Cryptopia:
Regulation & Crypto on a Cliff Edge

CUBE

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01 Executive summary

This report is the second in a series of CUBE Industry Data reports, which leverages CUBE's proprietary inventory of standardized regulatory data to draw meaningful insights from global regulatory activity.

Cryptocurrency is a topic that has been dominating financial media for many months now. What started out as a relatively fringe currency has now been placed high on the agendas of regulators around the world. According to Pew Research Center survey 16% of Americans say that they have invested in or traded in cryptocurrency, while according to the Bank of England the current market cap estimations value crypto at $1.7 trillion, accounting for around 0.4% of global financial assets.

For many, cryptocurrencies and the technology that support them raise many questions, with little certainty in sight. This is also true of regulation. In this report, we hope to bring some clarity to the regulatory landscape, by scanning the horizon of regulation to come and exploring what, and how, a regulatory utopia for crypto (or cryptopia) could be achieved.

Definitions for crypto, as well as associated technology and assets, are often varied. This is one of the many reasons that regulatory clarity is currently out of reach. For the avoidance of doubt, within this report we use cryptocurrency as a catch-all phrase to describe decentralized, digital currency that only exists online.

In collecting the data for this report, we spoke to crypto experts to collate a list of ontological concepts, which we then ran across our proprietary regulatory inventory with a view to understanding what topics Issuing Bodies are focused on and how they are prioritizing them.

Post-2018 regulatory Issuances were few and far between. Over the last four years, we have seen a 7,436% uplift in crypto-related regulatory messaging. 2022 looks to be the busiest year yet, with over 4,666 Issuances published in the first six months alone.

As society and traditional financial services move towards welcoming cryptocurrencies into the mainstream, regulators are acting fast to create new regulations or broaden existing perimeters to protect consumers and the wider economy. As the participation of investors increases for cryptocurrency, so too do the risks that market volatility for crypto could have a knock-on effect for the global economy. It is fast becoming a financial stability risk.

This report shows that regulators are acutely aware of the risks that crypto presents, with Europe and North America being the most advanced in their regulatory Issuances. North America has published 51% of all crypto-related Issuances, with Europe accounting for 32%.

Unsurprisingly, the US Securities and Exchange Commission (SEC) and the UK Financial Conduct Authority (FCA) have been among the most active in publishing regulatory Issuances for crypto-related concepts. But interestingly, the Ukrainian Government has been among the most active to publish in-force regulation and obligations for crypto. This proves a fascinating use case for the benefits of non-traditional finance in a disrupted financial market.

Looking ahead, regulators face a universal challenge to line up a regulatory system that manages the risks of cryptocurrency on a global scale. It looks like they're starting with stablecoins and scaling-up, but without global cooperation there is uncertainty as to whether any regulatory regime will hold.

Key Terms

RegBook®	In-force regulation, rules, legislation etc.
RegInsight®	Regulatory content which is not in force e.g. blogs, speeches, consultations
Issuing Body	A regulator, government or other organization that publishes content for the consideration of financial institutions
Issuance	Published content by Issuing Bodies - both RegBooks and RegInsights that concerns the operation of financial institutions
Issuance Type	The category of Issuance published by the Issuing Body. Examples of Issuance Types include blogs, speeches, consultations, regulations, legislation etc.

02 Key Findings

Regulatory Issuances for crypto are rising sharply

131
in 2018

287
in 2019

745
in 2020

9,872
in 2021

4,666
in 2022
(Up to April 2022)

Regulators are thinking big-picture for crypto

Virtual and cryptocurrencies is the most referenced regulatory concept
9,419 Issuances

Only **677** of crypto-related Issuances refer to individual coins

Discussions around crypto and sustainability make up less than
0.1%
of regulatory Issuances

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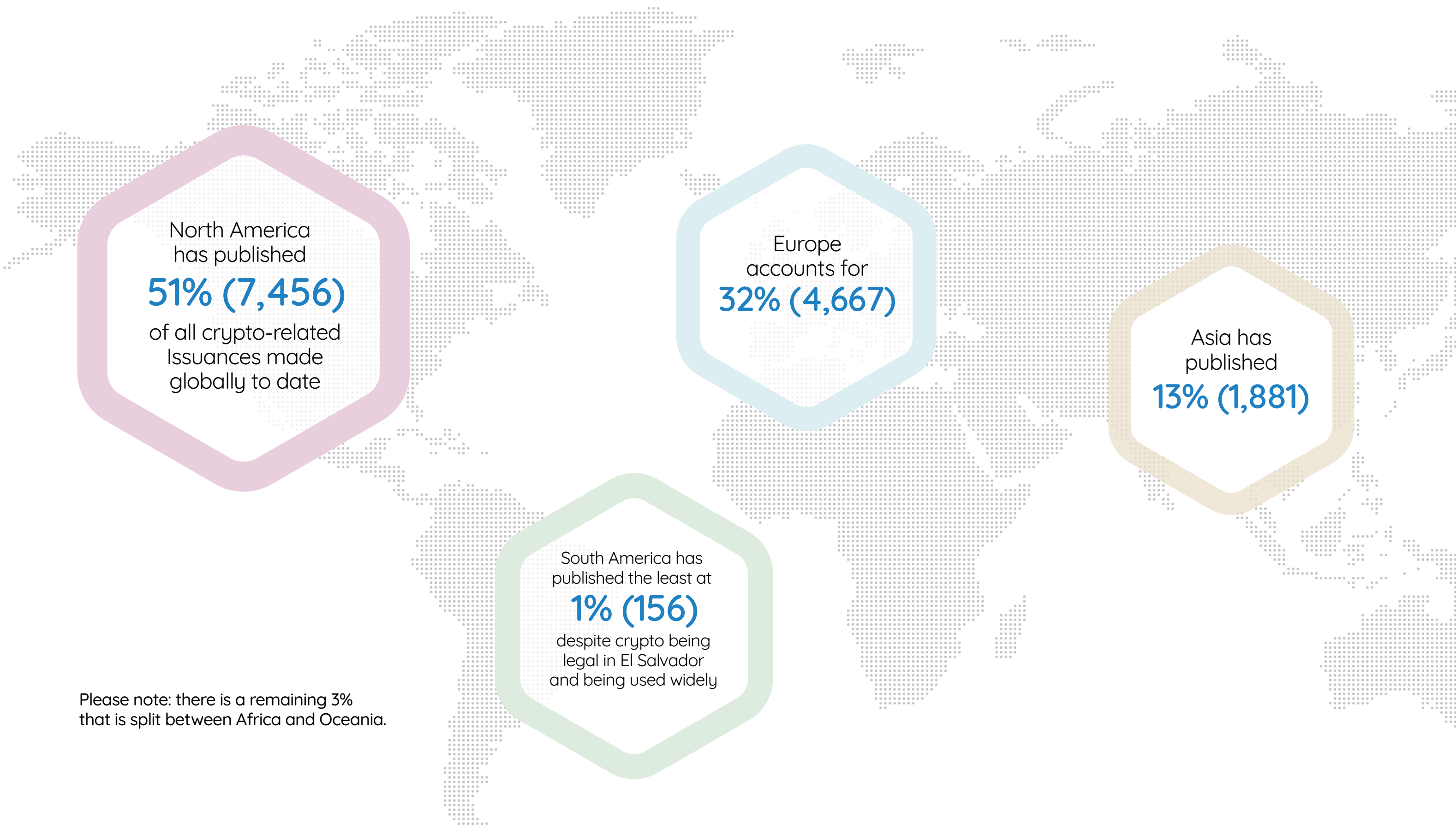
North America is leading the way for crypto-related Issuances



Exchanges are talking about cryptocurrency the most

From Nasdaq
(1,525)
to the Canadian Securities Exchange

As well as some of the usual suspects:

Financial Conduct Authority
(329)

Securities and Exchange Commission
(223)

United States of America Government
(164)

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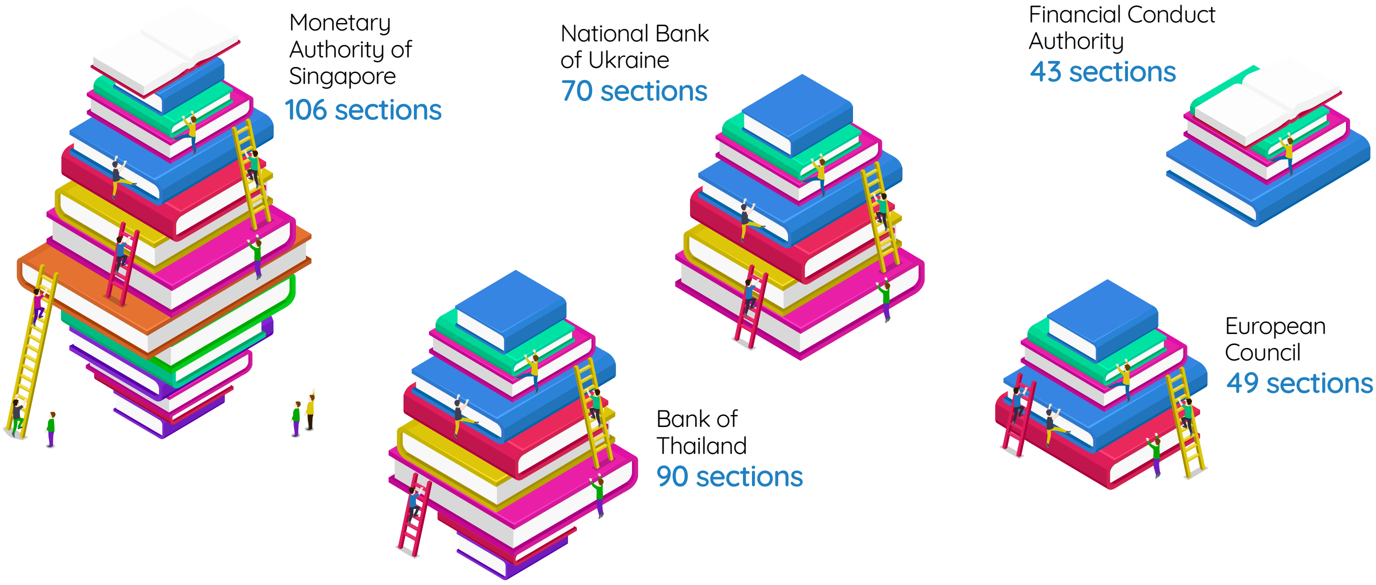
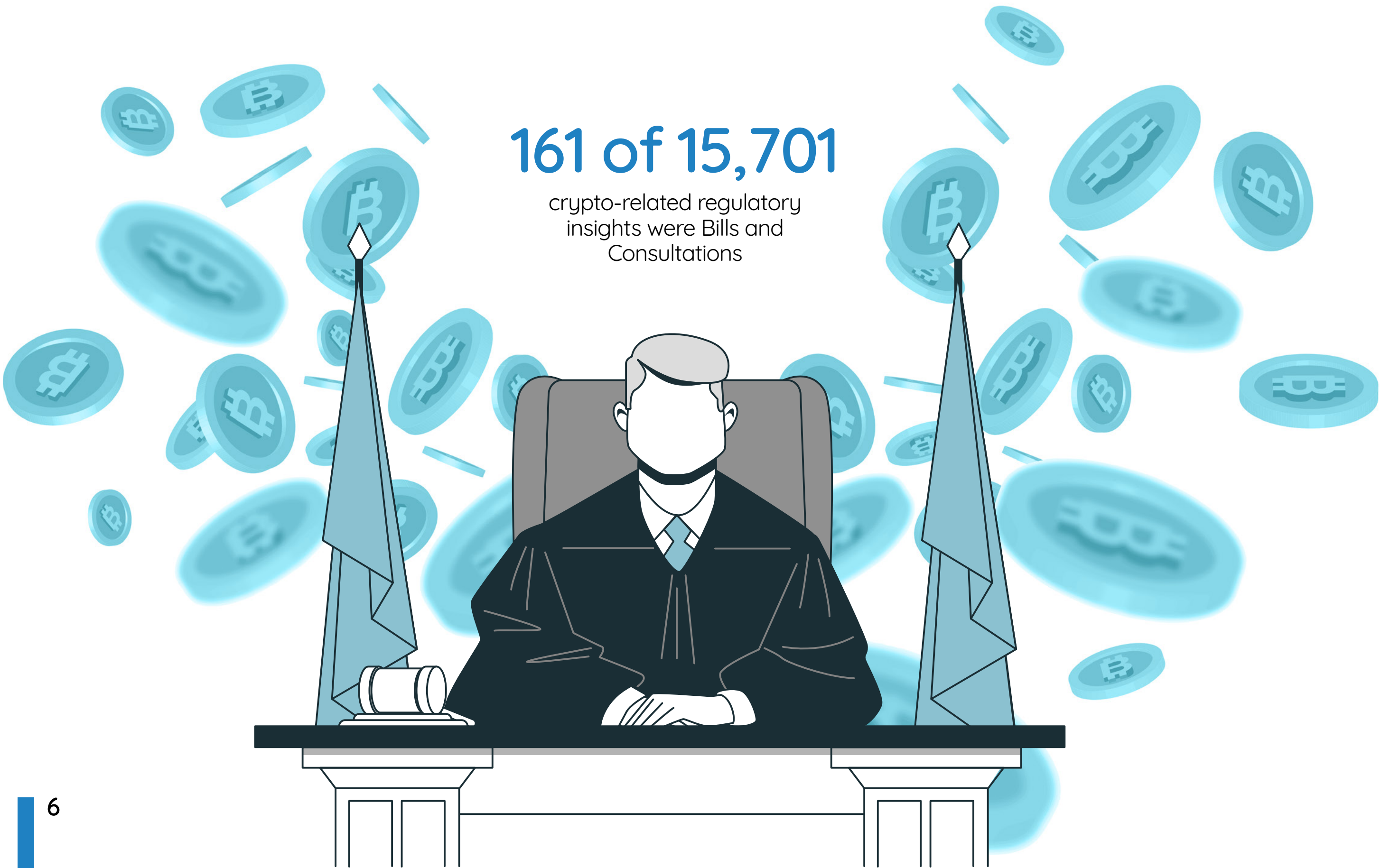
But Governments, Banks and Regulators are leading the way for hard law and regulation

Volume of Regulatory Text:



Crypto-related regulation is on the horizon



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03 Foreword

I'm pleased to present this report, the second in our data-led series, which explores an area that has exploded onto the regulatory agenda over the last year. The data and analysis featured throughout the report is collected by CUBE's own technology and AI analyzing the global regulatory internet.

At CUBE, we've always understood the importance of horizon scanning for regulatory compliance. After the financial crash in 2008, we knew that we'd see vast swathes of regulation to come and built CUBE with a vision to help compliance teams predict and manage regulatory change. Cryptocurrency is an area in which horizon scanning has been paramount – its growth has been so fast that you could blink and miss it. Over the past few years, we have watched as crypto went from an unknown, to a trending topic, to a real, imminent regulatory issue – one that could solve real-world financial challenges.

However, as is often the case, innovation can be a double edged sword. While crypto holds boundless potential, it also poses risks to consumers and the economy alike. It is staggering that in 10 years alone we've seen a seismic shift towards crypto use and investment – yet a watertight regulatory regime remains out of reach.

With the majority of financial organizations I speak to putting resource behind crypto, this report is timely. Crypto regulation may currently be lacking but given the strength of regulatory messaging – paired with some of the losses and malpractice occurring within cryptocurrencies – there is no doubt that regulation is imminent. What that regulation looks like, whether it is old regulation for new technology, or something different, remains to be seen. What we can be sure of is that regulatory change and obligations will come, and I hope this report goes some way to helping the compliance community understand what that might look like.

At CUBE, we continue to create and maintain the world's largest source of regulatory data, contextualized around all topical matter in the world of regulation. In our last report we covered climate-risk, now we turn to crypto. I hope that you enjoy this report and, as ever, we welcome your feedback and comments.

Ben Richmond
CEO and Founder, CUBE

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04 Cryptocurrency as a libertarian dream

The idea behind cryptocurrency is not necessarily a new one. As early as the 1980s – some 40 years ago – there is evidence of individuals advocating for a peer-to-peer currency that would be broadly untraceable and that would not rely on traditional, centralized entities such as banks.

However, despite these libertarian visions, it was not until 2008 that 'Satoshi Nakamoto' or an individual (or group of individuals) using this pseudonym created Bitcoin – marking the advent of crypto. 2008, as many will remember, was a difficult year for financial services with a global financial crash looming large. Traditional financial bodies weren't to be trusted and new regulatory frameworks were imminent. It was against this backdrop that Bitcoin was created.

The idea behind cryptocurrency is that it is a decentralized, open source payment method that doesn't require central bank involvement. It relies on Blockchain technology – which allows parties to create a permanent, unchangeable, and transparent record of exchange and processing without relying on a central authority. Cryptocurrency is different to traditional currency – frequently referred to as "fiat" currency - insofar as users can send and receive money, peer-to-peer through a channel that is not subject to the confines and limitations of mainstream currencies. However, while Blockchain is transparent, many cryptocurrencies remain relatively opaque in nature. The fact that, to this day, the creator of Bitcoin remains unknown, is evidence enough of the foundation on which crypto sits: lack of clarity, lack of regulation – but an unshakeable vision of a new world of finance.

Crypto could change the world

"I'd like to see crypto overthrow the world bank!" – proclaimed Dr Cathy Mulligan speaking at the Innovative Finance Global Summit in 2022. This is the original libertarian vision, after all. More and more often, investors are becoming involved in crypto because they think it means "money". However, crypto purists find crypto exciting because it also means "change".

The use cases for crypto extend far beyond current transactions, and in the past 5 years, a new breed of crypto-philanthropy has evolved.

- **Enable low-cost, high-speed payments:** cryptocurrency can be used to make international payments as it is not subject to the same rules, regulations, and structures of traditional fiat currency. When international payments are made, the transaction is effective immediately with no fees charged by banks.
- **Aid funding in wartime:** The recent war in Ukraine has proved a powerful use case for using cryptocurrency in situations where traditional fiat currency is restricted. Ukraine – a country which according to Chainanalysis ranks fourth in its pre-war adoption of currency – has made use of the unrestricted nature of crypto. As traditional high-street banks became limited, and with time of the essence, cryptocurrency has been a force for good.
- **Bank the unbanked:** Crypto has been touted as a technology that can provide people without bank accounts access to digital wallets that can quickly send and retrieve money across borders. A 2021 poll by Morning Consult found that 37% of underbanked people and 13% of unbanked people in the US own cryptocurrency – compared to 10% of fully banked people.
- **Reduce tax on charitable donations:** Charitable donations made with cryptocurrency sit outside of the usual charitable frameworks, therefore providing a system through which companies and individuals can pay less tax on charitable donations. This means the recipients receive more. Crypto-based fundraising organizations have grown exponentially in recent years, with one - The Giving Block - expected to process over $1 billion in crypto donations this year.

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Concerns around DeFi overlapping with TradFi

The difficulty for traditional finance (TradFi) – and indeed the traditional regulators that monitor TradFi – is that while crypto has boundless potential, it sits broadly outside of the regulatory perimeters. Moreover, TradFi is beginning to take steps to welcome crypto into its product offerings. For example, Japan's largest investment bank, Nomura, has announced plans to launch a new company that will help institutional clients diversify into cryptocurrency. In another instance, investment giant Fidelity has said it will soon have Bitcoin options within its 401(k) retirement plans.

This all leads to a dangerous melting point of half-regulated decentralized finance (DeFi) being brought over into the realm of TradFi, with the potential for huge losses, sustainability issues, and potential negative economic triggers.

Crypto on the edge of change

In June 2018, Meta announced that it would issue Libra (now Diem), a stablecoin backed by – and pegged to – the US dollar. Suddenly the whole world sat up and listened. This was the first glimpse of potential for a worldwide currency that would challenge fiat currency, as well as the status quo. Finance could change forever – regulators started to act.

And so, cryptocurrency and global financial regulators now stand at a cliff edge: to regulate or not to regulate?

For many, the main challenge is balancing this libertarian fantasy with regulation that was built for fiat currencies. How can crypto change the world if it is treated and managed in the same way that fiat and TradFi has been treated? Should the way regulators approach crypto not be different and bespoke, rather than generic and general? Can decentralized crypto ultimately be regulated at all?

05 What does the regulatory landscape look like?

The regulatory landscape around crypto and associated technologies has moved at an incredible pace, with over 15,000 regulatory Issuances published in the last 4 years alone. This is of little surprise given the speed at which innovators have created cryptocurrency and marketed it – in such a way that it has moved from a fringe concept to an almost-mainstream currency in little over 10 years.

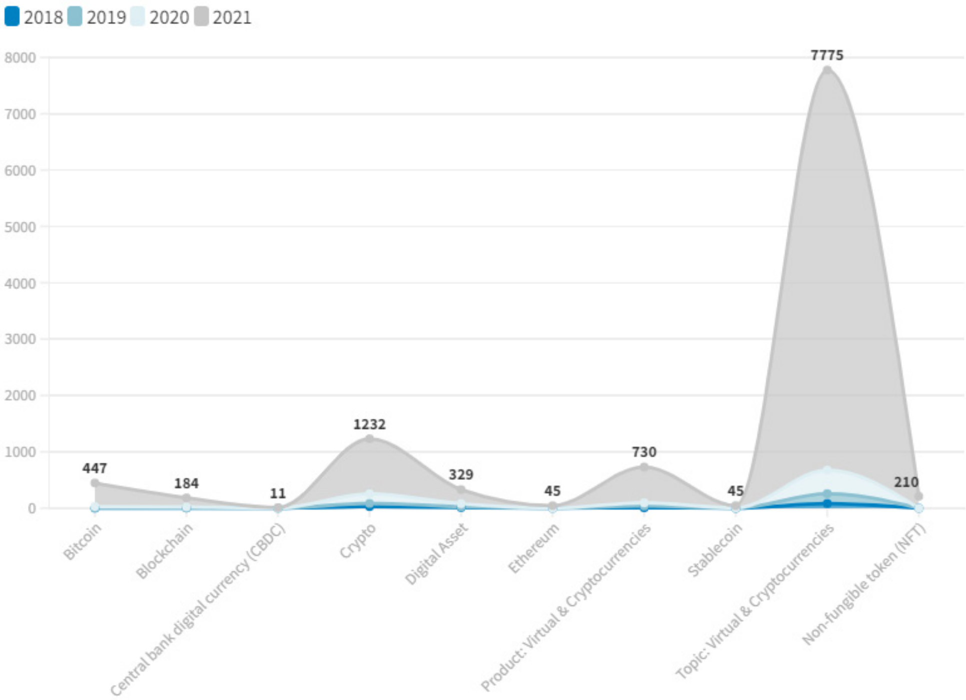

Figure 1. Volume of Cumulative Regulatory Issuances Published by Year

Innovation has the propensity to leave regulators and issuing bodies in the dust. No sooner have regulators come to terms with the latest development, a new iteration has been developed. This is made clear by Figure 1, above, which shows the volume of regulatory Issuance over the last four years.

It should be noted that we have focused on the last four years in particular, because prior to that date regulatory Issuances were too minimal to glean clear insights from. Across the whole of 2018, we saw only 131 regulatory Issuances referencing crypto-related concepts compared to 9,872 Issuances in 2021 – over 75 times the amount. As innovation has pushed ahead and cryptocurrency has been embraced by an increasing number, regulatory Issuances have increased too.

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4 years of market events for crypto

In early 2018, regulatory messaging from pre-eminent regulators such as the SEC and FCA was still very much in nascent stages. The FCA issued a statement to say that it was "aware of a growing number of UK firms offering so-called cryptocurrencies". Concurrently, SEC chairman at the time, Jay Clayton, noted that he might have to ask the "U.S. Treasury and the Fed to ask for additional legislation" to expand the SEC's remit for crypto, while Singapore's MAS said "our views are still evolving".

Looking at the language alone, it is clear to see how regulatory messaging has evolved since 2018 – perhaps since Meta's stablecoin proposal. Over the last four years, a number of market events have unfolded, spurring on the need for global regulators to act.

Bitcoin kicked off 2021 with a bang, surpassing a $1tn valuation for the first time in February 2021. A few months later, Dogecoin came to the fore, following a series of high-profile appearances from Tesla CEO, Elon Musk, who endorsed the coin. Musk's actions triggered a series of events which gamified the crypto market: a celebrity would endorse a coin, its value would increase, people would make (or lose) large sums of money.

In June 2021, El Salvador adopted crypto as legal tender. Large-scale protests ensued about the potential instability it could bring. In August, instability fears were confirmed when Poly Network – a DeFi platform – was hacked and $600m was stolen. Though the funds were later returned, this served as a stark warning about the stability and security of crypto and the associated platforms and technology on which it relies.

Naturally, after a string of surprising and unfortunate events, global regulators sprung into action, and towards the end of 2021 we started to see regulatory Issuances ramp up with the following events:

- **16 December 2021**
  FCA creates a temporary registration regime for cryptoassets – warns customers to withdraw all money from unregistered firms
- **23 December 2021**
  OCC advocates for proactively modernizing regulatory perimeter to include crypto
- **12 January 2022**
  UK parliament creates the Crypto and Digital Assets Group
- **16 February 2022**
  SEC reaches $100 million settlement with BlockFi for violating securities laws
- **23 February 2022**
  US Department of Justice appoints first National Cryptocurrency Enforcement Team Director
- **3 March 2022**
  FCA reveals it has opened 300 cases against unregistered crypto
- **8 March 2022**
  CFTC charges four operators in $44 million Bitcoin Ponzi scheme
- **8 March 2022**
  SEC charges siblings in $124 million crypto fraud
- **9 March 2022**
  President Biden signs an Executive Order broadly seen to invite crypto into mainstream finance
- **14 March 2022**
  European parliament publishes new rules to boost benefits of cryptocurrency
- **4 May 2022**
  SEC doubles the size of its Crypto Assets and Cyber Unit

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It should be noted that these are the events that were deemed media-worthy, but outside of the media a regulatory revolution has been rumbling for crypto.

Over the course of 2021, regulators published 9,872 pieces of crypto-related content. In the first 5 months of 2022, regulators had published 47% of what was published in 2021 (4,666). Following this trajectory, it is likely that 2022 will be a pivotal year for crypto regulation, not least because of messaging from governments across the globe encouraging regulators to expand the regulatory perimeters for crypto.

New rules for crypto? Or broaden regulatory perimeters?

Regulatory perimeters are yet to expand to encompass crypto. There are, of course, some exceptions. Anti-Money Laundering (AML) regulations and Counter Terrorist Finance (CFT) regulations have been expanded to take cryptocurrency into consideration and we have seen numerous instances of enforcement action taken against crypto firms under this existing rulebook.

The reasons AML and CFT regulation has applied neatly to cryptocurrency are plentiful, but most plainly it is that the conduct that AML/CFT regulation seeks to prevent is relatively universal and can stretch across myriad contexts. However, as noted by Elliptic's David Carlisle, there are areas in which regulation has failed to expand, including consumer protection and market conduct.

In order to regulate for crypto, regulators must decide whether they will create new, bespoke regulation – or expand existing regulations to fit the nuances of cryptocurrencies and associated technology and actions. Current regulatory messaging suggests that broadening the existing perimeter is the favored option.

The US Office of the Comptroller of the Currency (OCC), for example, has advocated for a broadening of the regulatory perimeter. The OCC's actions are largely motivated by urgency, rather than an unwillingness to create a bespoke framework. Acting Comptroller Michael J. Hsu has said that regulators "cannot wait" adding that if we follow previous historical events "we would wait for a large crypto firm to take excessive risk and implode or grow to such a size as to be systemically important, before subjecting it to consolidated supervision."

In the UK, the Bank of England's Financial Policy Committee has said "where crypto technology is performing an equivalent economic function to one performed in the traditional financial sector, the FPC judges this should take place within existing regulatory arrangements, and that the regulatory perimeter be adapted as necessary to ensure an equivalent regulatory outcome."

Some suggest that this system would be ineffective as the existing regulatory framework is too prescriptive to cater for the subtleties of crypto. It is seen as potentially shoe-horning a highly innovative and technological ecosystem into a legacy framework. Often it is those within the cryptocurrency industry that are of this view. This, indeed, would mark the end of the libertarian fantasy for many.

Others, believe that the existing regulatory framework could be broadened to apply.

> There's a relatively mature AML framework for crypto. When it comes to financial crime, money laundering, terrorist financing, sanctions – the framework is fairly robust. And there's a level of comfort knowing that the worst of those types of crime is managed relatively effectively in the crypto space. But where there is more recognition around regulatory gaps is in things like consumer protection, market conduct – those rules haven't been applied very effectively to the crypto space.
>
> I think most things in the existing regulatory playbook can work fairly well. There's no reason a crypto exchange can't conduct due diligence on its customers or that it can't follow rules related to consumer protection. I think there are probably just more areas of nuance, and features of technology where they don't always align very well with the way regulation has been imposed historically on regulated firms. But I think for the most part it can work.

David Carlisle
Vice President of Policy and Regulatory Affairs, Elliptic

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Looking at the data gives an indication indication of regulatory focus. Of all the regulatory Issuances, the topic of "Virtual and cryptocurrencies" has remained most prominent, accounting for 9,421 of all cumulative regulatory Issuances. Topics such as Blockchain, on the other hand, have received less attention. Blockchain is the technology that underpins almost all of cryptocurrency. It could be suggested that, if regulators were looking to create a truly bespoke system for cryptocurrencies, they would be talking more about Blockchain and the interconnectivity of the two.

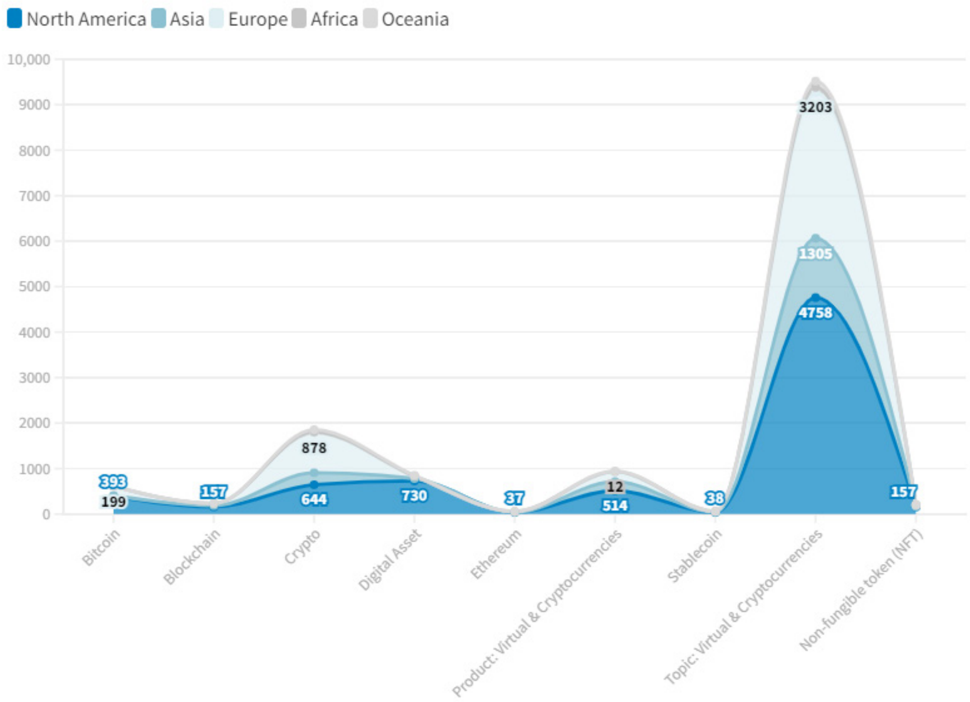

Figure 2. Global Regulatory Issuances by Topic Referenced

Instead, regulators appear to be addressing cryptocurrencies in broader terms. This could be for a number of reasons. Often, regulators do not have the information, education, or resources to implement regulation quickly. As the UK's Lord Holmes recently said on technology more generally, "the UK government needs to understand this stuff a lot more". The same could be applied to regulators.

This may be one of the reasons that crypto is being squeezed to fit traditional boundaries. This could also explain why regulatory Issuances around cryptocurrencies have favored broader topics, rather than niche detail. It may be that some Issuing Bodies simply lack the information and resource to explore cryptocurrencies at a granular level.

Given the pace of change, there is no doubt that regulatory exploration will increase significantly in the coming year. This can already be seen in actions from the SEC, who have recently committed to doubling the size of its Crypto Assets and Cyber Unit. Perhaps regulators will use recent movement around crypto and the fintech industry as a springboard to overhaul the way they approach and manage regulation.

06 Why are regulators acting now?

As the data shows in Figure 1, the emerging pace of regulatory change for cryptocurrency is fast becoming insurmountable and difficult to manage alongside existing compliance obligations. What started out as a libertarian currency is being gradually welcomed within mainstream financial services.

> The main reason there are so many calls for regulation now is that crypto is becoming much bigger. The size of the market is growing, it's reaching more and more people. Regulators and policy makers are now starting to see the real prospect of mass adoption of crypto and what the implications of that might be.
>
> The second issue is that crypto's size is becoming gradually more interconnected with other components of the financial sector and major financial institutions are now starting to launch crypto products and services. Institutional investors are getting involved in the space. Those tend to be heavily regulated entities already but what this signals is that crypto isn't going to be a niche sphere of the world for very long. It's going to become more of the fabric of financial services.
>
> **David Carlisle**
> Vice President of Policy and
> Regulatory Affairs, Elliptic

In fact, despite a turbulent market outlook, a report by Chainanalysis has found that cryptocurrency usage is growing faster than ever before. The report found that, across all cryptocurrencies, the total transaction volume grew to £15.8 trillion in 2021, up 567% from 2020's totals. Despite being explored as a mainstream option, with Gucci, Tesla and even Starbucks now accepting digital assets as payment, the regulatory landscape is incredibly fragmented...and changing fast.

Crypto regulation to protect consumers

Broadly speaking, regulatory action is needed for two key reasons:

1. To protect consumers
2. To protect the global economy

Looking at the risks to consumers, the risks are myriad. Firstly, cryptocurrency has received a torrent of negative press around its financial crime risks. Chainanalysis found that financial crime soared to $14bn over the course of 2021, up from $7.8bn in 2020. It is worth considering this in context, however. If the volume of overall adoption rose by 567% year on year, and the growth in illicit transactions grew by 78%, the rate of criminal activity to adoption is comparatively low.

As David Carlisle notes:

> From what we're able to measure, the proportion of illicit activity in crypto as a whole is actually quite small, maybe around 1% of crypto involves illicit actors and dark net markets. As more and more average people get into the crypto space, the criminals tend to be crowded out. Or at least drowned out. They're still there but they become less of the activity that goes on.

It is worth considering, however, that while in context $14bn in illicit activity is low compared to TradFi, this is still a significant sum – especially when there is little-to-no consumer protection.

This is the second consideration for consumer risks in crypto; there is no regulatory protection in the event that crypto fails. So, a consumer could lose £1 or £1m and it will likely not be protected in the same way that fiat currency is. This was not such an issue when crypto was a peripheral currency, but as mainstream financial institutions and governments actively welcome it, this leaves more consumers in a vulnerable position.

This was clearly demonstrated on the week of 9 May 2022, a week described by some as "the week that shook crypto". Others, including the Financial Times's Andrew Hill described it as a "crypto correction". In short, the week starting 9 May saw the notoriously volatile crypto market take an unprecedented turn.

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The week that crypto crumbled

In June of this year, terraUSD (UST) – a stablecoin that should be tethered to the US dollar - fell below $1. The crypto token that supports UST, Luna, lost all of its value in one day. The following day, Bitcoin dropped below $30,000 for the first time since July 2021.

On 11 May 2022, Coinbase Chief Executive, Brian Armstrong, was forced to deny rumors of bankruptcy after the company lost almost one quarter of its value in one day, down 67% in value since the beginning of the year.

To round off the week, investors pulled almost $7tn out of Tether, another stablecoin, in light of terraUSD's earlier collapse.

The events of this week were unprecedented, not least because of the volatile drops in stablecoins. Stablecoins are considered a far safer investment option for the more risk-averse. This is because of their pegging to traditional fiat currencies.

While it's generally accepted that crypto investments carry risks – a message that many global regulators have been keen to convey – the lack clear of regulation, paired with market volatility and high-value investments makes it the perfect melting pot for risk and loss. These are unprotected losses, sometimes amounting to thousands of pounds for individual and sometimes inexperienced investors. Without regulation, consumers remain unprotected.

Crypto regulation to protect the global economy

As well as putting investors in a vulnerable position, cryptocurrencies have now reached a level of mainstream interest whereby they serve to trigger wider market events. In March 2022, the Bank of England's Financial Policy Committee said that, while it does not currently judge that crypto poses "direct risks to the stability of the UK financial system" it does believe that if the pace of growth continues, and as DeFi becomes more interconnected with TradFi, "cryptoassets and DeFi will present financial stability risks." While the UK-based regulator does not yet see DeFi as presenting financial stability risks, others, including Deutsche Bank's Marion Laboure, consider that the key triggers for regulation have been activated:

1. Crypto now has enough retail access to warrant regulation (17% of consumers in US are using it).
2. It is big enough to cause financial stability issues.

Despite market volatility and the collapse of a stablecoin, we continue to see many regulators pushing forward with an invigorated resolve to regulate for crypto, rather than ban it entirely.

> Recent events in the decentralized finance space have demonstrated the volatile nature of investing and building in this nascent industry. Now, legislators and regulators are trying to determine what rules could be put in place to better protect investors and the broader crypto ecosystem. This is a positive step and a move towards adoption and innovation.
>
> **Alex Royle**
> Head of Compliance and Regulatory Affairs, EMEA, Galaxy Digital

07 Which Issuing Bodies are leading the way for crypto?

The regulatory landscape for cryptocurrency has seen a few outspoken governments and regulators in its brief existence. Not least China and El Salvador – the former who moved to ban cryptocurrency altogether and the latter who, in September 2021, became the first country in the world to accept Bitcoin as legal tender.

Ukraine is another country that has endorsed – or at least legitimized - crypto by reason of circumstance. With financial services often inaccessible, and with limited ability to transfer and receive funds, Ukrainian financial services have become one of the most active in the crypto space.

In other jurisdictions, there has been more trepidation for a variety of reasons. While advancing, crypto remains an unknown for many Issuing Bodies.

> There is to a degree a moral hazard obstacle that needs to be overcome – regulatory oversight makes regulators more accountable if things go wrong and regulation does lend credibility to an activity or product. This to my mind has been a contributing factor when you look why regulations for cryptocurrencies have not been put in place or been kept to a bear minimum around AML and warning of the risk of losing money.
>
> **Ali Hassan**
> Senior Representative, Europe and North America,
> Dubai International Financial Centre (DIFC)

Who is speaking the most?

The data enables us to better understand the Issuing Bodies that are saying the most, and those that are taking genuine steps to enact hard-law. It has previously been seen that those that shout the loudest are not always the same as those who have taken concrete steps towards managing emerging regulatory topics.

We can see that many of the most active Issuing Bodies in the crypto space are exchanges, from the Canadian Securities Exchange, which has issued 1,525 RegInsights for crypto, to the FSE Exchange, which has issued 380 RegInsights.

The regulator who has issued the most crypto-related insights outside of these exchanges is the UK's Financial Conduct Authority who – at the time of writing – had referenced crypto across 329 RegInsights. The second most active regulator in this space, perhaps unsurprisingly, is the US's Securities and Exchange Commission with 223 RegInsights published. Interestingly, the Spanish National Securities Market (Comision Nacional del Mercado de Valores) the Alberta Securities Commission, and the US Government have all made significant in-roads in their crypto discussions, with 180, 172 and 164 references respectively.

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The definition of crypto – whether it is a security or a commodity – had been a topic of contention within the regulatory space for some time. In the US, enforcement action taken against BlockFi appeared to confirm that crypto is a security, and that "crypto markets must comply with time-rested securities laws" as a result. Despite this, a recent Bipartisan Bill from two US Senators has suggested that crypto should instead be a commodity, and fall within the remit of the CFTC. As discussions are ongoing, there are still areas of interpretation, meaning there is the potential that some of the discussion within both the Spanish and Alberta securities body is deliberation around this area. Given that cryptocurrencies have so far been captured by securities laws worldwide, this goes some way to explaining why securities-related Issuing Bodies are doing more.

Who is doing the most?

Figure 4 sets out the Issuing Bodies who have made crypto-related references – meaning legislation, regulation and obligations. Straight away, it is clear that some of the bodies that feature in Figure 3 (i.e. those that are saying the most) are also taking firm regulatory action.

Figure 4. Volume of crypto-related regulatory text by Issuing Body'

This is true of the FCA, which as well as 329 RegInsights has published 43 sections of RegBooks. It is worth noting that the FCA has been active in its registration regime for cryptocurrencies since 2020 – and has taken regulatory action against those who fail to register. This likely validates the FCA's position near the top.

Alberta Securities Commission (ASC) is undoubtedly the only Issuing Body who is publishing RegInsights (172) and equally incorporating them into sections of RegBooks (119). ASC has been unwavering in its concerns around fraudulent crypto action within Canada, especially with the world's largest cryptocurrency trading platform, Binance, having registered in Alberta. On its website, ASC has made clear that "securities laws will apply to crypto assets in many cases" and has clearly adopted an approach of clarity and understanding for crypto.

What is particularly interesting in this area, is the clear prominence of the Ukrainian Government as an Issuing Body. Over the last four years, the Ukrainian Government has published very few Issuances that constitute RegInsights. However, it has published 70 sections of RegBooks, making it the 7th most active Issuing Body. Ukraine has notoriously embraced crypto from its inception, but this data appears to show that it has moved swiftly to implement regulation, without deliberation, speeches or chatter. Given the turbulence within Ukraine, driven by the war, it is likely that crypto regulation has been prioritized as a means of transferring funds across borders when traditional financial resources are inaccessible. It is likely that the decentralized nature of cryptocurrency has been a vital aid in wartime.

The Financial Services Agency of Japan (FSA) has also been active in its publication of RegBooks. This is unsurprising given Japan's willing to tackle cryptocurrency generally, with a specific focus on stablecoins. In March 2021, the FSA floated regulations that would legitimize and monitor stablecoins. On 3 June 2022, Japan passed this legislation and became one of the first countries, and the largest economy, to legitimize stablecoins.

Under Japan's stablecoin legislation, Yen-linked stablecoins will be regulated. This means that only banks and other registered financial institutions can issue stablecoins, while intermediaries will be obliged to adopt more stringent policies around AML and CFT. Importantly, the new rule guarantees investors face-value redemption. No doubt other regulators will soon follow suit.

08 What does the future hold for regulation?

It's clear to see, both from CUBE's data and industry movements, that crypto regulation is no longer out of sight. In the six months from January to June 2022, regulation for crypto has moved beyond being a 'maybe' to real regulatory action – from HM Treasury's insolvency consultation in March 2022, to the US's Responsible Financial Innovation Act announced in June.

While the regulatory landscape for crypto is often seen as complex and muddled, what is clear is that regulation is on the horizon.

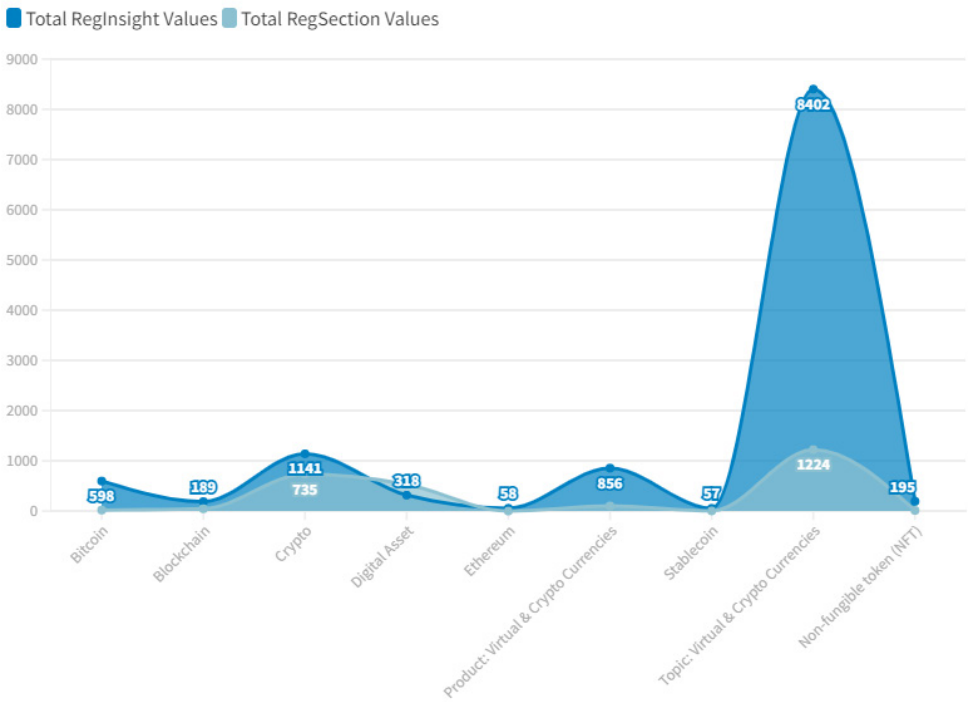

Figure 5: Cumulative number of RegInsights and sections of RegBooks

Comparing the volume of regulatory messaging against in-force laws and obligations, as demonstrated by Figure 5, it is clear that the volume of RegInsights (11,855 total) far outweighs that of sections of RegBooks (2,683 total). This shows that crypto – while frequently touted as 'unregulated', does in fact have the beginnings of a regulatory framework. It of course is not complete, but it is more advanced than many may have initially considered.

Turning then to Figure 6, we are able to analyze the Issuance Types that comprise RegInsights, in order to assess the content that points to further emergent regulation, and the content that is softer - blogs, news, etc.

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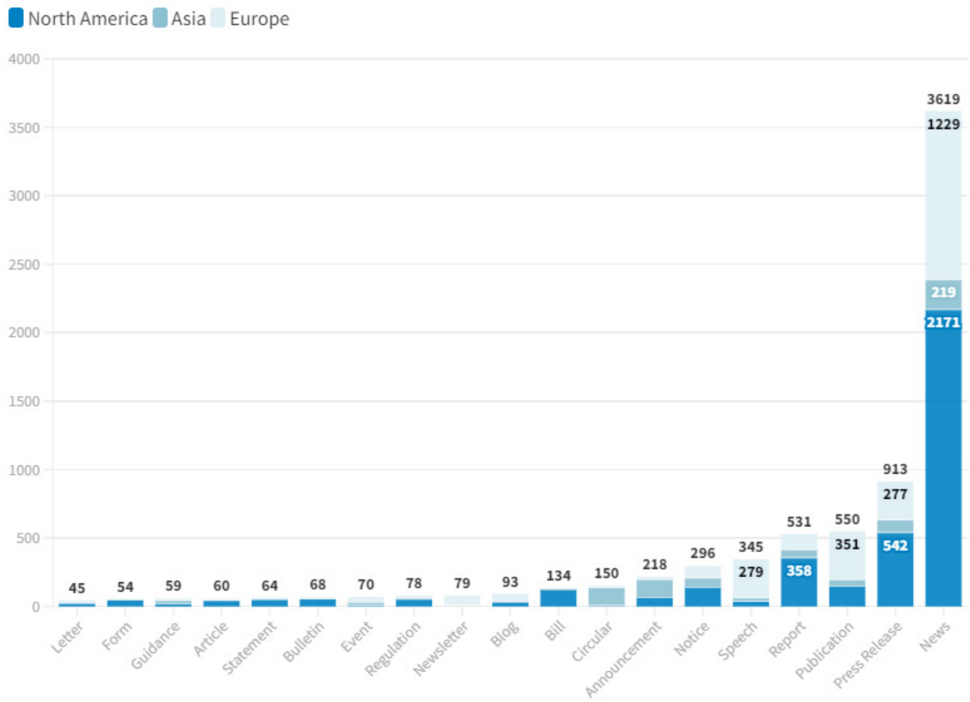

Figure 6. RegInsights Referencing "Virtual and Cryptocurrencies" by Issuance Type

Across 15,700 total regulatory Issuances, RegInsights that are classified as "news" make up almost one quarter (23%) of all crypto-related global content. We also see 1,000 Press Releases on the topic, as well 366 speeches. This goes to suggest that regulators are speaking far more about cryptocurrency than they are taking action. Some regions are talking more than others, as we saw above, with Europe in particular making 279 speeches on the topic of cryptocurrency. That is not to say that speeches do not, eventually, lead to regulatory change – but often they are a sounding board for public opinion rather than an announcement of things to come.

That being said, Figure 6 also shows a number of Bills and Consultations in the works, at 136 and 25 respectively. Given the pace of change and government announcements made since the collection of CUBE's data, it is likely that these numbers will already have increased – such is the urgency to regulate crypto.

Bills and Consultations point at legislation and regulation to come. So, while regulators are talking a lot about cryptocurrency, they are also moving to take action.

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The undeniable importance of stablecoins

This report focusses on cryptocurrency at an all-encompassing level. While Bitcoin and Ether receive special mentions in their own right, the importance of stablecoins – and what they mean for the future of regulation – should not go unnoticed.

Stablecoins are of a unique concern to regulators as, unlike usual crypto such as Bitcoin, Ether, or even Dogecoin, stablecoins are seen by investors as low-risk. They are tethered to fiat currency and as such provide a real-world example of how individuals could turn to cryptocurrency over TradFi. For instance, investors with a crypto wallet can easily move stablecoin across borders without the need for intermediaries or international bank accounts. This is likely the reason that we saw panic with Meta's 2018 announcement of Libra.

As the OECD's 2022 report, Institutionalization of crypto-assets and DeFi–TradFi interconnectedness highlighted, "Stablecoins are identified as the key bridge between traditional and decentralized finance, therefore policy makers could consider prioritizing regulatory focus on the activity in this asset class. Stablecoins constitute one of the foundational bases of DeFi markets, but at the same time are one of the greatest points of vulnerability of decentralized finance markets, with clear links to traditional markets (e.g. short-term debt markets)."

Stablecoins account for a large proportion of crypto use, in part because they are seen as making crypto predictable. As we saw from events in terra(UST), however, this is not always true. Regulators are aware of this and moving fast to bring stablecoins within their own remit.

Since collecting regulatory data for this report, there have been a number of key developments around stablecoins. On 6 June 2022, hot on the heels of Japan, the UK's HM Treasury published plans for managing stablecoins in a Consultation paper entitled "UK regulatory approach to cryptoassets and stablecoins". The Consultation paper sets out a potential insolvency regime for stablecoins.

Given the activity we are seeing around stablecoin-specific regulation, it is likely this is a pivotal area to watch for the emergence of regulatory regimes.

09 The future of regulation: overcoming challenges to foster collaborative, competitive regulation

Cryptocurrency and other digital assets are often described as being 'decentralized'. This means that they rely on blockchain technology, which uses a distributed ledger created and enforced by a vast and disparate network of computers. Cryptocurrencies are, generally speaking, not issued by one central authority.

In its nascent stages, the decentralized nature of crypto was rocket fuel for the libertarian currency. Decentralisation means it exists outside of government or authoritarian power – opening it up to new opportunities and freedom from increasingly stringent money rules.

That's likely a positive step toward creating a new standard in crypto regulation. So far, regulators and lawmakers around the world have taken vastly different approaches to crypto, creating a fragmented landscape that can be challenging for compliance teams. While some jurisdictions have taken pro-innovation stances by imposing commercially attractive regulatory standards, others have pursued a more critical approach. That now has the potential to change.

> "
>
> What will likely happen is there will be a natural coalescence between more rigorous regulatory jurisdictions and those that have been open and commercial from the outset. The regulators that were very commercially focussed initially are going to have to tighten rules, broaden the regulations already in place and potentially restrict some activities. They'll have to make sure they don't become havens for poor outcomes. But the regulators who have been unapologetically robust from the outset won't be able to tighten anymore. So, we'll see a pragmatic approach from them now that they've had the opportunity to assess the realities of the space.
>
> I think firms that have embraced the challenge and met requirements will benefit from committing to these jurisdictions and, by virtue of being operational ahead of any evolution of approach, subsequently receive an effective 'regulatory dividend' as the space matures.
>
> **Alex Royle**
> Head of Compliance and Regulatory Affairs, EMEA, Galaxy Digital

The challenges of local regulators for global currency

The borderless nature of cryptocurrency runs contrary to the often localized nature of financial regulation. While industry bodies such as the International Organization of Securities Commission (IOSCO) and Financial Action Task Force (FATF) are coordinating efforts to provide a level playing field for crypto, the nuances of borderless currency versus border-restricted regulation is hard for compliance teams to manage.

One such example is FATF's Recommendation 16 – often referred to as "the Travel Rule". The purpose of the Travel Rule is to apply a protective blanket rule that covers cross-border and domestic wire transfers. The Travel Rule has been in force for some time for TradFi but was updated to address the AML/CFT challenges associated with crypto in 2020, ensuring that all that manage or invest in crypto are protected.

Despite the international reach of the Travel Rule, individual countries are free to interpret and apply it to suit their own model. This means that the rule in Switzerland, for instance, is more stringent than the rule in the US.

This problem – often referred to as "the Sunrise Problem" - isn't limited only to different countries but can also be seen on a State-by-State basis. In places such as the US there are tens of regulatory bodies, focussing on different things in different States. Where crypto bleeds in to their regulatory perimeters, we could see myriad disparate regulations appearing in one country alone.

As Grayscale CEO, Michael Sonnenshein, recently noted in a panel discussion at Davos; "The US has a uniquely and unusually fragmented regulatory system. Each regulator in the US, including 50 State regulators could potentially take a different approach – it is a complicated process." He went on to add that "the next twelve to eighteen months will be pivotal in aligning on an approach to crypto globally."

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Writing in an article for The Hill in May 2022, Commodity Futures Trading Commission's Commissioner Caroline Pham wrote alongside the Securities and Exchange Commission's Commissioner Hester Pierce to highlight the "new opportunity to cooperate" for crypto regulation. The two Commissioners noted that "regulatory decentralisation can have benefits but, if not properly managed, also can aggravate the already confusing lack of regulatory clarity for crypto". With this in mind, the two US regulators will soon host a series of roundtables to "discuss how to regulate crypto responsibly".

In essence, there is a contradiction at play with crypto. Crypto was made to democratize access to finance and create a borderless financial system with global connectivity. So how, then, can regulators in individual jurisdictions look to create a unified regulatory system that works? At the moment, they can't – and despite conversations that suggest a willing to coordinate for crypto, the data showed little evidence of that happening.

The challenge of diverging regulatory priorities

Lack of coordination comes in many forms, one of which is a disconnect in the priorities of global regulators. As our recent climate-risk data report demonstrated, regulators in some countries are focussing on climate-related regulations, while others may yet to have firmly tackled financial crime or KYC. A lack of coordination may, in part, stem from a lack of consistent advancement for crypto across borders.

Further to this, as Figures 5 and 6 show, where Issuing Bodies are moving to address cryptocurrency regulation, they are not necessarily placing focus on the same areas.

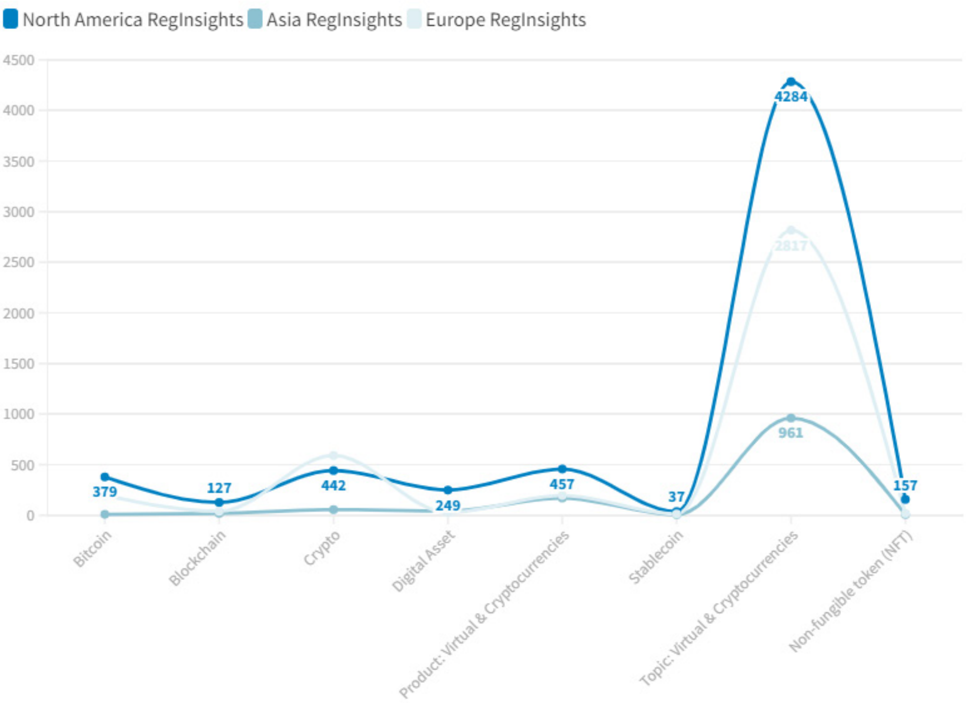

Figure 7. RegInsight by Regulatory Concepts across Regions

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RegInsights capture Issuances that are not hard-law or obligations. They include blogs and speeches as well as indications of future regulation, such as Bills and Consultations. Across the globe, it is clear that all Issuing Bodies are focussing more broadly on "Virtual and Cryptocurrencies" as a topic, with the acronym "Crypto" also being considered by Europe and North America in the main.

Europe appears to be considering individual coins to a certain extent, with 379 references to Bitcoin across European Issuing Bodies, followed by North America with around 150 references. What is interesting to see is that, while Europe and North America appear broadly aligned in their conversations around crypto, Asia is publishing far less around these specific topics.

Stablecoins have received varying degrees of regulatory attention, with a particular focus in North America, but relatively few references across Europe or Asia. Following the events in early May 2022 (as above), we are able to see that regulators are now placing far more scrutiny on stablecoins to assess how 'stable' and risk-free they really are.

Figure 8: Sections of RegBook by Regulatory Concepts across Regions

Figure 8 shows the sections of RegBooks which reference crypto-related topics. As with Figure 7, it is clear that North America, Asia and Europe are all focussing on Virtual and Cryptocurrencies in the main, with significant references to this topic across regulation.

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What is particularly interesting here, is that North America is taking real action in its consideration of Digital Assets within regulation, with 481 sections of RegBooks making reference to this term. Where we see regulatory convergence in other areas, the focus around Digital Assets shows clear divergence, as Europe makes only 27 references, and Asia has made just 9. This highlights the potential conflicts afoot with differing regulatory priorities. While North America pushes ahead with hard law and legislation considering Digital Assets as a whole, other regions have barely scratched the surface. This is where knowledge across borders becomes a priority. Instead of secrecy, regulators could be working together and sharing efforts and insights, learning from each other to create a holistic framework for crypto.

The challenge between government and regulators

As well as the challenge of regulatory overlap and conflicting priorities, there is another butting of heads at play: that of government and regulator.

Many governments around the world are opening their eyes to the economic benefits of innovation and cryptocurrencies. They are battling to gain a competitive advantage in a fast-growing, highly profitable market. Meanwhile, regulators are attempting to mitigate the potential damage that broadly unregulated crypto investment can cause.

> Many countries and jurisdictions have now recognized the potential economic benefit of attracting crypto activities as part of the wider ongoing transition to digital finance – both established financial centers and new locations with some rushing ahead without regulations in place. In DIFC, the global financial center based in Dubai our approach is considered and nuanced – we definitely see comprehensive regulations a necessity to ensure crypto markets have the same level of integrity and safeguards as other financial markets.
>
> **Ali Hassan**
> Senior Representative, Europe and North America,
> Dubai International Financial Centre (DIFC)

In the UK, for instance, the government published plans to make the UK a "global cryptoasset technology hub". The plans included working to bring stablecoins within regulation and exploring the competitiveness of the UK tax system to encourage development in crypto. Meanwhile, the FCA – while facilitating sandboxes – has repeatedly warned that "investors in cryptoassets should be prepared to lose all their money".

We see similar messaging in the US where, on March 9 2022, President Biden signed an executive order that essentially put government agencies and regulators on notice to "drive US competitiveness and leadership" for crypto and digital assets. Weeks later, the SEC announced that it would be doubling the size of its Crypto Assets and Cyber Unit, with a view to "police wrongdoing in the crypto markets while continuing to identify disclosure and controls issues with respect to cybersecurity". Once again, the government is looking to increase competition, while regulators move to mitigate losses and increase investor protections.

It is important to note, however, that investor protection, regulation and increased enforcement might not be anathema to competition and could instead be the factors that drive investment and innovation. As Ali Hassan noted, Dubai is seeing a large amount of growth in the crypto space, despite having more "nuanced" and potentially more stringent regulatory expectations.

On the one hand, we see governments desperate to be "open" to crypto. On the other hand, we see trepidation from regulators who focus more on the long-term protection of consumers and financial markets.

The challenge between regulation and innovation

One of the most commonly-cited arguments against regulation is that regulation could stifle innovation. Indeed, cryptocurrency is the original libertarian currency that has achieved worldwide popularity by reason of its ability to innovate. Regulation, especially within the existing regulatory confines, threatens to slow down the pace of change.

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While there are still some out there that believe regulation will put an end to innovation, it appears to be harder to substantiate. As Coinbase CPO, Faryar Shirzad recently opined at Davos, “There is no trade-off between innovation and regulation, and there is no market that will keep itself stable and free from manipulation unless there is proportionate and well worked-out, smart regulation.”

In essence, there is a play off. Regulation could slow down innovation, but a market without regulation will soon become obsolete and depleting in value, in which case there will be no motivation to innovate.

Moreover, there is historical precedent to show that regulation does not kill innovation. Look at Tesla’s self-driving cars, for instance. Technology continues to thrive in a highly regulated industry. The same is true if we look at data. For years, data was a highly prized commodity with little consumer protection. However, even highly stringent regulation such as GDPR has not seen an end to the data economy – quite the opposite with the emergence of alt-data, for example.

Of course, if regulation is too stringent it may have undesirable consequences by pushing businesses underground or into the corners... a space in which crypto is all too familiar.

As Alex De Vries pointed out when discussing cryptocurrency and sustainability:

> “Last year, China put in place a Ban on cryptoasset mining. But it actually had an adverse effect because, as my most recent paper shows, these miners then moved from China to the US and Kazakhstan. So the network actually got worse than before. It’s still using the same amount of energy, but the source of energy is dirtier than before. So a local ban isn’t going to be super effective. There are still a lot of cryptos operating out of China, but they’ve just hidden their operations.
>
> **Alex De Vries**
> Founder of Digiconomist, Data Scientist
> at De Nederlandsche Bank and PHD Candidate
> researching the sustainability of cryptoassets

However, it is broadly understood that innovation and regulation are not mutually exclusive. Virtual Asset Service Providers (VASPs) can continue to innovate and thrive while simultaneously meeting KYC and AML regulation.

How do we achieve a cohesive regulatory approach?

In a panel discussion, the FCA’s Interim Director of International, Richard Fox, acknowledged that “collaboration is a necessity” for crypto, adding that “we no longer have the practical choice to pull up the drawbridge and regulate things nationally”.

> “We have to target cryptocurrency at a global level, or you just get a waterbed effect where people move around from country to country – depending on the regulations and restrictions. That’s the same for Bitcoin mining as well as Bitcoin Investment.
>
> **Alex De Vries**
> Founder of Digiconomist, Data Scientist
> at De Nederlandsche Bank and PHD Candidate
> researching the sustainability of cryptoassets

It is commonly accepted that regulation for crypto should be tackled on a global scale, yet regulators are saying one thing and doing another. If left to develop on a localized basis, VASPs and compliance teams the world over will be faced with a complex, disconnected web of regulation across jurisdictions. This means more work for the compliance teams and could potentially lead to incomplete regulatory protection for investors.

How then do Issuing Bodies cooperate and connect to create a global vision for crypto?

Work with the industry?

Of all the proposals, there seem to be two areas of consensus. The first is that regulators must work with the crypto and DeFi industry to create new regulation - or even to implement old. Most regulators have taken steps towards this.

> What we are seeing is that regulators globally have seen a large brain drain into the industry. So regulators are now catching up, they're willing to listen a bit more. They're starting to realize that maybe they're not as natively equipped inside this new paradigm as they have been in the past. And so they're taking positive steps and creating good forums to engage with industry. It's a collaborative effort that needs to happen
>
> **Alex Royle**
> Head of Compliance and Regulatory Affairs, EMEA, Galaxy Digital

In the UK, the FCA has included Blockchain-based firms in its latest regulatory sandbox and launched a CryptoSprint to "gather views from industry and other stakeholders to help shape future policy. In Singapore, MAS has launched "Project Guardian" as a "collaborative initiative with the financial industry that seeks to explore the economic potential and value-adding use cases of asset tokenisation". And in the US, the SEC and CFTC are working together to host roundtables with the industry, that will hopefully inform their regulatory regime.

Many suggest that this is the only way to ensure that any enforced regulatory framework works for VASPs as well as investors involved.

Work together?

The second area of consensus is that, as above, regulators must work together on a cross-border, cross-state level. While we have seen messaging from regulators about their intentions to work together, the data shows little collaboration within the regulation itself.

However, while we don't see a huge amount of cooperation between localized regulators, we can see activity within international bodies that suggests a global approach is under consideration. The Financial Stability Board (FSB) and Bank of International Settlements (BIS) have spoken of their desires to create a global regulatory approach to crypto. the data shows that the Financial Stability Board (FSB) does appear to be practicing what it preaches, having published 16 RegInsights and 10 Sections of RegBooks. From this, we can see that the FSB is taking steps to actually regulate for crypto on a global scale.

On the other hand, BIS has published a high number of speeches, blogs and other RegInsight material (134 RegInsights), but has not made reference to crypto within any RegBook. While it has spoken more on the topic of crypto, it has done less to implement legislation. That is not to say, however, that legislation and regulation is not imminent.

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Create something new entirely?

Cryptocurrency, while evolved, is still an emerging currency – especially within the regulatory space. As such, there is still time – and in some instances a calling – for an entirely new means of regulation. Whether that be a new regulator, or a new way to regulate.

One option that is often floated, but seldom endorsed, is that of a global regulator for crypto. This would be a new independent body that would work with global regulators and the crypto industry to create a bespoke regulatory framework around cryptocurrency. This would prevent jurisdictional arbitrage, standardize regulation and reduce the burden on compliance teams. However, while this may sound like utopia for some, the reality would likely be hugely complex and difficult to set up, let alone manage.

Another option is the concept of "Embedded Supervision" as mooted in a Working Paper from BIS. The concept of embedded supervision enables regulators to leverage data from public blockchains in order to enact regulatory activities. This approach removes (or minimizes) the need for regulated firms to supply data to regulators. Instead, regulators can just access the information on the blockchain. This is an entirely new form of regulation which would null and void the debate around "old regs for new tech". Instead, this new concept "provides for compliance to be automatically monitored by reading the market's ledger".

While cooperation across regulators and industry are needed, and probable, there is far less likelihood of embedded supervision, or a global regulator being enacted in the near future.

10 The often-overlooked issue of sustainability

The movement to bring cryptocurrency within the traditional financial mainstream poses difficult questions for sustainability, especially for Bitcoin and Ethereum. These cryptos are founded on a Proof-of-Work (PoW) model, which is the mechanism used to confirm transactions and add new 'blocks' to the 'chain'. The process is notoriously energy intensive as it requires a number of participants in the PoW blockchain network to simultaneously compete against one another to solve a cryptographic puzzle. The more computers that try to solve the puzzle, the more complex it becomes. This means that it requires a huge amount of power and energy to fuel the computers in order to validate the blockchain. While Ethereum is attempting to move away from PoW, it continues to use it.

This poses potential conflicts for global regulators who have universally been professing to care about environmental, social and governance factors for finance – introducing climate-related disclosure rules in many jurisdictions. Regulators are simultaneously advocating for a greener financial system, while actively working to bring cryptocurrency under its wing, with negative environmental effects in tow. In some instances it is estimated that crypto mining has the same CO2 outputs as a country such as Belgium or Chile.

The same is true of some larger global banks and investment managers who are starting to offer crypto as an investment vehicle for pensions, while concurrently advertising ESG credentials.

In some instances, the mining of cryptocurrency is seeing retired or idle fossil-fuel based power sources being brought back to life – with the sole purpose of mining crypto. This was seen most recently in Greenridge, New York, where a coal plant was turned into a gas plant and is now used as a crypto mine.

The environmental effects of re-opening these shut-down energy plants are hotly contested. Crypto supporters suggest that such activity is reinvigorating local economies or add that cryptocurrency could be pioneers for renewable energy. Alex de Vries, doesn't see how:

> Miners always look for cheap and stable power, and that combination drives them to old, obsolete, immediately available infrastructure. They always need power TODAY and the existing infrastructure that's stable enough to provide it is going to be fossil-fuel based power sources.
>
> **Alex De Vries**
> Founder of Digiconomist, Data Scientist
> at De Nederlandsche Bank and PHD Candidate
> researching the sustainability of cryptoassets

Can regulation make crypto green?

In March 2022, there was panic in Europe as a last minute amendment to the European Parliament's Economic and Monetary Affairs Committee's Markets in Crypto-assets Ace (MiCA) threatened to prohibit crypto exchange platforms from offering trading in PoW-related currencies, such as Bitcoin. In essence, this would have given Bitcoin two years to clean up its PoW model through a transition process, allowing it to become greener or be banned. As it was, the amendment did not pass, though it is unclear how far any regulator could look to impose a ban on an activity that can often occur under the radar.

So how do regulators manage the fine balance between regulating for the climate and regulating for crypto? Perhaps it will instead take the form of an investor-led revolution, much like we see across financial services today. Or perhaps VASPs themselves will endeavor to make crypto greener in order to gain a competitive advantage.

> There is a limit to how effectively you can address Bitcoin miners directly – I think instead of targeting the miners directly you might have to target investors. This is lot easier and a lot more effective. Ultimately, the market determines the value of these crypto assets, which in turn is what drives the environmental impacts. The more valuable Bitcoin becomes the more miners spend on hardware and electricity. Reducing the appeal of these assets among investors might reduce their value and therefore their environmental impact.
>
> **Alex De Vries**
> Founder of Digiconomist, Data Scientist
> at De Nederlandsche Bank and PHD Candidate
> researching the sustainability of cryptoassets

11 Conclusion: regulation will come, but this isn't going to be easy

Half way through 2022, we stand at the precipice of regulatory change. Volatile crypto markets are now too intertwined with traditional finance to be ignored, but too complex to be easily regulated on a global scale.

Regulators stand at a cliff edge: to broaden their existing perimeters and welcome crypto, to work with other regulators to create a new global framework, or to tear up the rule book and consider something bespoke and unique to the nuance of crypto. For regulators, investors, and potentially the global economy – time is running out before the volatility of crypto bleeds into global financial stability. Time is also paramount when considering the potential environmental affects that crypto is having on societies and the earth.

It is likely, then, that regulators will act fast to stretch existing regimes to cater for cryptocurrencies. In turn, they may use stablecoins as a blueprint for new regulation to come. Undoubtedly, international bodies will work tirelessly to tie centralized regulation together with a decentralized currency. In any event, regulatory activity shows no signs of slowing, and compliance teams will have to work swiftly to anticipate, understand and implement emerging obligations.

CUBE

12 About CUBE

CUBE is a SaaS based RegTech designed to take the complexity out of regulation using artificial intelligence and automation to deliver Automated Regulatory Intelligence.

In short, we track, capture and monitor every regulatory change across the globe and make sense of it for our customers. Drawing on ten years of experience, we have a mature data set which covers the length and breadth of global regulatory content. As displayed in this report, CUBE has a golden source of regulatory data, covering emerging regulatory topics as well as more traditional areas, from AML to prudential and more.

This means that we make accurate inferences and intelligently link regulatory changes across different regulations and regulators, spot trends and make predictions rooted in data. This can all then be automatically mapped to our customers' policies and controls – leaving compliance officers to implement regulatory change across the organization.

Whether you're a large, multinational bank, or a small financial organization with up to a handful of compliance officers, we've got a suite of products tailored to you.

Speak to the team

This report was written and edited by Jennifer Clarke, Senior Editorial Manager for CUBE.

The data in this report is from CUBE RegPlatform.

July 2022