Retaining Sovereignty in a Forever Disrupted World:
Finding a Workable Regulatory Solution for Cryptocurrencies*

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Introduction

The following essay will survey at a very high-level some of the most pressing legal and regulatory issues facing cryptocurrencies and decentralized finance more broadly. I will evaluate each of these issues with a "shotgun" or "piecemeal" approach, with a view towards finding a constructive resolution between the myriad economic and technological possibilities offered by crypto, and the regulator's dual interests in consumer protection and to preserve the fundamental soundness of the regnant financial regime.

Though still in its infancy, crypto and the underlying blockchain on which it is based is

* J.D., Cornell Law School, 2022; John Marshall Fellow (2022), Publius Fellow (2020), Claremont Institute; Senior Online Editor, Cornell Journal of Law and Public Policy, Vol. 31; Securities and Exchange Commission, Fall 2021 Student Honors Program. Incoming litigation associate at Kasowitz, Benson & Torres. Prior to law school, Paul interned for President Donald J. Trump's National Economic Council in 2018.

already poised to permanently alter the course of financial transactions – and upend the longstanding wisdom on which such transactions are based. In this regard, crypto is much more revolutionary than extant commodities like gold, oil, and timber, as well as traditional securities like stocks and bonds. To the extent "crypto" may be shoehorned into a single category, its effects will reverberate across not only the world of finance and securities law, but politics more generally, and therefore, throughout the tangled matrix of the modern global economy.

In the abstract, decentralized financial systems (or "DeFi") attempt to instrumentalize modern digital technologies to create a fairer and freer financial system, one that is liberated from institutional authorities and predatory middlemen. In particular, DeFi is spared from the erratic (and often irrational) policies of centralized banks and the attendant shortcomings – such as rampant inflation – that increasingly plague sovereign fiat currencies untethered to a fixed commodity like gold. The seamless and inexpensive money transfers that may describe the driving and most laudable vision of cryptocurrencies are counterbalanced, however, by the harsh realities of money laundering, Ponzi and pyramid schemes, and other forms of misconduct that can easily accompany – and potentially reverse – the many upsides that should otherwise accrue to an innovation of this magnitude.

To the extent crypto has a political element, this essay will not shy away from speaking candidly about how crypto might help offset the rapidly changing geopolitical power balances between the United States and foreign competitors like China and Russia. Though undoubtedly still the global leader, the United States is also admittedly developing at a much slower pace compared to China and Russia.[1] Moreover, the latter two countries, generally seen as authoritarian, would be thus expected to follow an antagonistic approach to crypto, which they have,[2] given crypto's penchant as a libertarian and democratic alternative to centralized systems. The United States, as the beacon for global democracy and freedom, should thus embrace crypto passionately, albeit with levelheaded prudence knowing that any emerging technology will need some regulatory guidance to ensure its stated ideals are realized.

Accordingly, it would be gravely mistaken for the United States to model China and Russia's heretofore adversarial – and destructive – stances towards crypto. Indeed, there are components of decentralized finance, such as stable coins and decentralized exchanges (or "DEXes") which frequently pit themselves in healthy competition with their centralized counterparts – i.e., Central Bank Digital Currencies (or "CBDCs") and centralized exchanges like Coinbase (in crypto) and NASDAQ (in securities), to name just two prominent examples. However, inasmuch as those decentralized alternatives frame themselves as being in competition with perhaps a more familiar centralized offering, DeFi should not be misconstrued as introducing existential risks to the regnant institutions. Instead, these protocols should be framed as the best expressions of a free and competitive marketplace, in keeping with the crowning values of America's free enterprise system.

The reality is that – much like the two previous iterations of the digital revolution, now dubbed "Web 1.0" and "Web 2.0"[3] – Web 3.0, crypto, the blockchain, and everything else that

[1] *See* GDP growth (annual %).
[2] For China, *see* Crypto is fully banned in China and 8 other countries; for Russia, *see* Russian Central Bank again calls for banning crypto.
[3] *See* Web 1.0, Web 2.0 and Web 3.0 with their difference.

falls under that umbrella will need some intervention of regulatory bodies, like the SEC, and central banks, like the Federal Reserve, to realize its full potential. Over time it should be expected that DeFi will not so much replace extant central authorities, but form a symbiotic relationship with them, with each one bolstering the weaknesses of the other, leading to a sounder financial system overall. This collaborative enterprise would be at one and the same time less prone to the harmful inflationary pressures that could well see us go down the route of Venezuela if left unchecked,[4] while curbing the worst excesses of a largely unregulated system that has not yet reached maturity, and thus susceptible to the storm of volatility, speculation, and other abuses that any early-stage financial innovation would be expected to weather.

1) What *really* is Crypto? Decentralized Finance?

Having laid down the "broad" geopolitical framework out of which crypto emerged, it is only sensible to next ask: What is cryptocurrency?

Asking the question upfront will help orient subsequent analysis on whether a regulatory solution is appropriate based on the parameters of well-established and decades old securities and commodities law. Or, alternatively, whether the technology either requires an independent regulatory body (and attendant legal regime) based on its inherent novelty, or even better, whether the properties of the technology are *ontologically* incompatible with government regulation, at least insofar as regulation has been conventionally applied to other similarly situated financial products in the past. An offshoot of the latter inquiry is that perhaps regulation is appropriate (however defined and in whatever decided capacity), but such regulation would be

[4] For a primer on Venezuelan hyperinflation, *see* What caused hyperinflation in Venezuela: a rare blend of public ineptitude and private enterprise.

more appropriately vested in a private organization (maybe akin to the "Oversight Board" that regulates Facebook's speech code)[5], rather than a preexisting or wished-for regulatory body.

In certain respects, regulators have likely fallen short in their assessment of cryptocurrencies due to a fundamental misnomer that is baked into the name itself. To the extent popular cryptocurrencies are indeed "currencies," that is to say – expressly authorized by law[6] – most would fall short of the definition. Even the most widely adopted of cryptocurrencies, Bitcoin ("BTC"),[7] is increasingly less framed like a conventional "currency" – i.e., money that exchanges hands to procure goods – and more like a store of value or a commodity,[8] like gold and oil, that can preserve value over time.[9]

A looser understanding of money would be something that roughly equates to legal tender – or government issued money. The US dollar is one such example: its value has been rubberstamped by the US Treasury, backed by the full faith and credit of the federal government.[10] Under this definition for currency, crypto – or at least BTC – would be deemed currency only if expressly authorized by the government of a sovereign nation, in which case only El Salvador to date would satisfy the test for authorizing BTC as its official legal tender.[11]

But BTC, and many other cryptocurrencies, are not bound by geography; it may be the legal tender of El Salvador and perhaps on the balance sheets of a few other companies, to say nothing of multinational corporations, banks, and myriad public and private entities the world over. In this respect, BTC operates less like a form of money or currency, whatever definition

[5] *See* Ensuring respect for free expression, through independent judgment.
[6] *See* Currency.
[7] *See* Bitcoin (BTC) price stats and information.
[8] *See* The Politics of Crypto.
[9] See, e.g., "Cash is trash, Bitcoin is the 'digital gold'." - Michael Saylor.
[10] *See* The Fiat Standard: Saifedean Ammous.
[11] *See* El Salvador Becomes Bitcoin Laboratory as First Nation to Adopt it as Legal Tender.

may be used, and more like a *commodity* like gold and silver, which, like the former, are similarly globally distributed – i.e., no country ever had exclusive proprietorship over gold – and yet could also back the currencies of multiple countries simultaneously (which they long did when many companies operated on the gold standard at once).

By this framing, at the very least BTC would appear to be more appropriately classified as a commodity under American law given this fundamental property it shares with gold.[12] Now, there are two other important considerations to keep in mind: The first being that unlike gold, all crypto is digital – thus the regulator will have to decide whether its intangibility makes it so dissimilar from nondigital commodities as to obligate a different set of rules altogether. The second consideration, which derives from the first, is whether the digital property of crypto is dispositive for a regulator to treat crypto like other intangible financial products, thus requiring that crypto be subject to securities analysis.

2) The *Howey* Test? Alternatives?

Beginning with the *Howey* Test, which applies a four-part test to whether a particular financial instrument is a security: (1) The existence of an investment contract; (2) The formation of a common enterprise; (3) A promise of profits by the issuer; and (4) The use of a third party to promote the offering.[13] The point of this analysis is not to mechanically run every single cryptocurrency through this four-part test. There are three main reasons for this: (1) previous SEC Chairmen formally declared, at least BTC, to be a commodity, not a security;[14] (2) certain other crypto, notably Ripple ("XRP"), was classified as a security – at least over the course of a

[12] *See* CFTC Overview | Commodity Futures Trading Commission.
[13] *See* Howey Test.
[14] *See* SEC Chair Says Bitcoin Is Not A Security.

specified timeframe – by the SEC in official legal proceedings;[15] and (3) the *Howey* Test should probably be applied, if at all, in a more flexible and less formalistic manner in the province of crypto, giving due credence to both rapid changes in the underlying technology as well as alternatives to *Howey* that have emerged in the seventy-plus years since its advent – for instance, the somewhat more flexible "*Reves*" test.[16]

Beyond those factors, there are broader "macro" policy considerations to keep in mind as all this transpires in the background. For one, there is the problem of inflation, which is a product of governmental spending programs, and especially, the quantitative easing monetary policies (read: money printing) of Chairman Powell's Federal Reserve (the "Fed").[17] The Fed's role in all this may be more important than any other legal or policy consideration. This is because so many of the problems now routinely associated with crypto – whether, for example, NFTs and other decentralized protocols are just speculative bubbles, soon prepared to burst at the coming of the next recession,[18] and only now being artificially lifted by the reckless monetary and fiscal policies currently in place – will miraculously dissipate overnight once cruel reality sinks in. In this regard, the NFT bubble may be analogous to the dotcom bubble of the early 2000s,[19] in which many scandalously overvalued tech startups went underwater virtually overnight because so much of what had been marketed as "innovation" at the time were in fact just Potemkin Villages, backed by no real, underlying value. I will flesh this out in greater detail below, but it is worth noting here to help better contextualize recent regulatory initiatives (notably, the Biden administration's Infrastructure Law,[20] which imposed more regulations on crypto – mostly by

[15] *See* SEC v. Ripple.
[16] *See* What Is A Security? The Howey Test And Reves Test.
[17] *See* Jerome Powell's Fed policies have boosted the system that made him rich.
[18] *See, e.g.,* Crypto fundamentals and NFTs.
[19] *See* Dotcom Bubble.
[20] *See* DeFi and the "Digital Asset" Felony Hidden in the Infrastructure Bill.

way of taxation), which have garnered traction in response to DeFi's growing prevalence as a vehicle for wealth creation and innovation.

Returning to our initial discussion of securities law, it is perhaps appropriate to ask whether the SEC's former classification of BTC as a commodity is irreconcilable with its subsequent decision on XRP. In raising this question, we should further inquire what factors motivated this change in decision: Was it primarily due to technological changes that have come down in the pike in the three years since the SEC originally made its decision on BTC? Or was it primarily a function of ideology – the result of an SEC switching hands from a Republican to Democrat administration in that period? Or, alternatively, could it have been a function of greater adoption overall in the interim period, which spread awareness, and by extension, a greater appreciation of the risks involved in trading and lending crypto?[21]

Of course, lack of clarity on the overriding legal issues is what makes a proper assessment of the suitability of *Howey* and related tests unduly burdensome. Indeed, current SEC Chair Gary Gensler has stated repeatedly that "many crypto tokens are securities and fall under the agency's jurisdiction,"[22] a statement that seamlessly meshes with the reasoning which animated the Ripple decision. However, to the extent the Ripple decision is precedent, there is still less clarity on whether (1) all DeFi protocols here on out must similarly receive the same mechanical application of the four-part *Howey* Test to determine if they are securities; and (2) whether, by implication, it is therefore true that BTC necessarily fails one or more parts of

[21] I raise these questions not to offer comprehensive answers in an essay of this short length, but to give expression to numerous sorts of policy considerations at work in the background. These peripheral considerations cannot be excused when evaluating crypto, a topic that invokes passionate responses from proponents and critics alike and whose discussions have not been spared from the same partisan flames that have engulfed the rest of the country on nearly every issue under the sun.
[22] *See* SEC chief Gary Gensler says many crypto tokens are securities and fall under the agency's jurisdiction.

Howey as to render it a non-security. Obviously, the reasoning behind each of these issues is not as soundproof as regulators may like to think. One could probably argue with good reasoning that BTC, to the chagrin of many of its fiercest advocates, meets the threshold for a security under *Howey,* because its users are invested in a common enterprise, with the expectation of profit, which is derived from the efforts of others.[23]

All of this also overlooks how the SEC has been simultaneously swapping between both *Howey* and (the arguably less rigorous) *Reves* tests to evaluate different crypto projects. It is bad enough that a great deal of uncertainty surrounds *Howey*'s proper application. The fact that the SEC, however, has incorporated *Reves* to adjudicate various other Web3 and DeFi projects has introduced even more confusion into the picture. This confusion is heightened by the fact that neither *Howey* nor *Reves*, as this excellent Latham & Watkins précis highlights,[24] have been clearly and consistently applied to create a reasonable set of procedures upon which DeFi developers could rely. By sharp contrast, the haphazard nature by which both *Howey* and *Reves* have been utilized to date would suggest that either regulators have no idea what they are doing or have not given adequate care to the rules that govern DeFi protocols; or that such heretofore indiscriminate application of both tests is a telltale of a deeper animus towards the DeFi industry writ large, in which case the SEC has used the pretext of securities regulation to frustrate the growth of the industry overall.

As the Latham & Watkins article explains, "[t]he *Reves* decision was based on an investment relationship that is absent in many DeFi protocols. Without that sort of relationship,

[23] While there is general consensus that BTC does not pass Howey, there is reasonable scholarly debate as to which of the four prongs is decisive against BTC. This analysis says prong two and three, whereas this one says only prong two. Given this disparity, it is likely correct to say reasonable minds may disagree on whether BTC passes as a security or not under *Howey*.
[24] *See* The Limits of Applying Reves v. Ernst & Young to DeFi and the Perils of Regulating Web3 by Enforcement.

what can be gained from regulating DeFi and LP Tokens as securities under Reves is not clear." Thus, why the SEC has used *Reves* in situations where *Howey* would have been easier or more preferable is puzzling. Perhaps in the cases where *Reves* was applied, the SEC truly wanted to telegraph a less rigorous application of securities law to certain DeFi protocols: an olive branch, so to speak, extended to the industry, particularly in the wake of *Ripple*, whereby the SEC maybe sought to convey that the dramatic clampdown on XRP was anomalous to that protocol. By that optimistic reading, it somewhat undercuts the point raised earlier about how the SEC might prefer to stifle crypto rather than encourage innovation. That said, however, it does little more to placate justified concerns from the industry about the lack of clearcut regulatory guidance, which still does not exist.

Moving forward, if the SEC truly desires to frame itself as an umpire, and not obstructor, to the DeFi community, it must make clear which of *Howey*, *Reves*, or some newfound test devised specifically for DeFi protocols, is most appropriate and will be applied moving forward. Once it has made that determination, the SEC must consistently enforce DeFi protocols by the same workable standard to appease the worries of developers who so far lack much by way of guidance to self-police their own projects. Perhaps, ultimately, the SEC will – in line with the approach articulated by Chair Gensler in his recent interview with Jon Stewart[25] – opt for a broad-based strategy whereby it instead chooses to make examples of a handful of key industry leaders to establish a general set of principles for the rest of the industry to follow.

[25] *See* Can We Fix The Stock Market? Interview w/ SEC Chairman Gary Gensler | The Problem With Jon Stewart. SEC Chair Gensler: "I think what we can do is bring important cases, that are sort of high-profile cases, that show people, 'no you're over the line.'" He also explained that the agency is receptive to case-by-case bars for "individual accountability."

But if that is the path the SEC ultimately chooses, it must make clear of that to the rest of the industry. And moreover, that it will not renege on its promise at a later point and swap whatever standard it decides now willy-nilly for a different one down the line. In this regard, some written guidelines may still be desirable in order to both clarify (and codify) the standards it will be applying to the handful of high-profile "test cases," if this approach is indeed followed, as well as to establish a precedent for all future SEC commissioners to follow. One may argue that not doing so, and hence risk unleashing more uncertainty in the industry, would be a fundamental violation of due process, and hence a major breach of the SEC's fiduciary responsibilities to both customers and developers alike.

3) The Spot ETF Contingency

One final point worth raising is even if *Ripple* sets a precedent for most DeFi projects in terms of being presumptively classified as securities from here on out, the question of whether doing so actually conforms to the consumer-protection goals the SEC claims is an open-ended inquiry. So far in this analysis, we have been working with the general assumption, based on *Ripple*, BTC, and other precedents heretofore made, that classifying DeFi protocols as securities is a net negative for the industry because it obfuscates the rules and stifles innovation. This working assumption, while broadly true, is complicated somewhat in consideration of the equally haphazard regulatory approach the SEC has applied so far to crypto Exchange Traded Funds (or "ETFs").[26]

While in some instances, crypto-based ETFs have passed SEC regulatory muster, in many other cases (a recent notable example of this being Anthony Scaramucci's struck down

[26] *See* SEC Approves Bitcoin Futures ETF Filed Under the '33 Act.

Bitcoin spot ETF[27]) have not been authorized. The SEC's reasoning, again, is not straightforward – particularly for a Bitcoin ETF, wherein the SEC has already ruled that BTC is a commodity, and therefore, one might reasonably expect from that premise to open the trading of such ETFs. This is because ETFs generally track commodities and are a way by which commodities markets become available – albeit indirectly, of course – to retail traders (rather than exclusively the territory of institutions). It would be interesting to investigate the portfolios of the crypto companies included in ETFs that have been to date authorized by the SEC,[28] and whether such companies – Coinbase, for example, which is one such company in another Scaramucci ETF that was approved by the SEC: the First Trust SkyBridge Bitcoin ETF[29] – comprise a nontrivial size of its total balance sheet – say, 20% or 30% – in crypto like ETH, instead of more conventional asset classes like cash and stock.[30]

The main point, however, is that codifying something as a security must necessarily open some doors even if it closes others. Put differently, the SEC's primary role is not – at least in the abstract – to quash emerging industries. Its duty is to rubberstamp certain financial products as being safe enough for consumers to trade: thus, to sanction a particular DeFi protocol as a security must likewise confer that protocol with all the benefits a conventional security has: for example, a license to be publicly traded on a centralized exchange like the NYSE, if all other regulatory compliance measures are met. Thus, the SEC should be mindful that if it does "jump the gun," so to speak, and classify every or most DeFi protocols as securities, that it also be

[27] *See* The SEC has blocked Anthony Scaramucci's Bitcoin ETF.
[28] For a partial list, *see* 7 Best Cryptocurrency ETFs to Buy.
[29] *See* First Trust SkyBridge Bitcoin ETF Trust.
[30] Even more thrilling is the possibility that Elon Musk takes Twitter private, retrofits its balance sheet to be composed entirely of Dogecoin, and later retakes the company public. Would Twitter therefore be denied an IPO? What if the company went public, only to later add Dogecoin to its balance sheet – would that be a violation of securities law? What if the First Trust ETF includes Twitter in its fund: would that renege its authorization? Obviously, farfetched scenarios, but perhaps will not be as ridiculous over time!

equipped with the regulatory infrastructure to properly and fairly scrutinize those protocols as securities. This must include the prospect of registering for an Initial Public Offering ("IPO") or any other such lawful procedures that are also available to complimentary security projects based on centralized financial protocols. If that regulatory infrastructure is unavailable, or if the SEC believes it cannot enforce crypto protocols in the same manner as conventional securities, for reasons of knowledge gaps, technological differences, or some other factor, then proceeding to do so anyway would be negligent on the regulator's part because that would effectively amount to a "separate but equal" application of the law: leaving DeFi protocols with all the liabilities of regulated centralized securities and none of the advantages.

4) Surveying Broader Geopolitical Trends

As of this writing, tech stocks virtually across the board are in a downward spiral – a remarkable turnaround given how soon it follows the heels of one of the greatest expansions in recent market history.[31] Just a year ago, tech startups like Robinhood and veteran market lynchpins like Netflix[32] and Amazon[33] were enjoying historic runs, seeing their valuations jump to all-time peaks: a windfall that was the byproduct of a perfect storm of factors over many years, ranging from historically low interest rates,[34] low inflation,[35] lockdown-induced spending[36] (and the government programs that made such increased spending possible), and an historic expansion of credit due to quantitative easing.[37] Less than a year later, many of these

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[31] *See* Some tech stocks are down 75% from their highs last year — these are among the biggest losers.
[32] *See* Netflix, Inc. (NFLX).
[33] *See* *Amazon.com, Inc. (AMZN)*.
[34] *See* Fed's interest rate history: A look at the fed funds rate from the 1980s to the present.
[35] *See* Historical Inflation Rates: 1914-2022.
[36] *See* Third-Round Paycheck Protection Program (PPP) Funding: What Is It and How to Apply.
[37] *See* Size of the Federal Reserve's balance sheet since quantitative easing (QE) measures were introduced from March 2020 to April 2022.

same companies are holding on for dear life. Robinhood, the wonky retail trading startup that was embroiled in a ton of controversy (and made infamous) after its involvement in the January 2021 "GameStop Short Squeeze,"[38] lost nearly 90 percent of its total value from its 2021 peak, now floundering at less than $10 per share as of May 2022, triggering emergency measures like layoffs while having to offload some of that burden in the form of price increases on customers.[39]

Perhaps even more jarring are the tailspins of tech juggernauts like Netflix and Amazon, which have paced a nosedive that is observed across FAANG stocks generally.[40] Netflix, a far more established entity than Robinhood with a successful decades-long track record, is for those reasons even more striking: the digital streaming behemoth shaved off nearly three quarters of its total value in half a year's time![41] The rumor mill is running wild about whether the tech downslide is portentous of a much "deeper retrenchment for the [tech] industry" in the months to come.[42] This is intensified by the fact that the tech industry's tumble comes not in isolation of other worrying macro trends: oil in recent months has skyrocketed to unprecedented highs, the result of inflation, supply chain shortages, and the Russian-Ukraine war. And speaking of the devil, midway through 2022 inflation remains at a 40-year high, with no signs of a slowdown in federal spending,[43] which has in turn produced historic deficits and runaway debt of more than $30 trillion. Mortgage rates are also soaring, now approaching their highest values in recent

[38] *See* How GameStop Enthusiasts Caused a Short Squeeze in the Stock Market.
[39] *See* Robinhood Markets Inc.
[40] *See* Apple, Netflix, and Other Tech Stocks Are Crumbling. The Pain Might Not Be Over.
[41] *See* How Netflix went from a Blockbuster killer to a company whose future is 'clear as mud'.
[42] *See* The Tech Industry's Epic Two-Year Run Sputters.
[43] See, e.g., As pressure builds, Biden makes plans to cancel some student loan debt.

memory,[44] a factor that is sure to exacerbate pressures on tech companies, which has dampened the confidence of investors all around.

Meanwhile, the crypto market has similarly dithered: Bitcoin has plummeted into the low-$30,000s, as of this writing,[45] with no signs yet of slowing down: other popular cryptocurrencies, like ETH, SOL, and ADA, have experienced, in some cases, even more sobering hits over this timespan.[46] And since I already sound like the Prophet of Doom, I might as well finish with NFTs, whose market some investors are now speculating will fare the worst of all, with some oracles going as far as to forecast a wholesale collapse of the NFT industry![47]

Even if just ten percent of the above doomsaying materializes, it will seismically reorient expectations regarding tech stocks and the strength of the broader macroeconomy, inclusive of DeFi, in general. Perhaps this will be a necessary prophylactic, one that will in turn better structure expectations for regulation in the future. After all, if half the DeFi projects wind up going bust – complimenting the probable insolvency of at least some of the most hyped tech startups that up to now peacefully rode the tailwinds of the 2020-21 bubble – what remains on the other side of the storm will be sturdier foundations on which to build anew. This again tracks another tech-related macro trend at the dawn of the millennium in which only the most robust of that era's numerous startups – i.e., Amazon, PayPal – survived the crash of the 2000 Dotcom bubble. At a time when speculation remains rampant, and market trends increasingly divorced from reality, it becomes admittedly difficult to lay down reliable regulatory procedures in an environment when everything remains in constant flux.

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[44] *See* US mortgage rates rise; 30-year at 5.27%, highest since 2009.
[45] *See* Bitcoin.
[46] *See* Today's Cryptocurrency Prices by Market Cap.
[47] For one such take, *see* Why the NFT market will collapse – and it's not because of environmental concerns.

To date, the most effective form of regulation of crypto has been through taxation, particularly by way of the protocols of the Biden Infrastructure Bill, which applies a sort of "scorched earth" approach to the industry.[48] Of course, it would be ludicrous to suggest that these rules can be anything other than a short-term stopgap: if the industry wishes to grow, taxation can never substitute for well thought policies that establish transparent guardrails for the industry. Beyond that, given the disparate views between Republicans and Democrats on crypto that are only widening,[49] as well as the strong prospect that Republicans will retake at least one, if not both, houses of Congress come November's midterms,[50] it remains to be seen whether the Biden guidelines will be amended (if not outright replaced); the uncertainty on this score introduces yet another variable in the overall DeFi regulation equation, therefore compounding the uncertainties that already exist due to the instabilities in the broader market.

In addition, one wonders whether the desire to tax crypto industries is not a gravely shortsighted miscalculation on the part of lawmakers. After all, if the above considerations about tech and crypto markets being artificially inflated by expansionary credit policies[51] – which has created a large gulf between price and the product's intrinsic value – then one questions the wisdom of policymakers, who propped up equities markets in the first place by way of quantitative easing – and whether they are giving close enough attention to each of the steps involved in this complicated calculus. Put another way, the federal government inflates the overall economy through a consortium of different tactics – PPP loans, QE, debt relief, etc. – but if one follows where the money actually goes, it probably tracks a cyclical loop that creates minimal real value along the way. This is because whenever government money is injected into

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[48] *See* @jchervinsky's Twitter thread.
[49] *See, e.g.*, When Did Crypto Become Republican?.
[50] *See, e.g.*, Analysis: Republicans poised to do well in 2022 midterm elections.
[51] *See* Expansionary Policy.

the market, private lenders – institutions like Goldman Sachs and JP Morgan – can then exploit the many fruits of lowered interest rates (which are the result of more dollars circulating in securities and bonds markets through quantitative easing) by allocating even more money towards startup projects, like DeFi protocols and Big Tech companies (or indirectly, by way of venture capital).[52] Ergo one finds the creation of literally hundreds of tokenized and fully autonomous DeFi protocols, some bordering on the ludicrous, like "Abracadabra & Magic Internet Money,"[53] which then regulators single out as problematic for a bevy of obvious reasons. But regulators generally also lack the foresight to recognize that these dubious protocols (indirectly) exist in the first place largely because of the slipshod fiscal and monetary policies these very same regulators routinely promote!

It is without a doubt that some of the above-mentioned protocols are ludicrous, and perhaps not a trivial share of illegal Ponzi/Pyramid schemes, or pump and dumps. This is crystallized once the market takes a downturn, as it now shows signs of, and the institutional support dries up, thus setting up so many of these projects for failure for want of market participants.[54] But one cannot help contemplating whether the hyperfocus on these high-risk DeFi protocols are not being used as fodder to detract attention away from the even more

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[52] *See* Quantitative Easing (QE); Venture Debt Financing: How It Works, Terms and Best Alternatives.

[53] *See* abracadabra.money.

[54] Unfortunately, space does not permit an extensive analysis of these DeFi projects: and the above negative characterization about many DeFi protocols, though I believe to be broadly true, is not without some caveats. It need not be said that token economies are not bereft of all value, particularly as a supplement (or alternative) to centralized exchanges, which include the tremendous prospect of eliminating rapacious middlemen – a la Robinhood and Citadel – to make way for seamless transactions matching buyer and seller. But for many of these protocols, the aspiration does not conform with reality, at least at this stage; and thus, for all practical effects, they function more like Pyramid schemes than disruptive and meaningful alternatives to traditional banking (more on this below).

reckless policies of centralized governing bodies – the Fed, US Treasury, Congress, and the huge private institutional lenders that do the formers' bidding.[55]

The latter point dovetails in particular with the legitimation and widespread use of SPACs in the centralized financial space that became such a market craze at the start of the pandemic,[56] which functionally operate as shell companies under a swankier name. Though probably something that should have been much more heavily regulated (and if there is to be a recession, will have likely played a nontrivial role in bringing down the tech sector), but when the opportunity was presented on the regulator's table, they mostly were all talk, no action[57] (which one cannot help but interpret as a tacit endorsement of what had been going on). Perhaps they were too busy pondering ESG,[58] or better yet, the depths of Modern Monetary Theory (or "MMT"),[59] a pseudointellectual facsimile that helped mitigate the excesses of runaway federal spending under a scholarly veneer.

All that is to say, DeFi protocols, however "subversive" and antiestablishment they make themselves out to be, in truth deal with far less money than the centralized authorities who regularly like to feign outrage over DeFi and as often prefer to make bogeymen out of DeFi projects (and blithely group the bad actors and innovators in the same bucket), rather than take responsibility for their own (incalculable) missteps. Should this current market take a page out of 2008's playbook, DeFi's overall contribution would amount to nil in comparison to the

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[55] Speaking to this general disenchantment, *see* PayPal Co-Founder Peter Thiel - Bitcoin Keynote - Bitcoin 2022 Conference.
[56] *See* 2020 Has Been the Year of SPAC IPOs: Here Are the Prominent 4.
[57] *See, e.g.,* The SPAC World Is Eager to Keep Growing, but Regulatory Threats Aren't Going Away; Big Law's SPAC Love Affair Draws Watchful Eye of Regulators.
[58] *See, e.g.,* Larry Fink's 2022 Letter to CEOS: The Power of Capitalism; for a contrarian view, *see* Elon Musk rails against WOKE trend to make corporate world more 'socially conscious' saying ESG rules have been 'twisted to insanity' and should be 'deleted if not fixed' and Peter Thiel leads bitcoin backers blasting ESG 'hate factory'.
[59] *See* Is This What Winning Looks Like?.

centralized players in Washington and Wall Street, who, much like their 2008 counterparts,[60] bear the maximum brunt of the burden for any would-be fortunes lost as the result of a largely avoidable market crisis.

5) Regulatory and Policy Suggestions

We end on a less gloomy note. The possibilities for DeFi are numerous, a fact that will become ever clearer over the course of the next twelve months especially as markets correct for the mistakes committed by policymakers in the recent past. While the picture may change quite dramatically for DeFi over that timespan, what remains at the other end for those projects that survive will be a considerably fortified outlook that will allow regulators to evaluate which projects are unflagging and which are not. From there will be divined a more accurate portrait of the overall market, whose survivors (should a crash occur) will be primed to remake the landscape in much of the same way as Amazon, Apple, Google, and many of the other leaders that powered through the Dotcom bubble of the early 2000s, a phenomenon that produced so many of the Web 2.0 mainstays that have so permeated American society over the past two plus decades. Web 3.0 is well-positioned to follow a similar role: its survivors will thus be expected

[60] An interesting query: what would be the 2022 analogue to 2008's subprime lending? Perhaps the equally destructive campaign for "ESG," over which leading entrepreneurs like Elon Musk and Peter Thiel, have exacted withering criticism. ESG, much like subprime mortgages, cudgels the ideal of social responsibility in the package of innovation – yet few in the industry have realized that ESG and the production of real, tangible value are as ersatz a relationship as the valuation of Robinhood stock at its 2021 summit in comparison to its true value. For his part, Musk has capitalized hugely on at least the "E" side of the perfidious acronym, receiving billions of dollars in federal subsidies for his promise of delivering electric vehicles (a promise he has admittedly made good on) to help reverse climate change. Though, it is also worth noting here that Thiel has a more cynical explanation for Musk's perceived environmental altruism, which Thiel candidly states in his best-selling startup guidebook, *Zero to One*: "Tesla knew that fashion drove interest in cleantech. Rich people especially wanted to appear "green," even if it meant driving a boxy Prius or clunky Honda Insight. Those cars only made drivers look cool by association with the famous eco-conscious movie stars who owned them as well. So Tesla decided to build cars that made drivers look cool, period – Leonardo DiCaprio even ditched his Prius for an expensive (and expensive-looking) Tesla Roadster. While generic cleantech companies struggled to differentiate themselves, **Tesla built a unique brand around the secret that cleantech was <u>even more of a social phenomenon than an environmental imperative</u>**." (Emphasis added) (169).

to serve as the market's lynchpins in the decades to follow, setting the pace for not only future technological and social developments, but also regulatory policy.

To that end, we suggest that the following preliminary groundwork (which in keeping with this essay's analysis overall are purely "high-level" recommendations) should be applied incrementally, allowing the broader market to dictate when regulatory policy is adequate and not following the scorched-earth tactics of the Build Back Better legislation, whose permanence is anything but foreordained given the rapidly shifting political and macroeconomic climate. In sum, policymakers at this stage would be most judicious to apply a "wait and see" strategy for the time being: the time for visionary, grand-scale crypto-regulatory alternatives, akin to those proposed by Coinbase,[61] will indeed come. But as of this stage, those initiatives are disproportionately far-reaching – "pie in the sky" – relative to the sober facts on the ground, which make difficult (if not impossible) the ability to implement a tried-and-true regime of the sort that both regulators desire and developers and customers deserve.[62]

On regulatory policy, a proper place to begin is with BTC, the largest by far of all DeFi protocols being the first such protocol to make use of the blockchain and, for that reason, having the largest market cap over any of the others.[63] The driving policy objectives should be adoption and standardization, with a view towards decreasing volatility and encouraging innovation. For starters, to the extent that BTC is actually a commodity, not security, the SEC must make clear and codify that classification. Beyond that, it must clear up discrepancies on why some crypto

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[61] *See* Coinbase - Digital Asset Policy Proposal: Safeguarding America's Financial Leadership.
[62] For the time being, prudence dictates that regulators should pussyfoot around intervention – only involving itself in the most extreme cases demonstrating bald-faced evidence of criminality, or for protocols that are so egregiously violative of regulatory laws, no matter which test applied, as to receive near-universal condemnation from the larger DeFi community.
[63] *See* Bitcoin.

ETFs have had their applications denied while others approved, and work towards shoring up the regulatory landscape to avoid such inconsistencies in order to clear the way for more ETFs to be authorized. To do so would help foster greater institutional and retail adoption. In keeping with that objective, regulators should think of ways to not only authorize DeFi projects as they pass over the transom but go the extra step and operate as a *proactive* or *offensive* agent to ignite greater overall adoption.

To this end, regulators should both encourage wider adoption of crypto by institutions as well as the attendant transparency measures, such as making the percentage of a company's stake in crypto public knowledge (perhaps by making it a requirement on 10-K filings or another regulatory filing).[64] This may be encouraged through a combination of verbal endorsements, tax incentives, and federal subsidies, among other policies. If this practice were energetically adopted by regulators, it would stabilize the price of BTC by making it easier to survey its cross-market allocation: how much of it is in the hands of retail investors vis-à-vis institutions. This will better help all parties anticipate and competently gauge how the behaviors of so-called "whales"[65] (i.e., institutions like JP Morgan[66] or Tesla[67]) affect crypto (and BTC specifically)'s underlying value.

Moreover, the Treasury should adopt a portion of BTC (and potentially other cryptocurrencies) on its own ledger, following the lead of El Salvador.[68] This would be the definitive stamp of approval by centralized institutions, fortifying the confidence of the market overall while telegraphing to the global community that the US government has confidence in

[64] *See* 10-K.
[65] *See* Bitcoin Whale.
[66] *See, e.g.*, JPMorgan, led by bitcoin skeptic Jamie Dimon, quietly unveils access to a half-dozen crypto funds.
[67] *See, e.g.*, Tesla will no longer accept Bitcoin over climate concerns, says Musk.
[68] *See* El Salvador buys the bitcoin dip, adding 500 coins to its balance sheet.

crypto's prospects as an inflationary hedge and a long-term store of value that is operationally the digital equivalent to gold. The sum of these measures would increase transparency, lower volatility, dramatically raise both consumer and market morale, and put the best interests of all investors, both large and small, first and foremost. It would furthermore signal to the global community – and, in particular, adversarial markets like China and Russia – that the United States will boldly pronounce itself as global leader on what may ultimately go down as the most important technological innovation of this generation.

Once the economic dust inevitably settles and consumers and regulators alike have a much better idea of the lay of the DeFi landscape, regulators may seek to implement stringent guardrails around the conditions that will furnish the legal regime to come, which will in turn make DeFi adoption and development widespread, affordable, and safe and easier for everyone. While at this still early stage it is hard to speculate when those conditions might arise that would make standardization appropriate (and possible), an example of where this might become necessary is in the DEXes space. The idea to standardize certain protocols would be led by two impetuses: (1) consumer protection; and (2) encouraging innovation.

We alluded to earlier how it is difficult to determine which of, if any, several DeFi projects now being worked on will prove viable over the long run. An example of this is the yield farm protocols discussed in class: projects such as Aave, PancakeSwap, Compound, and Abracadabra. It may be too premature at this time to distinguish between which of these projects are both technologically and economically feasible, and which are merely using the pretext of DeFi to cover up a less than admirable use of economic resources. Taking a very broad perspective, it would seem the possibility of a truly autonomous decentralized exchange would be impossible without some degree of regulatory intervention. This would be required to one, standardize which of several competing automated market makers (“AMMs”) is the “true” one, on which tokens (perhaps eventually linked to tangible products and goods, thus imitating the operations of centralized exchanges) may be issued and traded; and two, to have some enforcement body to facilitate the adoption of ICOs[69] (perhaps in conjunction with IPOs at the time a company goes public) in order to generate real value in the overall market. If, for example, Aave’s[70] protocol were standardized by a regulatory body – be it the SEC or someone else – true, it may spell doom for competing protocols, but at the same time, it would give the underlying market the necessary kickstart to convert a now-fledgling enterprise,[71] valued somewhere in the tens of millions,[72] to a full-blown exchange, able to compete on the same playing field as its centralized analogues in NASDAQ and the NYSE.

If the long-run goal of DeFi is to truly phase out (or at the very least disaggregate and make people less dependent on) the centralized institutions, then it will probably have to find a way to standardize certain procedures in order to make such goals possible. To the extent the industry cannot “innovate itself out of the need” of centralized regulatory authorities (a pipedream for sure), the humdrum centralized institutions will still be needed, at least to some extent, to drive the markets and perpetuate them over the long haul. This it has arguably been doing already (albeit indirectly) through massive federal lending. Previous iterations of the web would not have been possible without government assistance. Even the biggest crypto

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[69] *See* Initial Coin Offering (ICO).
[70] *See* Aave.
[71] *See* Diving into DeFi as investors brace for a volatile 2022.
[72] *See* Aave financials – crunchbase.

evangelists – entrepreneurs like Elon Musk[73] and Peter Thiel[74] – still rely on federal authorities to foster and subsidize their projects.

On that note, I should close this brief (and, again, high-level) survey by referencing a statement made in February by SEC Commissioner Hester M. Peirce. Although it is true that Ms. Peirce is a Republican, and thus her view may be somewhat more conciliatory to DeFi projects than the Commission as a whole, it nevertheless bespeaks a lesson likely apropos to developers and regulators alike. In her statement, Pierce started her final paragraph by saying: "We often tell companies wanting to offer products that could implicate the securities laws to '**come in and talk to us**.' To make that invitation meaningful, however, we need to commit to working with these companies to craft sensible, timely, and achievable regulatory paths."[75] (Emphasis added.) I believe, particularly in our hyper-partisan environment, it can be easier than ever to write off all apparent enemies and overlook the truly beneficial effects that could arise from a joint collaboration, even in this age of distrust.

I will end with a personal anecdote: last summer, I completed the Securities Law Clinic course at Cornell Law School. As part of the clinic, we attended a virtual conference hosted by several SEC commissioners, including Elad Roisman and Hester Pierce, who extended an invitation to students to schedule a one-on-one meeting afterwards. I took up that offer and reached out to Commissioner Roisman's secretary, who served briefly as SEC Chair for an interim period during the transition of presidential administrations,[76] and we scheduled a call for June. I was interested in speaking with Commissioner Roisman after having investigated the

[73] *See, e.g.,* Elon Musk is speaking out against government subsidies. Here's a list of the billions of dollars his businesses have received.
[74] *See, e.g.,* Peter Thiel Gamed Silicon Valley, Donald Trump, and Democracy to Make Billions, Tax-Free.
[75] *See* Statement on Settlement with BlockFi Lending LLC.
[76] *See* Elad L. Roisman.

Robinhood short squeeze at great length in a law review note.[77] I wanted to see if there were potential market opportunities for a retail trading app that avoided so many of the pitfalls Robinhood committed with respect to transparency, payment for order flow, and gamification. Lo and behold, based on my conversation with Chair Roisman, there seemed to be an opportunity on the market, which is what inspired me to begin developing Kingfish Trading, a retail trading platform for amateur investors.[78] But the lesson from the Roisman call is that when I asked him how many other students reached out to him to set up a call, he told me I was the first to ever do so in his career. I wonder how much of that is true across the board for DeFi. I also am curious as to whether those companies that go against the crowd by reaching out to regulators would not have a leg up on their peers. My bet is that they would.

Thus, I would wager that the protocols which become part of our common vernacular five or ten years down the line, much as Amazon and Tesla have been for Web 2.0, will similarly follow the examples of Bezos and Musk and utilize the government's resources when it is expedient to do so. This will give them the lead in helping to create industry-wide standards, a product of communication and transparency between DeFi protocol and regulator, that would in turn benefit the former substantially while giving the latter the needed assurances that the industry's leading player is a friend who can be trusted, not an enemy intent on burning down the existing apparatus.

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[77] *See* How Robinhood Has Revolutionized Online Trading and Dramatically Upended the Traditional Model for Payment for Order Flow (PFOF).
[78] *See* Kingfishtrading.