

AN INTERNATIONAL FINANCIAL ARCHITECTURE FOR STABILITY AND DEVELOPMENT

The Crypto-Assets Experience: Give Technology a Chance without Milking Users nor Investors (and Keep Close International Oversight on Potential Collateral Damage)

Claude Lopez, Milken Institute

Susana Nudelsman, UBA

Alfredo Gutiérrez Girault, CARI

José Siaba Serrate, CARI

www.t20argentina.org



/T20Solutions



@T20Solutions



/T20Solutions



Abstract

Crypto-Assets (CA) are digital instruments aimed to serve as mediums of exchange that rely on decentralized control and boast the (yet to prove) promise of a revolution in Finance. Their meteoric rise entails both opportunities and perils. Rewards are uncertain; risks, much more tractable. We propose the design of a cross border framework to put CA on a level regulatory playing field with other competing financial instruments and activities. That involves keeping close scrutiny of CA linkages with the real economy and the existing conventional financial infrastructure, and bringing CA under the normal anti-money laundering (AML) and counter-terrorist financing (CFT) standards. Risks borne by users and investors - and possible systemic risk - deserve thorough examination while giving technology space to develop its genuine potential.

Challenge

Cryptocurrencies have arrived. Not one or two or half a dozen. Close to 1600 are on circulation - worth more than USD 400 billion as of early May 2018 - and many more are expected to come through planned private and public offerings (ICOs). **We prefer to call them Crypto-Assets (CA) as their use as currency is very limited or nonexistent (though most of them, as currencies, lack intrinsic value).** Considering that they are easily replicable - and there are more CA than conventional currencies- , a high mortality rate is to be expected among all of them, without having any chance of ever becoming monies, with, perhaps, just a few exceptions (those capable to create value through significant acceptance and usage).

Are they a brave new world? Or, are they a (dangerous) passing fad? **CA have already experienced exuberance and bubbles and falls from grace, and survived, as they thrive in a continuous high volatility environment.** It has to be noted that experts' opinions have not been gentle. CA have been categorized as "fraud" (Jamie Dimon, CEO of JPMorgan, though he later regretted it ; and many others), "basic Ponzi schemes" (Jim Yong Kim, head of the World Bank, among others), "the mother of all bubbles" (economist Nouriel Roubini), "a combination of a bubble, a Ponzi scheme and an environmental disaster" (Agustín Carstens, General Manager of BIS). Successful value investor, Warren Buffet, warns that the "craze" will "almost certainly come to a bad ending". **There is no conspiracy of silence, indeed.**

Open voiced criticism and repeated steep price falls have not deterred investors in constantly increasing their exposition. "Cryptocurrencies could drop to near - zero at any time", Ethereum founder - Vitalik Buterin - has written in his own twitter without triggering any run against CA. CA, at least at current times, can spare of praise



and political correctness. They carry hi tech allure that shines even in the toughest times. The underlying technology gets favorable reviews – even from the above cited detractors – as it holds the potential to contribute to a drastic improvement of payment systems (with significant expected payoffs in terms of financial inclusiveness and economic efficiency). **But given that the essential technology is open source, those potential benefits will probably be mostly socialized and not harvested by CA investors.**

Until the present date, **systemic risk has been deemed negligible due to the small size of the nascent asset class**, but its magnitude is growing, market setbacks notwithstanding. Most of the dangers that have been mentioned by authorities – and seem to be at the top of their agendas – are linked with illicit transactions, money laundering and tax base erosion or terrorism financing concerns. But that analytical frame, while rightly oriented, is not sufficient. **Size matters, but strategic location of risk does, too.** It is well known that a small bird within a jet engine could spell lethal trouble. And CA are displaying a rising tendency to bias their expansion towards bigger financial engines as they get more public visibility and gradually leave their marginal status behind. Their quotations (and ad pieces) are moving to the mainstream financial pages, bitcoin ATMs are spreading, more merchants accept payments in bitcoins (that are automatically converted into fiat through the financial system), and so forth. Trading in standardized futures was authorized by the CFTC in the US last year. Both Chicago main exchanges, CBOE and CME, launched contracts on bitcoin in December 2017 (though transaction volumes remain very low). Requests of authorization to start dedicated ETFs (exchange traded funds) have been filed in the US SEC though none have prospered (and several were later retired by the interested parties. Mr. Dimon’s back and forth declarations – initially he even said that any employee involved in trading CA would be dismissed from his firm – should be put into the right perspective. If growth persists, CA could eventually become a very lucrative line of business. And banks compete for profits among themselves. If the more aggressive players decide to participate, they may force even non-believers to jump into the bandwagon. Does anyone remember subprime? **In a not so distant future, if negligence prevails, a debt financed boom in the asset class could turn into a serious financial headache.** Its high energy intensity – with the bitcoin network alone currently estimated to consume more electricity than 159 countries (including Ireland and most countries in Africa) – may also trigger significant adverse environmental impacts.



Proposals

CA are a post Lehman financial innovation. Their frenzy is a market phenomenon that has popped up under the new framework of financial architecture and regulation.

It is a rational technological and entrepreneurial response to existing incentives as they are, at least on paper, extremely rewarding to their creators and early investors. As such the CA experience provides an actual field case to appraise the virtues and weaknesses of the revised set of rules of the game that have been put in place after Lehman in the name of enhanced stability. **Do we have a good firewall to let financial innovation pass while avoiding its potential pitfalls?** Could former hypes – like the dotcom – or the subprime episodes – repeat themselves if they are skillfully dressed under new hi tech clothes? How is the public – users, unsophisticated investors and society – best protected? The CA rolling coaster fever looks as an early warning of failure. And this is not only a national concern but a multilateral one that the G20 should address now. The digital world is flat. It has no national frontiers and its influence is global. **So, international cooperation is of the essence.**

We consider that the G20 should develop a specific CA chapter within its broader financial innovation agenda. The evolution of CA and their potential impact on financial stability should be monitored regularly, both with a short and long term perspective. **That task must be started sooner than later and should not wait for CA to reach systemic importance. Current risks borne by users and investors – and their rapidly increasing trend – deserve thorough examination.** We believe that from such analysis, recommendations and directives could emerge at time to **influence a more useful development path for CA – and competing technologies – and diminish potential social waste and eventual collateral damage** (on third parties, trust on the payments systems, the environment, etcetera).

National regulation on CA is just in an infant stage, and in some countries still absent. Where regulation exist it is not yet a stable established corpus but more of a work on construction type of normative, still prone to big changes – frequently due to specific circumstances such as adverse events like theft or hacking – and with a limited scope that leaves important blind spots unattended. Regulatory orientation varies wildly: ranging from liberal and friendly approaches (such as in Switzerland) to very hostile ones aimed at clamping down a full set of activities (as in the case in China). **Giving heterogeneous national regulatory approaches, their learning phases, and the borderless nature of CA, there is an obvious need for a basic level of international consensus on how to handle CA so as to avoid regulatory arbitrage,** race to the bottom type of behavior, the **drilling of legal norms** that haven been agreed upon in areas such as tax evasion and money laundering and that may render them ineffective, the **early detection of perils** that could be incubating within the financial and payment systems, and the **investigation and prosecution of serious offenders.**



We recommend the design of a cross border framework to put CA on a level regulatory playing field with other competing financial instruments and activities. Assuring consistency and the building of a preemptive firewall for damage control is a key purpose for putting such framework in place sooner than later. This is a terrain for collaboration among the Financial Stability Board, the IMF, the Financial Action Task Force on Money Laundering (FATF) and other Global Standard-Setting Bodies (GSSBs).

We think that this framework could be established along these lines:

It should cover and monitor activities and not only entities. Given the disruptive nature of the new technologies, most of the activities involved are currently executed in a shadow area by players out of the radar of any regulator and /or supervisor.

It should keep close scrutiny of CA linkages with the real economy and the existing conventional financial infrastructure. Nodes – such as online exchanges and wallets – where CA and fiat currency are converted into each other are crucial. In February several banks announced their decision to ban CA transactions financed through credit cards revealing the existence of an open gate where risks could easily pour from one system to the other.

National jurisdictions should agree on standard manuals of procedures and best practices, the compilation of basic information and the regular exchange of such information.

The CA experience shows the need to establish strong rules to promote market integrity and **protect investors and consumers** from a wide array of threats that include fraud and cheating scams, hacking, outright theft, closure of exchanges, price (and exchange rate) manipulation, etc.

It is imperative to bring CA under the same operational umbrella that FATF has developed as anti-money laundering (AML) and counter- terrorist financing (CFT) standards. Require online trading platforms to carry out due diligence on customers and report suspicious transactions. Imitate South Korea's initiative to require transactions on CA exchanges to be linked to real-name bank accounts subject to AML obligations. By ending anonymity take advantage of blockchain superb traceability attributes.

It should provide a robust evaluation of the environmental impacts of CAs – in particular their energy use.

We also think that CA stakeholders should be able to engage in this process of



regulatory fine tuning and make their voices heard.

After putting the new underlying technologies under the same regulatory umbrella, let them develop and compete with other traditional or non- conventional platforms on an equal footing as they provide the impetus to rethink the way finance is done. There are many promising areas for development: payment systems (execution/ liquidation / settlements; cross border payments), smart contracting, and others, in a genuine search for lower costs of transactions, better risk management and greater financial inclusiveness.

Analyze the sovereign side of CA: from the pros and cons of issuing digital currencies to the current rogue states' involvement and the attempt to use CA to circumvent sanctions by the international community. Examine the first national CA - the Venezuelan petro - and its role. Explore the convenience of issuing digital currencies by multilaterals as, for example, a digital SDG.

In a nutshell:

We propose the design of a cross border framework to put Crypto-Assets (CA) on a level regulatory playing field with other competing financial instruments and activities. That is not to regulate more but equal. This task must not wait for CA to reach systemic importance. It should cover and monitor activities, and not only entities; keep close scrutiny of CA linkages with the real economy and the existing conventional financial infrastructure, and bring CA under the conventional anti-money laundering (AML) and counter- terrorist financing (CFT) standards. The evolution of CA and their potential impact on financial stability should be monitored regularly. From such analysis, recommendations and directives could emerge at time to influence a more useful development path for CA - and competing technologies - and diminish potential social waste and eventual collateral damage. This framework should give innovation space to develop its genuine potential and make a positive social contribution.

Other Recommendations:

Handle the current CA market boom with special care as it will probably end with a resounding bust (it will for most of the CA on circulation). **Bubbles happen**, even with more traditional extensively regulated financial instruments that operate with higher transparency. **Consider potential stress scenarios, identify the weak spots and figure out tentative action plans for remedy.**

CA are clearly not suitable for non-speculative investors, but individuals have



enthusiastically embraced them. **More information and education** might tame that tendency but, while this inflated pricing game lasts, it might be futile. Nonetheless, there is a moral obligation to set a straight record of advice even if most people do not want to hear (just for those that might decide to pay attention to risk/reward profiles).

Try hard to avoid the foreseeable next legs of a possible “sucking game”: that is dumping CA and ICOs to the public in order for CA creators, connoisseurs and early investors to cash in and leave off the table. Facilitating increased access to the more established markets – with their greater liquidity pools – is an easy way to inflate prices first, and then pave the road for the exit strategy. So this area deserves particular oversight in terms of investor protection.



References

1. <https://www.merriam-webster.com/dictionary/cryptocurrency>
2. Data gathered by Coinmarketcap.com, a specialized site.
3. That is the same terminology used by the G20 finance ministers and central bank governors in their Buenos Aires ´ Communiqué of March 20, 2018. <https://www.g20.org/en/press/press-kit/press-releases/communique-first-g20-meeting-finance-ministers-and-central-bank>
4. Money is a social convention where one party accepts it as payment in the expectation that others will do so too. On how far private money can go, and historic precedents of its usage, see <https://www.bis.org/publ/work698.htm>
5. One has to consider also that a true global cryptocurrency might emerge in the future as an improved version relative to these pioneer CA.
6. Just to get a glimpse of the exciting mode take a look at <https://www.forbes.com/sites/kenrapoza/2018/01/02/2018-will-see-many-more-cryptocurrencies-double-in-value/#2ba37fae3eed>; <https://www.forbes.com/sites/kenrapoza/2018/01/02/2018-will-see-many-more-cryptocurrencies-double-in-value/#2ba37fae3eed>; <https://www.finder.com/cryptocurrency-predictions>
7. For a bitcoin price history visit <https://www.buybitcoinworldwide.com/es/precio/>
8. <https://www.ccn.com/jp-morgans-jamie-dimon-labels-bitcoin-fraud/>
9. <https://www.ccn.com/jamie-dimon-regrets-bitcoin-fraud-remark-remains-uninterested/>
10. <https://www.bloomberg.com/news/articles/2018-02-07/cryptocurrencies-are-like-ponzi-schemes-world-bank-chief-says>
11. <https://www.project-syndicate.org/commentary/why-bitcoin-is-a-bubble-by-nouriel-roubini-2018-01?barrier=accessreg>
12. <https://www.bis.org/speeches/sp180206.htm>
13. <http://www.dailymail.co.uk/sciencetech/article-5255001/Warren-Buffett-says-Bitcoin-end-DISASTER.html>
14. <https://www.cnbc.com/2018/02/19/ethereum-creator-vitalik-buterin-warns-about->



[cryptocurrency-investment.html](#)

15. <https://www.mckinsey.com/industries/high-tech/our-insights/how-blockchains-could-change-the-world>

16. We acknowledge that technological innovation, including that underlying crypto-assets, has the potential to improve the efficiency and inclusiveness of the financial system and the economy more broadly`. Excerpt from the G20 finance ministers and central bank governors´ Buenos Aires Communiqué of March 20, 2018

17. Bank of England Governor, and Chair of the FSB, Mark Carney: ´At present, in my view, crypto-assets do not appear to pose material risks to financial stability`. <https://www.bankofengland.co.uk/speech/2018/mark-carney-speech-to-the-inaugural-scottish-economics-conference>

18. Carney: ´Even at their recent peak, their combined global market capitalisation was less than 1% of global GDP. In comparison, at the height of the dotcom mania, the valuations of technology stocks were closer to about a third of global GDP. And just prior to the global financial crisis, the notional value of credit derivative swaps was 100%`. <https://www.bankofengland.co.uk/speech/2018/mark-carney-speech-to-the-inaugural-scottish-economics-conference>

19. “Market participants should take note that the relatively nascent underlying cash markets and exchanges for bitcoin remain largely unregulated markets over which the CFTC has limited statutory authority. There are concerns about the price volatility and trading practices of participants in these markets. We expect that the futures exchanges, through information sharing agreements, will be monitoring the trading activity on the relevant cash platforms for potential impacts on the futures contracts’ price discovery process, including potential market manipulation and market dislocations due to flash rallies and crashes and trading outages. Nevertheless, investors should be aware of the potentially high level of volatility and risk in trading these contracts.” Excerpt from the CFTC Statement on Self-Certification of Bitcoin Products by CME, CFE and Cantor Exchange. <https://www.cftc.gov/PressRoom/PressReleases/pr7654-17>

20. Applications were requested to be pulled until concerns regarding liquidity and valuation of underlying instruments are resolved, according to withdrawal letters filed to SEC.

21. <https://www.ccn.com/jp-morgans-jamie-dimon-labels-bitcoin-fraud/>

22. Investment bank Goldman Sachs is planning to launch a bitcoin trading desk to



offer clients a non-deliverable forward that will be linked to bitcoin. Eventually, the bank hopes to receive regulatory approval from the Federal Reserve and state-level authorities to begin trading actual bitcoins —“physical bitcoins” — a development that will cement the flagship bitcoin’s status as a mainstream financial asset. <https://www.ccn.com/goldman-sachs-will-launch-a-bitcoin-trading-desk/>

23. For the subprimemortgage crisis see https://www.federalreservehistory.org/essays/subprime_mortgage_crisis

24. <https://digiconomist.net/bitcoin-energy-consumption>

25. <https://powercompare.co.uk/bitcoin/>

26. The bitcoin software was made available to the public for the first time in 2009. Satoshi Nakamoto’s seminal paper (Bitcoin – A Peer to Peer Electronic Cash System) was posted to a mailing list on cryptography in 2008. <https://bitcoin.org/bitcoin.pdf>

27. <https://worldhistoryproject.org/topics/dot-com-bubble>

28. What country is the home state or country of origin? What country is the host state or country of destination?

29. Digital Currencies: International Actions and Regulations <https://www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulations.html>

30. Such as the Basel Committee for Banking Supervision (BCBS), the Committee on Payments and Market Infrastructures (CPMI), and the International Organization of Securities Commissions (IOSCO).

31. US banks such as Bank of America, Citigroup, JP Morgan, Capital One and Discover as well as banks from the United Kingdom, Canada and Australia. <https://www.forbes.com/sites/naeemaslam/2018/02/05/banks-banning-cryptocurrency-purchase-on-credit-cards-why/#4e5f32a3cf95> ; <https://medium.com/@coinloop/the-real-reason-why-credit-card-companies-are-banning-bitcoin-purchases-a75315c2b060>

32. <https://www.finder.com/south-korea-releases-new-crypto-guidelines>

33. Regulation requires adequate surveillance to make a difference <https://www.reuters.com/article/us-southkorea-bitcoin/south-korea-inspects-six-banks-over-virtual-currency-services-to-clients-idUSKBN1EXOBG>

34. The Eurosystem has decided to develop a new service for the settlement of



instant payments. The TARGET instant payment settlement (TIPS) service will enable payment service providers to offer fund transfers in real time and around the clock, 365 days a year. It is scheduled to commence operations in November 2018. https://www.ecb.europa.eu/paym/intro/news/articles_2017/html/201706_article_tips.en.html The TIPS service offers an alternative to the distributed ledger technology (DLT). ECB Executive Board member Yves Mersch assures TIPS is both faster and cheaper than DLT: “TIPS is 10 seconds, 0.2 cents. DLT transactions are at best 30 euros and take at least one hour”. <https://www.bloomberg.com/news/articles/2018-02-08/ecb-s-mersch-says-his-payment-system-is-better-than-blockchain>

35. <https://www.brookings.edu/blog/techtank/2018/03/09/venezuelas-petro-undermines-other-cryptocurrencies-and-international-sanctions/>

36. In November 2015, Yao Yudong, head of the People Bank of China’s Research Institute of Finance and Banking, recommended the IMF to create a digital version of its global reserve currency – an electronic Special Drawing Right (e-SDR) – to help address flaws in the current global monetary system. <https://www.reuters.com/article/china-currency-sdr/imfs-special-drawing-rights-should-go-digital-china-c-bank-researcher-idUSL3N13C14720151117> In 2017, the IMF Managing Director, Christine Lagarde, hinted that a digital SDR might be a future possibility <https://www.investopedia.com/news/imf-chief-suggests-imfcoin-cryptocurrency-possibility/>

37. Can economists agree on at least a minimum fundamental value of a bitcoin? The answer is a resounding no according to Chicago Booth’s Initiative on Global Markets’ North American Economic Experts Panel. Only 4 percent of the panelists agreed that a bitcoin’s fundamental value is at least USD 1,000, but most of the panel did not rule it out <http://review.chicagobooth.edu/economics/2017/article/what-s-fundamental-value-bitcoin>

T20
ARGENTINA 2018
THINK 20

CARI / CONSEJO ARGENTINO PARA LAS
RELACIONES INTERNACIONALES

CIPPEC®