



POLICY BRIEF

No. 100

JUNE 2022

KEY POINTS

- During the pandemic, the use of cryptocurrencies increased globally at an unprecedented pace, reinforcing a trend already under way
- The benefits that cryptocurrencies may bring to some individuals and financial institutions are overshadowed by the risks and costs they entail, particularly in developing countries
- The global reach of private digital currencies makes national regulatory responses challenging but developing countries are not left without choices; policy options for curbing such risks and costs are proposed in this policy brief

All that glitters is not gold: The high cost of leaving cryptocurrencies unregulated

The global use of cryptocurrencies increased exponentially during the coronavirus disease (COVID-19) pandemic. Such private digital currencies have become particularly prevalent in developing countries, entailing considerable risks and costs regarding national monetary sovereignty, policy space and macroeconomic stability. In this policy brief, UNCTAD examines such risks and costs, reasons for the uptake of cryptocurrencies in developing countries and the current regulatory landscape. Three policy recommendations that developing countries may consider in this regard are ensuring financial regulation; restricting advertisements related to cryptocurrencies; and providing a safe, reliable and affordable public payment system adapted to the digital era, such as a central bank digital currency or fast retail payment system.

Introduction

Cryptocurrencies can serve as financial assets. Advocates state that cryptocurrencies, or private digital currencies, have the potential to emancipate citizens from bank conglomerates and State control, while promoting financial inclusion. This potential is mainly based on the use of the underlying technology, namely, distributed ledger technology, of which blockchain is a subset.



Such technology provides the means to use networks of connected computers to verify peer-to-peer private transactions. To ensure the integrity of the ledger in the absence of a central authority, the nodes on the network, or digital miners, confirm the records and are rewarded through remuneration in cryptocurrencies.

Since 2009, when the first decentralized cryptocurrency was created, a complex and rapidly evolving cryptocurrency ecosystem has emerged. At present, there are over 19,000 cryptocurrencies, compared with 1,500 in 2018.¹ Countless service providers help keep this system operational, of which the most important are decentralized finance platforms, crypto-exchanges and digital wallet applications. The former, which is based on distributed ledger technology, provides cryptocurrency lending, trading and investment without reliance on traditional financial intermediaries.² Crypto-exchanges enable the conversion of cryptocurrencies to sovereign currencies and digital wallets store private digital currencies on behalf of users.

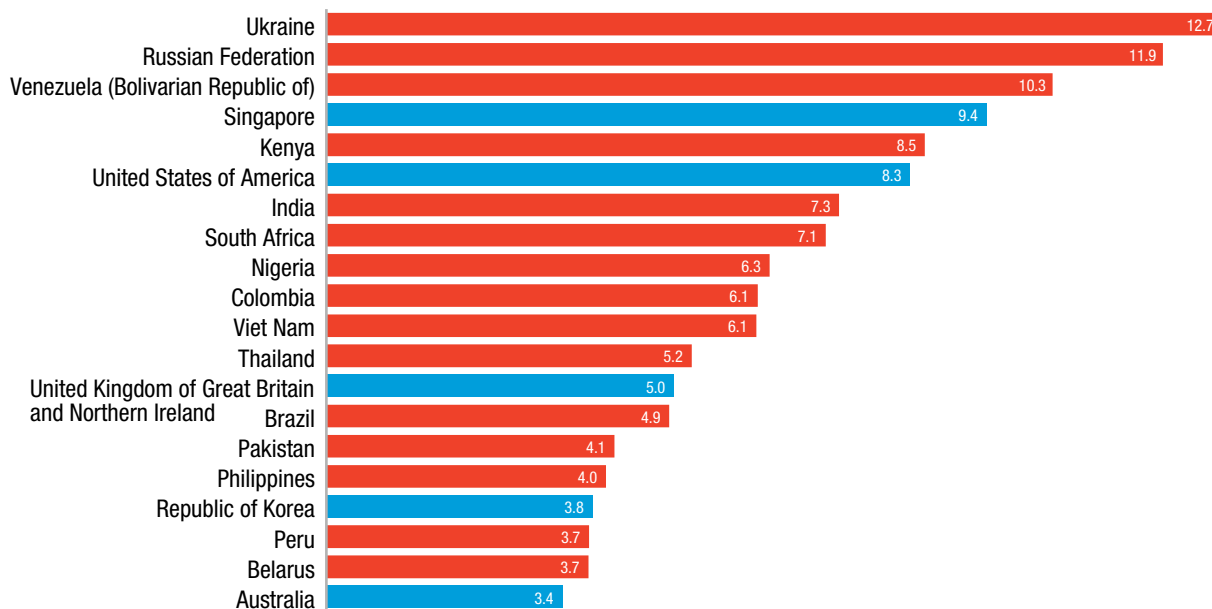
Another important component of the cryptocurrency ecosystem is stablecoins. This new class of cryptocurrency aims to maintain a stable price relative to a sovereign currency, or a basket of currencies, by holding financial assets as collateral. However, increasing profitability might be an incentive for stablecoin issuers to hold risky assets. A decrease in the value of such assets, or an undercollateralization of stablecoins, would result in issuers lacking the means to pay holders. Yet compared with a decrease in the value of cryptocurrencies, resulting in financial losses to holders, a more serious matter would be a drop in the price of stablecoin collaterals, which could require a public bailout, with taxpayers ultimately paying the costs. As of May 2022, several stablecoins are no longer pegged to the United States dollar. This has provoked anxiety among holders of cryptocurrencies and resulted in market turmoil associated with a significant sell-off.³

A systemic crisis was not triggered – this time!

Digital currencies in developing countries: Why so alluring?

The cryptocurrency ecosystem expanded by 2,300 per cent between September 2019 and June 2021, particularly in developing countries.⁴ According to some estimates of digital currency ownership, in 2021, 15 of the top 20 economies in this field were emerging market and developing economies (see figure).

Digital currency ownership as share of population: Top 20 economies, 2021
(Percentage)



Source: UNCTAD, based on data from <https://triple-a.io/crypto-ownership/>.
 Note: The classification of economies (blue, advanced economies; red, emerging and market economies) is based on that in International Monetary Fund, 2020, *World Economic Outlook: A Long and Difficult Ascent* (Washington, D.C.).

¹ See <https://www.cnn.com/2022/06/03/cryptocurrency-industry-focus-regulation-stablecoins-market-crash.html>.
 Note: All websites referred to in footnotes were accessed in June 2022.
² Bank for International Settlements, 2021, Quarterly review, available at https://www.bis.org/publ/qtrpdf/r_qt2112b.htm.
³ *The New York Times*, 2022, Cryptocurrencies melt down in a "perfect storm" of fear and panic, 12 May.
⁴ See <https://blog.chainalysis.com/reports/2021-global-crypto-adoption-index/>.



There are two main reasons for the increased use of cryptocurrencies in developing countries during the pandemic. First, the use of cryptocurrencies was an attractive channel, in terms of price and speed, through which to send remittances. During the pandemic, the already high costs of traditional remittance services rose even higher during lockdown periods due to related disruptions.⁵ Second, cryptocurrencies, as part of financial investments and speculation, are mainly held by middle-income individuals in developing countries and, particularly in countries facing currency depreciation and rising inflation (triggered or accentuated by the COVID-19 crisis), cryptocurrencies have been perceived as a way to protect household savings.⁶

Regardless of the reason for the use of cryptocurrencies, crypto-exchanges play a crucial role in enabling their broader deployment. Such exchanges function as clearinghouses, intermediating conversions between cryptocurrencies and sovereign currencies. Currently, there are over 450 crypto-exchanges that, in May 2021, reached a combined peak of \$500 billion in daily trades, equivalent to the maximum daily trading achieved on Nasdaq, the second-largest stock exchange worldwide, in January 2022.⁷ The largest crypto-exchange, which has 28 million users, reached a record level of daily trading in November 2021, at \$76 billion.⁸

Who bears the costs?

The returns from cryptocurrency trading and holding are, as with other speculative trades, highly individual. On balance, they are overshadowed by the risks and costs they pose in developing countries. There are several reasons to be cautious.

First, the use of cryptocurrencies may lead to financial instability risks. If prices plunge, monetary authorities may need to step in to restore financial stability. Importantly, in developing countries, the use of cryptocurrencies provides a new channel for illicit financial flows.⁹

Second, the use of cryptocurrencies undermines the effectiveness of capital controls, an essential instrument in developing countries with which to curb the build up of macroeconomic and financial vulnerabilities, as well as to increase policy space.¹⁰

Finally, if left unchecked, cryptocurrencies may become a widespread means of payment and even replace domestic currencies unofficially (a process called cryptoization), which could jeopardize the monetary sovereignty of countries.¹¹ The use of stablecoins poses the greatest risks in developing countries with unmet demand for reserve currencies. For example, the turmoil in May 2022 prompted a flight to higher quality stablecoins that publish audited holdings of their backings. The International Monetary Fund has expressed concerns with regard to the risks of using cryptocurrencies as legal tender.¹²

The Central African Republic and El Salvador have officially adopted the cryptocurrency bitcoin as legal tender, in April 2022 and September 2021, respectively.¹³

Regulatory responses under way

Policymakers worldwide have begun to regulate cryptocurrencies. In 2019, the announcement by a major social media platform regarding the planned launch of a supranational stablecoin led to responses from regulators in developed countries. The scale of the platform, with over 2.5 billion active users, combined with its aim to become a global payment provider, raised concerns about the need for a potential public bailout in case of failure. In addition, the entry of a large technology company into the payment services sector was perceived as posing a risk to data privacy and consumer protection.¹⁴ The regulatory response led to a downgrading in the plans of the social media platform, from a global stablecoin to a more modest application, namely, provision of a digital wallet with a limited geographical availability.

The announcement also served as a wake-up call among central banks, several of which began to discuss the provision of public alternatives to private digital currencies. Central bank digital currencies are high on the agendas of most monetary authorities. Such currencies have already been introduced in a few developing countries, such as Bahamas, and many others are advancing on pilot projects, such as China, or are researching the design of such currencies.¹⁵

⁵ See <https://blogs.worldbank.org/psd/ebb-and-flow-remittances-year-pandemic> and <https://foreignpolicy.com/2021/09/28/future-of-money-cryptocurrency-blockchain-finance-regulations-sanctions-stablecoins-china>.

⁶ See, for example, with regard to Türkiye, <https://www.ft.com/content/02194361-a5b9-4bf0-9147-f36ba7759cf1>.

⁷ UNCTAD calculations, based on data from <https://www.statista.com/>.

⁸ See <https://www.coinmarketcap.com/rankings/exchanges>.

⁹ See UNCTAD, 2022, *The cost of doing too little, too late: How cryptocurrencies can undermine domestic resource mobilization in developing countries*, Policy brief No. 102.

¹⁰ UNCTAD, 2019, *Trade and Development Report, 2019: Financing a Global Green New Deal* (United Nations publication, Sales No. E.19.II.D.15, Geneva).

¹¹ See <https://www.imf.org/en/Publications/GFSR/Issues/2021/10/12/global-financial-stability-report-october-2021>.

¹² See <https://www.imf.org/en/News/Articles/2022/01/25/pr2213-el-salvador-imf-executive-board-concludes-2021-article-iv-consultation>.

¹³ See <https://www.ft.com/content/fbf9aef0-453f-4e61-bd83-ff2b2bc92221> and <https://www.bbc.com/news/world-africa-61248809>.

¹⁴ See <https://www.project-syndicate.org/commentary/facebook-libra-diem-failure-lessons-for-digital-currencies-by-katharina-pistor-2021-05>.

¹⁵ See <https://www.atlanticcouncil.org/cbdctracker/>.



Developing countries have also launched regulatory responses to cryptocurrencies.¹⁶ As at November 2021, 41 countries, compared with 15 in 2018, had prohibited banks and other financial institutions from dealing in cryptocurrencies or banned crypto-exchanges from offering services to individuals and enterprises. Nine developing countries, namely, Algeria, Bangladesh, China, Egypt, Iraq, Morocco, Nepal, Qatar and Tunisia, have banned cryptocurrencies outright. Several others have imposed income taxes on capital gains arising from cryptocurrency trading. Finally, crypto-exchanges are becoming subject to national anti-money laundering and anti-terrorist financing laws in jurisdictions such as Australia, Bahamas, Greece, Romania, the Philippines and Uzbekistan.

Policy recommendations

Despite recent regulatory responses, cryptocurrencies remain in a legal grey area in most developing countries. The cryptocurrency ecosystem is global by nature and many of its components (decentralized finance platforms, crypto-exchanges, digital wallet providers and stablecoin issuers) are outside the jurisdictions of States, making cryptocurrency regulation a challenge. Accordingly, key regulatory responses to mitigate the global risks posed by cryptocurrencies need to come from developed countries, in which most of these providers have their headquarters.¹⁷

Developing countries may have less room to manoeuvre, yet the regulation of cryptocurrencies is possible. The following policies, among others, have the potential to curb the further spread of the risks of cryptocurrencies and stablecoins:

- (a) Ensuring comprehensive financial regulation, through the following actions:
 - Require the mandatory registration of crypto-exchanges and digital wallets and make the use of cryptocurrencies less attractive, for example by charging entry fees for crypto-exchanges and digital wallets and/or imposing financial transaction taxes on cryptocurrency trading;
 - Ban regulated financial institutions from holding stablecoins and cryptocurrencies or offering related products to clients;
 - Regulate decentralized finance (such finance may, in fact, not be fully decentralized, given its central management and ownership, which form an entry point for regulation¹⁸);
- (b) Restricting or prohibiting the advertisement of crypto-exchanges and digital wallets in public spaces and on social media. This new type of virtual, and often disguised, advertisement requires policymakers to expand the scope of regulation beyond traditional media. This is an urgent need in terms of consumer protection in countries with low levels of financial literacy, as even limited exposure to cryptocurrencies may lead to significant losses;
- (c) Creating a public payment system to serve as a public good, such as a central bank digital currency. In the light of the regulatory and technological complexity of central bank digital currencies and the urgent need to provide safe, reliable and affordable payment systems, authorities could also examine other possibilities, including fast retail payment systems.

There is no one-size-fits-all policy response to the increase in the use of cryptocurrencies among developing countries. Countries need to tailor recommended policies, considering the particular features of national financial systems, regulatory infrastructures and enforcement capacity. Moreover, with regard to financial regulation, policymakers should bear in mind that the cryptocurrency ecosystem is constantly evolving. Public authorities therefore need to adopt a forward-looking, holistic and innovative approach, taking advantage of traditional financial regulatory authorities but also adding new collaborators, such as telecommunications, advertising, cybersecurity, competition and data protection authorities. Doing too little or taking action too late will lead to higher costs in the future.

¹⁶ See <https://www.loc.gov/item/2021687419/>.

¹⁷ See <https://www.ft.com/content/669fd346-13ff-4c7b-9597-f829b1ad567d>.

¹⁸ Bank for International Settlements, 2021.

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