only 58 out of 128 reporting jurisdictions have implemented the recommendations into their legislation.²⁰ A further 26 jurisdictions have reported that they are in the process of implementing the recommendations.

Of the 58 jurisdictions, 52 reported that they have implemented regimes that permit VASPs, while six jurisdictions have prohibited them. 31 jurisdictions have established registration regimes for VASPs, while 17 have established licensing regimes and a further four have implemented regimes with both licensing and registration.²¹ The registration requirements for VASPs seem to be a challenge globally, with many regulators approving only a handful of VASPs despite having implemented these regimes.

The FATF monitors countries to ensure they have fully and effectively implemented the recommendations, and to hold countries accountable who do not comply. Since 2000, the FATF has maintained a blacklist and a greylist of non-compliant nations that FATF members believe to be uncooperative with other jurisdictions in international efforts against money laundering.²²

IMPLEMENTATION OF THE TRAVEL RULE

Evidence on the status of Travel Rule implementation for VASPs in the following jurisdictions is based on the FATF's 4th Round Ratings Document.²³ The FATF's reviews are done periodically. Some jurisdictions' last reviews were before the guidance on VASP was issued. Where this is the case, further evidence has been provided to bring clarity to the status of the jurisdiction's progress.

Australia	2018 MER: COMPLIANT	On May 25th, 2021, the CEO of AU.S.TRAC announced that talks are underway to decide if the agency should implement the FATF Travel Rule for crypto asset exchanges. In August 2021, the Australian Department of Home Affairs said it agrees with submissions from industry that the government currently does not have the technological capability for implementing a travel rule for cryptocurrencies. ²⁴
Bahrain	2018 MER: LARGELY COMPLIANT	In Feb 2019, the Central Bank of Bahrain introduced new legislation, including rules for licensing, governance, minimum capital, control environment, risk management, and AML/CFT. It is unclear if these meet FATF's R16 requirements for VASPs. ²⁵
Brazil	NON- COMPLIANT	Unclear
Canada	2021 MER: LARGELY COMPLIANT	Canadian VASPs are expected to comply with Travel Rule guidance as of June 1, 2021. Under the new rules, Money Services Businesses (MSBs) and foreign MSBs are required to identify clients from which they are receiving the virtual currency equivalent of \$10,000 CAD or greater. The transfer, exchange, or remittance of virtual currency equivalent to \$1,000 or greater will likewise trigger KYC verification requirements. ²⁶
China	2020 MER: PARTIALLY COMPLIANT	China was partially compliant with R16; it has recently banned all transactions related to cryptocurrencies. ²⁷
El Salvador	UNCLEAR	Unclear
European Union	MANDATED	The Crypto Travel Rule is mandated in the European Union as of June 20, 2021. ²⁸ The European Commission published a proposal to regulate information accompanying transfers of funds and certain crypto assets, which called for consistency with the FATF Travel Rule.

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Germany	MANDATED	Germany mandated the Travel Rule on May 26th, 2021, the Federal Ministry of Finance (BMF) released a draft bill, Crypto Securities Transfer Regulation (German: KryptoTransferV), which mandated the Travel Rule. ³¹ The Crypto Travel Rule will be mandated in Germany by the end of 2023, once the German Federal Ministry of Finance approves the ordinance. Minimum threshold for the applying this rule will be E.U.R 1,000
Gibraltar	2019 MER: COMPLIANT	Though Gibraltar's last MER was in 2019, in March 2021 the government published the Proceeds of Crime Act 2015 (Transfer of Virtual Assets) Regulations 2021 (Transfer of Virtual Assets Regulations). ³² These regulations implement the Travel Rule and introduce new terms such as 'virtual asset service provider', 'virtual asset transfer' and 'virtual asset account'. The rule applies to transactions equal to or above €1,000.
Hong Kong	2019 MER: LARGELY COMPLIANT	The framework proposed by the Securities and Futures Commission (SFC) will extend Hong Kong's traditional AML obligations for wire transfers to all VASPs operating in Hong Kong. ³³ If passed, fund transfers above \$8,000 HKD will require the originating institution to send information that would comply with the Travel Rule. The final proposal for this framework is set to be introduced to the Legislative Council in 2021.
Israel	2018 MER: PARTIALLY COMPLIANT	While Israel applies the basic requirements for originator and beneficiary requirements for cross-border transfers, Israel otherwise relies on general Customer Due Diligence (CDD) obligations instead of providing specific requirements for wire transfers. Particularly, MSBs whose business model often entails the provision of wire transfers are not subject to specific obligations. ³⁴
Japan	2021 MER: LARGELY COMPLIANT	The Financial Services Agency (FSA) will enforce the travel rule in the crypto industry effective April 2022. ³⁵
South Korea	2020 MER: LARGELY COMPLIANT	Korea's amended Act on Reporting and Use of Specific Financial Transactions requires VASPs to register an authorized real-name bank account and report it to the Financial Intelligence Unit (FIU). ³⁶ In addition, each Korean VASP will have to apply for an information security certificate that requires them to first fulfill new regulatory requirements, specifically implementing a suitable technical travel rule solution.
Singapore	2019 MER: COMPLIANT	The Monetary Authority of Singapore (MAS) covers the Travel Rule in paragraph 13 of Notice PSN02. This requires VASPs to prove ownership of non-custodial wallets. The minimum threshold is not specified, but transactions under \$1,500 SGD have a reduced set of requirements. The act came into effect January 28, 2020. ³⁷

South Africa	UNCLEAR	The Intergovernmental Fintech Working Group (IFWG) introduced a policy paper for the crypto industry on April 14, 2020. ³⁸ It states that crypto businesses must comply with the Travel Rule, but it does not specify a transaction threshold. The paper estimates that it will take 6-9 months for local regulators to implement these guidelines. It introduces the term Crypto Asset Service Provider (CASP) as a new class of regulated institutions that aligns with the FATF VASP definition. CASPs are required to comply with FATF's AML/CFT measures like FATF's Recommendation 16 on the Travel Rule.
Switzerland	2020 MER: LARGELY COMPLIANT	The Crypto Travel Rule went into effect on January 1, 2020. ³⁹ It requires VASPs to implement the travel rule for transaction amounts above 1,000 CHF and prove ownership of non-custodial wallets. The minimum threshold was originally set at 5,000 CHF, but this was lowered to 1,000 CHF in February 2020.
Thailand	2021 MER: LARGELY COMPLIANT	Thailand has largely fulfilled the requirements for accurate originator and beneficiary information accompanying cross-border wire transfers, and explicit provisions for wire transfers below 50,000 THB (\$1,000 U.S.D). However, there are still deficiencies, such as retaining originator and beneficiary information with all cross-border wire transfers. ⁴⁰
Turkey	2019 MER: LARGELY COMPLIANT	In its 2019 Mutual Evaluation Report, the FATF determined that Turkey is largely compliant with the travel rule. ⁴¹ There are some minor gaps regarding lack of explicit requirements for VASPs to consider information on both originator and beneficiary sides, but FIs must verify the identity of customers when the amount of a single transaction or the total amount of linked transactions in wire transfers is greater than 2,000 TRY.
United Arab Emirates	2020 MER: COMPLIANT	In Feb 2020, the Financial Services Regulatory Authority (FSRA) of Abu Dhabi Global Market (ADGM) announced the enactment of various amendments to the FSRA's regulations and rules concerning the authorization and supervision of virtual asset-related activities within ADGM. The key amendments include changing the terminology of "Crypto Asset" to "Virtual Asset", to be aligned with the terminology used by the Financial Action Task Force and moving the applicable regulations and rules from a bespoke category of "Operating a Crypto Asset Business", to their respective underlying Regulated Activities (e.g. Providing Custody; and Operating a Multilateral Trading Facility, Dealing in Investments, etc.). ⁴²
United Kingdom	2018 MER: COMPLIANT	On July 22, 2021, HM Treasury released Amendments to the Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 Statutory Instrument 2022, which included a chapter on the transfers of crypto assets. This will be an update to the Money Laundering Regulations, will include an unspecified grace period for compliance solution integration, and proposes that full Travel Rule data transfer requirements will apply to all VASP-to-VASP transfers over £1,000. ⁴³
United States of America	2020 MER: PARTIALLY COMPLIANT	The Travel Rule has already been implemented in the U.S. but was seldom enforced, although it has been refocused on since 2020 with the introduction of a proposed rule change that would dramatically reduce the transfer amount that would trigger collection of data. ⁴⁴

MARKET SURVEILLANCE

Market manipulation continues to be a top concern for regulators. Most upcoming licensing regimes emphasize the need for demonstrably intentional, comprehensive risk programs that automate and unify transaction monitoring and market surveillance. In early 2020, Hong Kong,⁴⁵ Singapore,⁴⁶ Japan,⁴⁷ and Indonesia⁴⁸ implemented licensing regimes which had strict trade monitoring requirements.

Regulatory frameworks in development across the E.U., Hong Kong, and Singapore are expected to include requirements for specialized third party-provided surveillance systems. The E.U.'s proposed MiCA framework would aim for continent-wide digital asset risk monitoring requirements.⁴⁹

CONSUMER PROTECTION

The increase in activity across crypto markets has seen many regulators express concerns over consumer risks associated with digital assets. In 2021, the India Reserve Bank,⁵⁰ Saudi Arabia,⁵¹ the UK's Financial Conduct Authority,⁵² Australian Securities and Investment Commission,⁵³ Bank of Ireland,⁵⁴ and the European Supervisory Authority⁵⁵ were among the many regulatory bodies to issue or renew previous warnings against consumer risks of trading digital assets.

China named consumer protection as the main reason for its ban on all virtual currency-related business activity.⁵⁶ Although they have issued similar warnings in the past, there is a consensus that this ban will be followed with stricter enforcement. The announcement has already had an impact on the industry: as of September 2021, leading exchange Huobi has announced it will discontinue service for mainland users.⁵⁷ Users of OTC services also appear to be leaving the market, with stablecoin issuer Tether breaking its peg against RMB in the aftermath of the announcement, suggesting heavy outflows.⁵⁸

DeFi has exposed further issues in consumer protection, as evinced by large exploits of Poly

Network (\$611 million U.S.D) and Compound (\$147 million U.S.D), and many other, smaller exploits. Consumers may be exposed to a variety of risks, including smart contract risks, scams (i.e., "rug pulls"), and blockchain failure risks. The non-custodial nature of DeFi (and crypto generally) means that users can choose their crypto wallet; this presents new risks, as users may be unaware of the implications of their choices. Regulators, including the FATF, have expressed concerns in addressing these risks across P2P platforms.⁶⁰

INNOVATION: BARRIERS VS ENCOURAGEMENT

The focus of this section is two-fold: Firstly, the bid for protection of consumers and market integrity may create barriers to innovation in the industry. Secondly, it is worth noting the jurisdictions that have had innovative approaches towards the regulation itself. Hong Kong's voluntary opt-in registration scheme⁶¹ has been relatively efficient, demonstrated by the fact that it is a popular jurisdiction for service providers. A more unorthodox approach towards cryptocurrency innovation was taken by El Salvador, which was the first country to adopt Bitcoin.⁶² Brazil's legislature recently approved the draft of Bill 2.303 / 15, which seeks to regulate digital currencies; there is also a proposal to update the draft bill and give Bitcoin legal status as a "payment currency" in the country.⁶³

In 2021, the Central Bank of Argentina took a novel approach towards innovation by asking domestic banks to forward them information about their customers who perform any other kind of crypto transactions.⁶⁴ The purpose of the measure is to provide further information to evaluate whether the crypto market needs further regulation. Elsewhere, regulators have provided sandboxes to encourage innovation.

JURISDICTIONS THAT HAVE REGULATORY SANDBOXES

Bahrain	The Regulatory Sandbox is a virtual space for both CBB-licensed financial institutions and other firms to test their technology-based innovative solutions relevant to FinTech or the financial sector in general. The Sandbox will last up to nine months with a maximum extension of three months. ⁶⁵
Brazil	In 2020, the Securities Commission launched its Regulatory Sandbox Framework with the Central Bank and the Private Insurance Superintendence (SU.S.EP), which is expected to give regulatory waivers for innovative projects testing new technologies in the capital and financial markets infrastructure. ⁶⁶
Canada	Launched a securities law regulatory sandbox for fintech businesses in 2017. ⁶⁷
Caribbean	In 2018, the Financial Services Commission and Central Bank launched a regulatory sandbox for the financial services sector. The government then extended its regulatory sandbox to include blockchain and crypto companies. ⁶⁸
European Union	The E.U. launched a sandbox-like regulatory regime for the issuance of DLT-based security tokens in September 2020. ⁶⁹
Israel	A regulatory sandbox was proposed in July 2020 that will give Israeli financial technology startups an environment to experiment with products and services. ⁷⁰
Japan	In June 2018, the government introduced a sandbox regime to accelerate the introduction of new business models and innovative technologies. Organizations and companies, both domestic and foreign, can apply to experiment with new technologies such as blockchain, artificial intelligence, and Internet of Things in fields such as financial services, healthcare, and transportation. ⁷¹
Mexico	The Financial Technology Institutions Law created a regulatory sandbox for startups, which allows them to operate for two years with a temporary license without meeting all regulatory requirements. CNBV issued its first license on January 22, 2020, to a cryptocurrency market, and as of February 2020, at least 85 entities had filed applications. ⁷²
Singapore	Singapore created a regulatory sandbox to help firms receive Capital Markets Services Licenses. ⁷³
South Korea	There are a series of sandboxes in different municipal ordinances around South Korea, including BU.S.n. ⁷⁴
Switzerland	Launched a regulatory sandbox in 2017. ⁷⁵
Thailand	The Bank of Thailand launched a sandbox under regulatory guidelines introduced in 2019. The regulatory sandbox allows financial service providers to test their financial services that incorporate new technologies and fintech innovations. In addition, the regulatory sandbox encourages financial service providers to cooperate with one another in the development of fintech innovations and new technologies. ⁷⁶
United Arab Emirates	The Abu Dhabi Global Market launched a sandbox in 2018. The ADGM digital sandbox provides a marketplace for open collaboration between FIs, FinTech firms, and regulators to facilitate testing and adoption of innovative digital financial products and services that can benefit the industry. ⁷⁷

ADOPTION: INSTITUTIONAL PARTICIPATION

This year saw a considerable increase in institutional activity in digital assets. Fidelity Digital Assets' report showed that U.S. and European interest in digital asset investment products increased by 12 percentage points year-on-year, with 84 percent of surveyed investors interested in purchasing institutional investment products that hold digital assets.⁷⁸

Within Europe, there is a concern that MiCA favors incumbents over new market entrants. For example, existing providers with MiFID licenses can provide cryptoasset services, provided they comply with the operational requirements of MiCA; credit institutions that comply with the Capital Requirements Regulation will not have to apply for authorization under MiCA;⁷⁹ and cryptoasset service providers are required to be authorized as a payment institution under PSD2 in order to make a payment. These requirements operate on the assumption that traditional market participants are in the best position to manage risk.

TAXATION

An emerging trend across jurisdictions is market guidance and legislation occurring through taxation, rather than through direct regulation. Jurisdictions around the world continue to diverge in their tax approaches to cryptocurrency. India has announced plans to tax cryptocurrency,⁸⁰ while South Korea may further delay its law to tax cryptocurrency.⁸¹

Most jurisdictions treat cryptoassets as non-currencies for tax purposes, which means that transfers of cryptoassets can result in tax liability in many jurisdictions. With bitcoin reaching an all-time high price in 2021,⁸² tax authorities are trying to ensure that they can collect any taxes that are due and are increasingly focused on information reporting by exchanges and other VASPs.

In the U.S., the Internal Revenue Service (IRS) has the authority to collect information from brokers regarding transactions they effectuate on behalf of customers.⁸³ Although the IRS has been working on regulations to extend

broker reporting to crypto asset exchanges, the U.S. Congress has passed a law to expand the definition of broker to "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person."⁸⁴ Industry participants are concerned that the language could be applied to participants in the ecosystem that are not acting as traditional brokers and do not have insight into the underlying transactions, such as miners, stakers, providers of hardware/software wallets, or developers of digital assets or protocols.

Similarly, the E.U. has been working on its eighth update of the Directive on Administrative Cooperation (DAC8),⁸⁵ which would expand the collection and exchange of information to include transactions involving crypto assets. The OECD is working on proposals for reporting and exchange of information with respect to crypto assets.⁸⁶ It is unclear how these developing information reporting regimes will apply to decentralized protocols.

SHARIAH LAW

The topic of Sharia compliant products and services in the context of cryptocurrencies is growing and warrants further development into 2022. For example, Rain is the first cryptocurrency exchange in Bahrain to graduate from the regulator's sandbox and apply for a license and be compliant with Sharia law. The Shariah Compliance Certificate is issued by the Shariah Compliance Body, licensed by the Central Bank of Bahrain to be a Shariah consulting company, and authorized to issue Shariah compliance certificates.⁸⁷

LOOKING AHEAD

As the digital and crypto assets markets continue to grow, additional areas of research and mapping should include NFTs, DAOs, social tokens, and the metaverse. As these markets become simultaneously more developed and more complex, novel legal and regulatory issues will arise. It is critical that stakeholders, regulators, and legislators maintain an understanding of new developments, and thus GSMI 3.0 will likely address some of the aforementioned areas of focus.