The Economist INTELLIGENCE UNIT

Digimentality 2021

Digital currency from fear to inflection

Commissioned by:

crypto.com

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About the report

Digimentality 2021—Digital currency from fear to inflection is a report from The Economist Intelligence Unit, commissioned by Crypto.com, exploring the extent to which digital payments are trusted by consumers and what barriers may exist to basic monetary functions becoming predominantly electronic or digital. The report compares the attitudes of consumers with a similar survey conducted in 2020 and adds the perspective of corporate and institutional investors. Kim Andreasson is the author and Jason Wincuinas is the editor of this report.

A consumer survey of 3,053 people conducted in February and March 2021 provides data for the first part of the report. About half of the respondents came from developed economies (US, UK, France, South Korea, Australia and Singapore) and half from developing ones (Brazil, Turkey, Vietnam, South Africa and the Philippines). About seven in ten respondents were between 18 and 38 years old with the remaining aged 39 years or older. Roughly half (46%) were men and the rest women (54%). Various educational backgrounds are represented, with the largest numbers of respondents (five in ten) having a college or professional degree. All respondents had bought a product or service within the past 12 months using some kind of digital payment.

The second part of the report draws from a survey of 200 institutional investor and corporate treasury management respondents conducted in February, March and April 2021. About a third of respondents are US-based with the remainder spread across the advanced economies of Australia, China, France, Germany, Singapore and the UK. All survey takers were familiar with their organisation's investment decision-making processes.

Complete demographics can be found in the appendix.

The following executives gave their perspective for the report:

- Henri Arslanian, crypto leader, PwC
- Mathew McDermott, managing director and global head of digital assets, Goldman Sachs

We would like to thank all interviewees and survey respondents for their time and insight.

Introduction

Across the world, a move towards cashless societies continues, incorporating a variety of approaches ranging from credit cards and payment apps to cryptocurrencies and central bank digital currencies (CBDCs). In China, the government has launched a large-scale CBDC pilot with its digital renminbi.[1] In the US, the Commodity Futures Trading Commission unveiled plans for cryptocurrency regulation to take effect by 2024, a development that could accelerate institutional adoption of digital assets.[2] In April 2021 the price of Bitcoin hit an all-time high of more than US$60,000.[3]

"It seems to me that Bitcoin has succeeded in crossing the line from being a highly speculative idea that could well not be around in short order, to probably being around and probably having some value in the future," Ray Dalio, founder of Bridgewater Associates—the world's largest hedge fund by assets under management—said in a recent research note.[4] "The big questions to me are what can it realistically be used for and what amount of demand will it have."

The question of use and demand from a consumer perspective is the focus of this report's first section. It explores the extent to which digital payments are trusted by consumers and what barriers may exist to basic monetary functions becoming predominantly electronic or digital, while comparing the attitudes of consumers with a similar survey conducted in 2020. The second part will address the use and demand question on an institutional and corporate level.

1 CNBC, "China has given away millions in its digital yuan trials. This is how it works", https://www.cnbc.com/2021/03/05/chinas-digital-yuan-what-is-it-and-how-does-it-work.html
2 CTFC, press release, https://www.cftc.gov/PressRoom/PressReleases/8336-20
3 CNBC, "Bitcoin hits new all-time high above $63,000 ahead of Coinbase debut", https://www.cnbc.com/2021/04/13/bitcoin-hits-new-all-time-high-above-62000-ahead-of-coinbase-debut.html
4 Bridgewater, "Our thoughts on Bitcoin", https://www.bridgewater.com/research-and-insights/our-thoughts-on-bitcoin

Defining digital payments

For the purposes of this report, we use the term "digital payment" to include the following:

- Online banking (direct payments from a bank account to a person or business via electronic means instead of a paper cheque)
- Mobile payment or e-wallet (typically via smartphone, including WeChat pay, Alipay, Google Pay, Apple Pay, etc)
- Online money transfer services (Paypal, Venmo, TransferWise, etc)
- Open source (non-bank) digital currencies (which include cryptocurrencies such as Bitcoin, Ether, Litecoin, etc)
- CBDC, which involves digital currency issued as legal tender by a central bank (such as the Chinese digital yuan or the Swedish e-krona)
- Corporate-issued digital currencies introduced (sometimes called a permissioned blockchain, such as Facebook's Libra/ Diem or JP Morgan's JPM coin)

This is such a pivotal moment in the history of money, in the future of money and there's been a couple of catalysts to it, and one of them was actually covid-19.

– Henri Arslanian

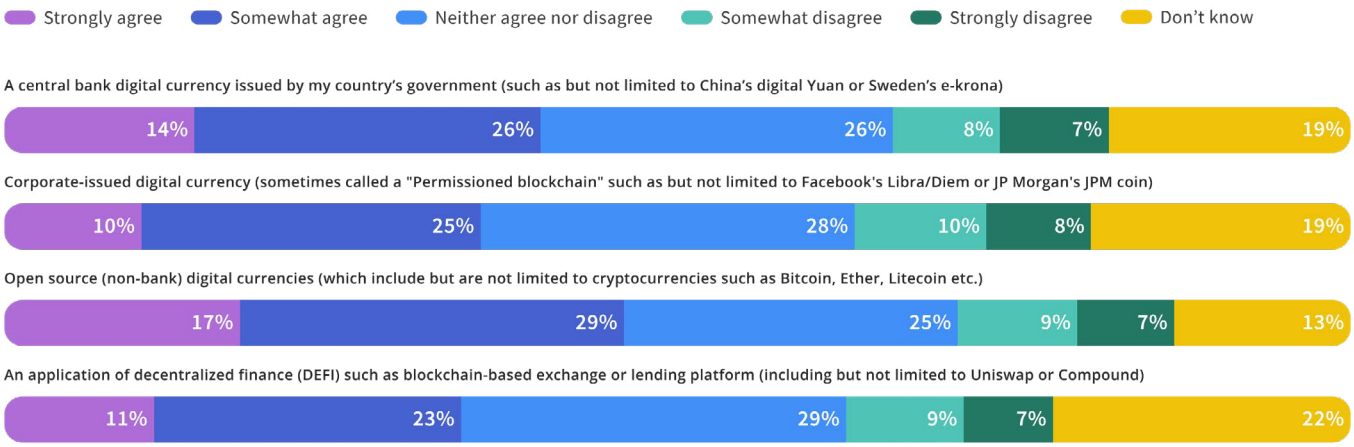
Crypto leader, PwC

Part I: More inflection than fear among consumers

Consumers show increasing favour of digital transactions. Those in the survey further agree that the case for digital currencies and assets, using cryptocurrencies, is especially more compelling (cited by 46%) due to the covid-19 pandemic. Consumer preference for CBDCs (40%) and corporate-issued digital currencies (35%) followed the open-source, or cryptocurrency, option. "It's a function of continued demand across both retail and institutions," says Mathew McDermott, managing director and global head of digital assets at Goldman Sachs. "Given the huge amount of stimulus we're seeing across countries because of covid-19 and low interest rates, it's the right place at the right time for companies to offer the ability for people to buy, hold, and use digital currencies and have digital wallets."

Figure 1: Consumer barometer

Consumers were asked to what extent they agree or disagree that covid-19 heightened the use case for digital currencies/assets, by type



Source: The Economist Intelligence Unit

Rise in digital payments

In the past 12 months, 27% of survey takers reported that they always used digital payments instead of physical banknotes, coins or credit cards. Another four in ten (41%) claimed to use digital payments for at least half of their purchases. In the 2020 consumer survey, only 22% said they always use digital options and 42% said often, indicating an overall year-over-year rise in digital payments. Further supporting this point is the 12% that said they rarely used digital payments over the past 12 months, which declined from the previous year's 14%.

The most common form of digital currency that consumers report using continues to be the open-source variety (cryptocurrencies such as Bitcoin), claimed by 18% of survey takers. Government-issued CBDCs (12%) and a digital currency issued by a technology or financial firm (10%) followed. That order of preference has not changed year on year. However, it is worth noting that while announcements of new CBDCs have proliferated in recent months, actual public use is still extremely limited and primarily in test phases.

In terms of awareness, cryptocurrencies remained the most commonly known among all digital currency options with more than half (55%) of consumers in the 2021 survey saying they are aware of but have never owned or used a cryptocurrency.

"As more people adopt and have access to digital wallets, you can just see the number who have access and invest in cryptocurrencies continues to broaden," says Mr McDermott.

“

It’s a function of continued demand across both retail and institutions.

– Mathew McDermott

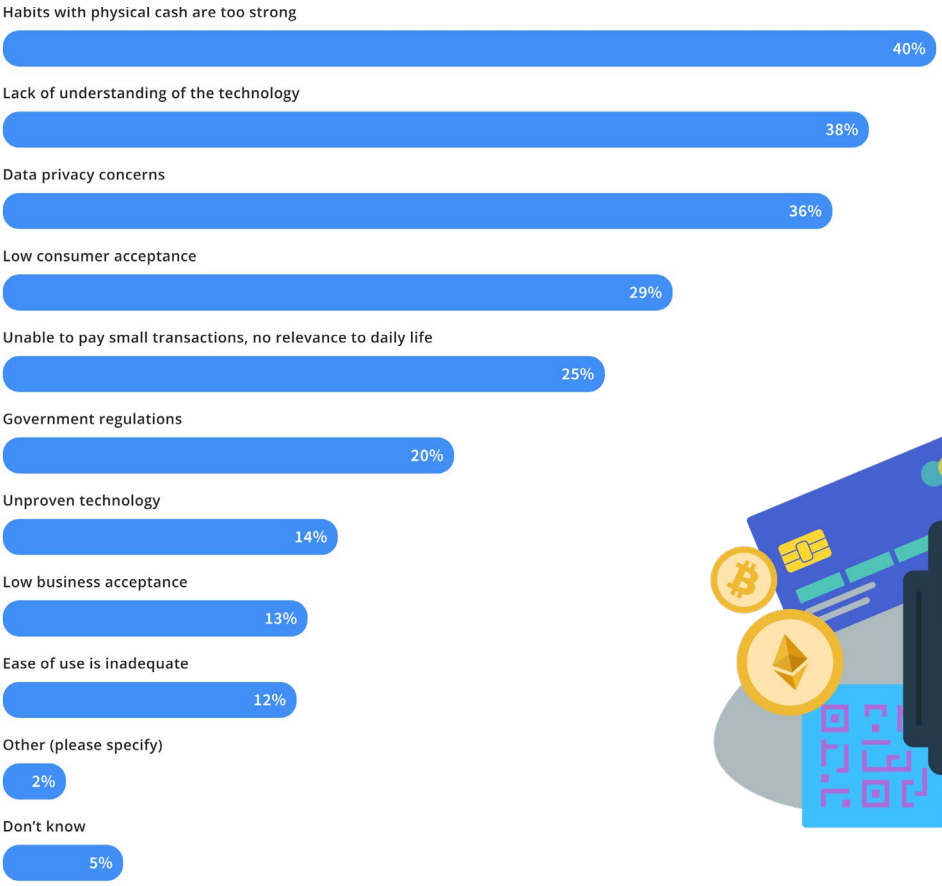
Managing director and global head of digital assets, Goldman Sachs

Persistent obstacles

Habits with physical cash, lack of technological understanding and data privacy concerns continue to be the top factors consumers name as barriers to their country becoming cashless.

Figure 2: Habitual obstacle

Consumer perception of barriers to their country becoming cashless



Source: The Economist Intelligence Unit

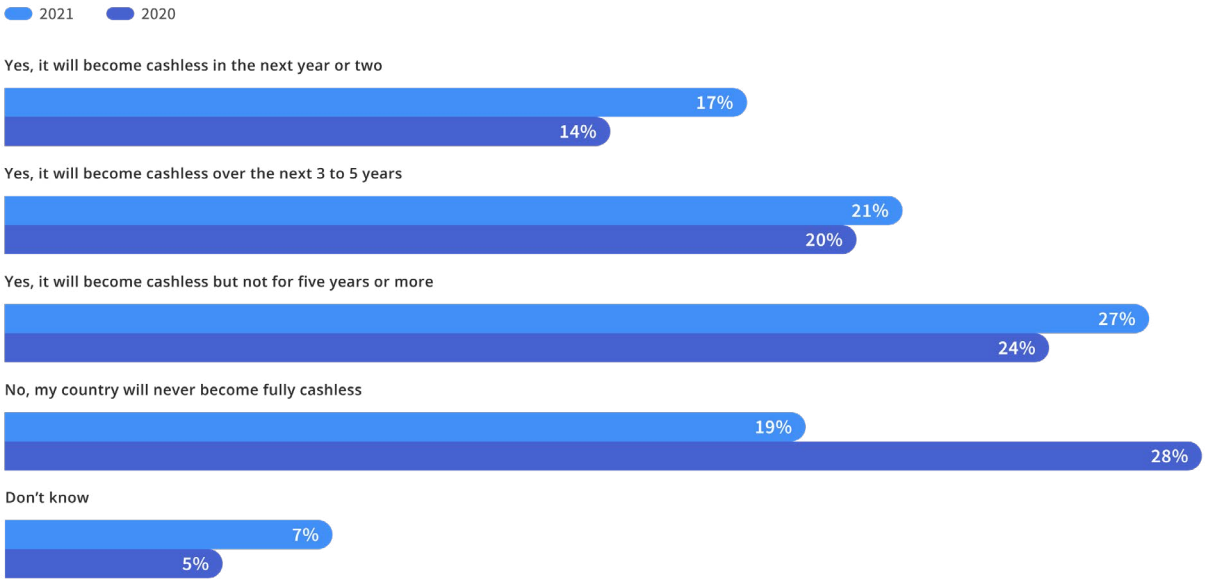
The main barriers towards greater adoption are similar, albeit with nuances, across the different types of digital currencies available. For open-source cryptocurrencies, the main barrier is a lack of knowledge, according to survey-takers (cited by 51%). This is followed by security concerns (34%) and difficulties knowing where to buy (29%). Greater adoption of CBDCs is hampered by a lack of education (28%), technical literacy (27%) and people not trusting that the technology is secure (25%) or concerns over privacy (24%). Similarly, corporate-issued digital currencies suffer from a lack of trust in secure technology (28%), lack of education (25%), concerns over privacy (25%) and technical literacy (24%).

But the tide is turning

Nine percent of respondents in the 2021 survey say the country in which they live is already cashless (defined as using predominantly digital instead of physical payment methods), a similar number as the previous year (10%). However, in 2021 17% said they expect their country to become cashless within a year or two, representing a rise from 14% previously. Indicative of this trend, a fifth (19%) now say their country will never become cashless, compared with almost three in ten (28%) in 2020. Uncertainty around the issue also seems to have risen this year with a slight jump (from 5% to 7%) in respondents saying they didn't know. With the speed of development in digital currencies over the past 12 months, such an outcome perhaps should be anticipated.

Figure 3: Rising cashless expectations

Consumer expectations of their country becoming cashless



Source: The Economist Intelligence Unit

Bitcoin is not a payment mechanism today. It's more of an investable asset.

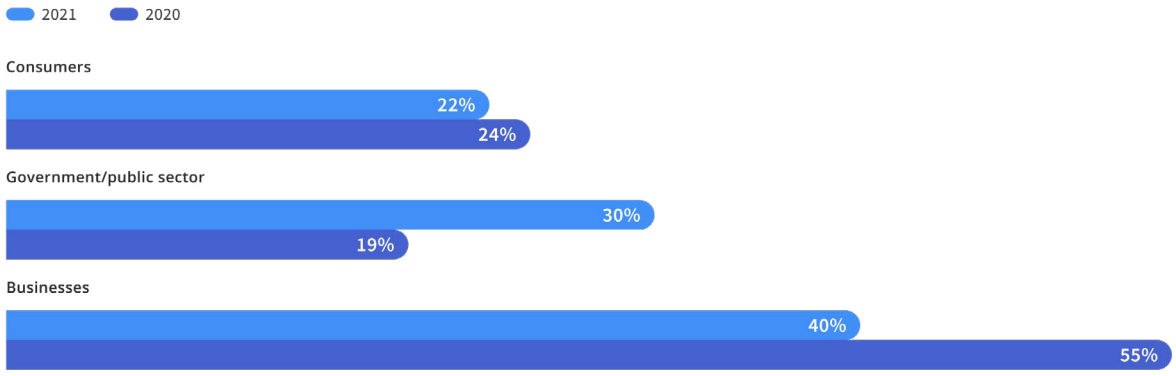
– Mathew McDermott

Managing director and global head of digital assets, Goldman Sachs

The underlying current towards digital cash continues but appears to be changing in nature. A year ago, among those who said their country is already cashless, more than half (55%) believed businesses command the most influence on the path to cashlessness, with consumers (24%) and governments (19%) trailing. Perhaps due to growing CBDC coverage in news cycles, governments gained in the influence rating this year, reaching 27%, as did consumers (30%), while the business figure dwindled to 38%. Yet the overall order of influence remains unchanged. While still holding the most influence, it's plausible that corporations will pave the way to the point that consumer and government adoption rises enough that they carry the cashless trend to a peak, which may be indicative of private sector initiatives from Facebook and JPMorgan, among others.[5]

Figure 4: Cashless influence

Consumer sentiment about groups with the most influence on their country becoming cashless



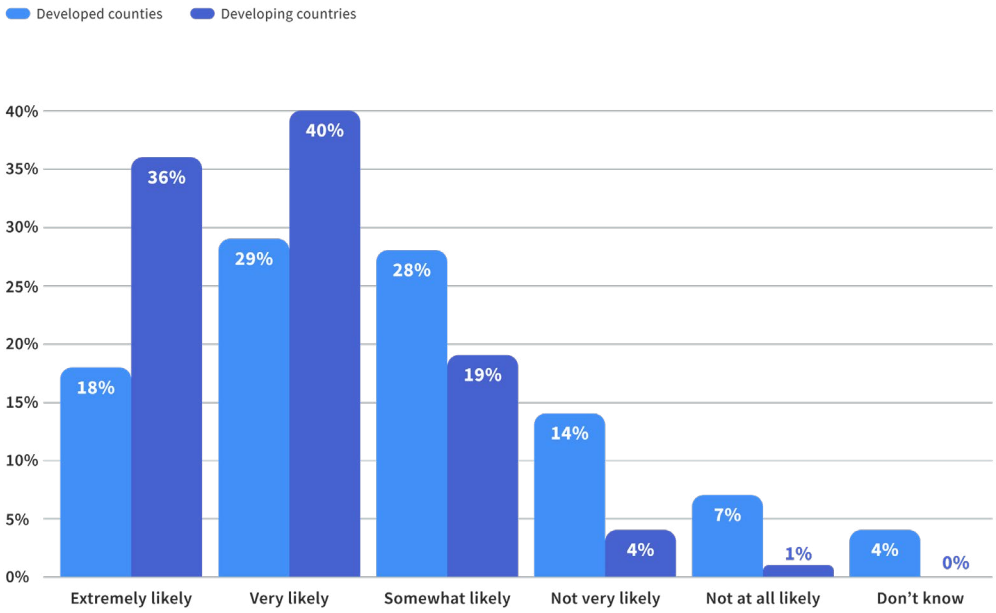
Source: The Economist Intelligence Unit

In 2020 our survey indicated greater resistance to going cashless in developed economies versus developed ones. That held true in 2021 at about the same levels, with respondents in developing nations (Brazil, Turkey, Vietnam, South Africa and the Philippines) generally expressing a higher expectation of using digital payments as opposed to cash for most or all their daily transactions in the next 12 months. Developing nations were also more confident in that outlook, with less than 1% selecting "don't know" versus 4% in developed nations (US, UK, France, South Korea, Australia and Singapore).

5 Bitcoin.com, "Goldman Sachs Cryptocurrency: Possible Collaboration With JPMorgan and Facebook", https://news.bitcoin.com/goldman-sachs-cryptocurrency-jpmorgan-facebook/

Figure 5: Developing favour

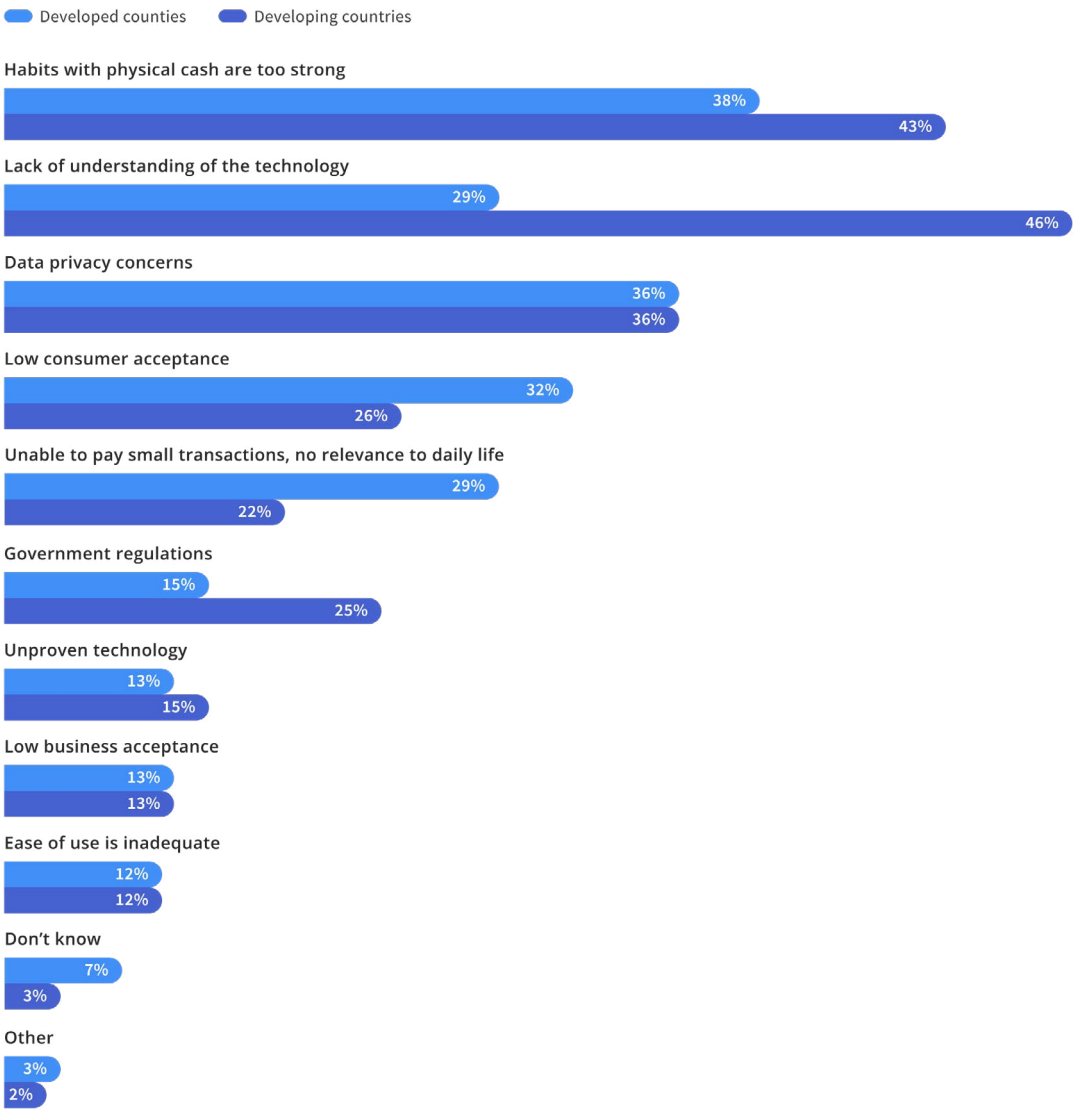
Likeliness to switch from physical cash to digital forms of payment for most or all of daily transactions in the next 12 months



Source: The Economist Intelligence Unit

Figure 6: Marked difference in understanding

Consumer expectations of the major barriers to their country becoming cashless



Source: The Economist Intelligence Unit

Part II: The new gold?

Change in the institutional landscape is coming quick. The increase in the price of cryptocurrencies such as Bitcoin has brought renewed interest from banks, financial services firms and corporate treasuries. For example, in February 2021 Tesla, an electric car company, announced it had brought more than US$1bn in Bitcoin[6] into its corporate treasury and would accept it as a form of payment in the future. The carmaker reversed its payment stance in May, citing concerns about energy consumption related to Bitcoin's infrastructure. That aspect of the currency is highly debated and the downturn in value that followed Telsa's reversal is indicative of volatility risks in the space. Tesla may yet change course again. Survey respondents, who weighed in before either of Tesla's announcements, support settlement use. When asked if open source digital currencies (such as Bitcoin) should be considered strictly for transactions versus as an appreciating asset, 34% of executives chose the transaction option while another 27% say both. That's a majority of 61% opting for the settlement use case.

"[But] if you look at how Bitcoin is used today, it is definitely used more as a store of value, more similar to gold than for something that is used day-to-day for small payments," says Henri Arslanian, crypto leader for PwC, who points out that there are lots of similarities between Bitcoin and gold. Both of them are scarce, dividable into small pieces and do not corrode. "Importantly, they [gold and Bitcoin] can't be faked."

6 CNBC, "Tesla buys $1.5 billion in bitcoin, plans to accept it as payment", https://www.cnbc.com/2021/02/08/tesla-buys-1point5-billion-in-bitcoin.html

Late to the race, CBDCs lead digital adoption

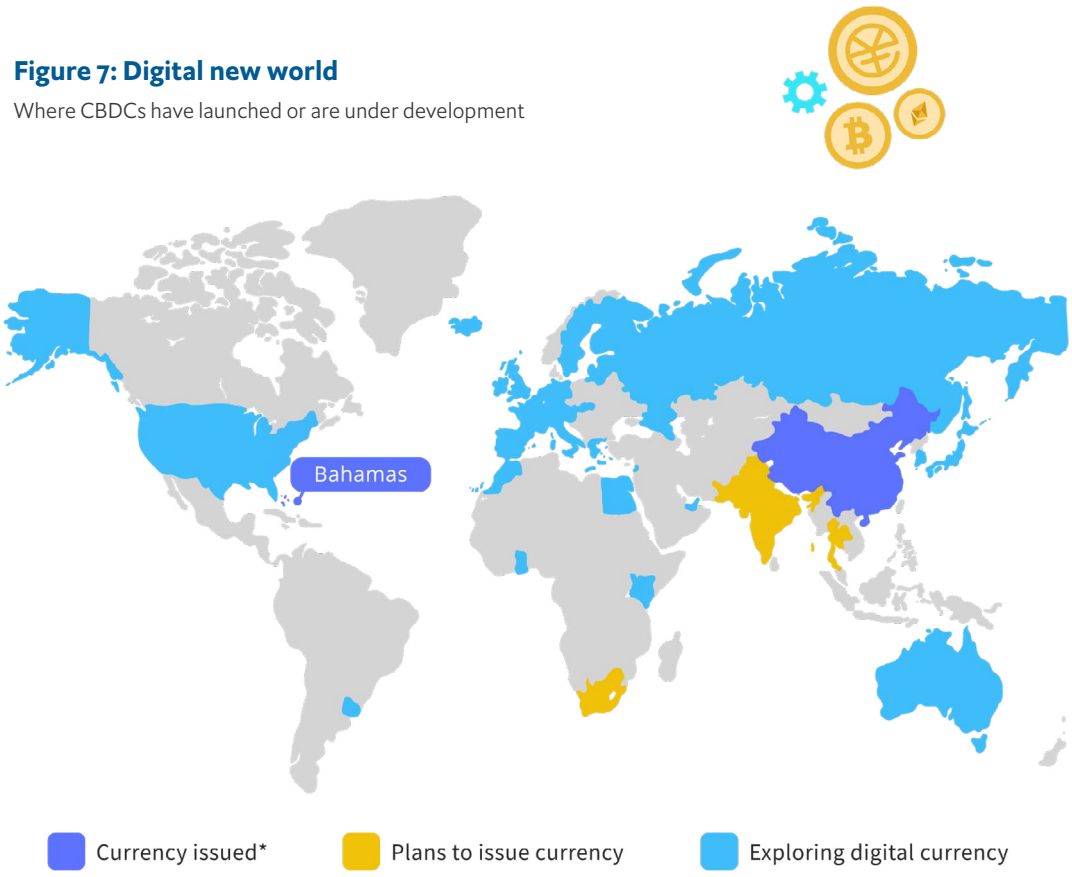
Almost eight in ten (78%) of the institutional and corporate survey takers say they agree that issuance of CBDCs is necessary to establish a functioning market for new financial instruments such as digital bonds or other forms of digital assets to supplement the role of cryptocurrencies.

"I would argue that, actually, they're complementary," says Mr Arslanian. "If people get used to central bank money that is digital—they have access to central bank money in a digital format—that obviously makes them more comfortable to use other digital currencies."

Three-quarters (74%) of respondents believe that their countries are or will become cashless. Out of those, about half (47%) say it will happen within five years if not already. "I think CBDCs will be developed and actively used in some form in three to five years," Mr McDermott also predicts. The Bahamas and China have already issued digital currencies and more countries are exploring the option.

Figure 7: Digital new world

Where CBDCs have launched or are under development



*in launch phase in China as of April 6, 2021. Rest: As of March 22, 2021

Sources: Statista[7]; Bloomberg; Wall Street Journal

A majority of respondents (59%) also agree the establishment of CBDCs will increase general demand for other forms of digital currencies and assets that are not government-backed. "The move to digital currencies enables you to monitor economic activity in real-time," explains Mr Arslanian, also noting a built-in anti-money laundering benefit.

7 https://www.statista.com/chart/24571/central-bank-digital-currencies-around-the-world/

76%

of executives say covid-19 has accelerated demand for and adoption of digital currencies

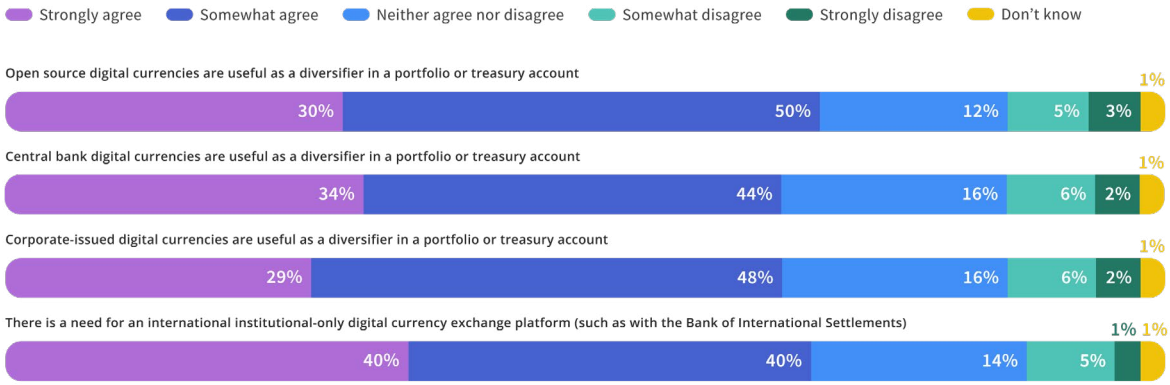
Diversifying interests

Institutions and corporate treasuries appear divided over whether open source (non-bank) digital currencies (such as Bitcoin, Litecoin, etc) should be considered strictly as a currency for settling transactions or an asset for storing or appreciating value. About a third view it as a currency (34%), an asset (31%) or a combination (27%).

"Bitcoin is not a payment mechanism today," asserts Mr McDermott. "It's more of an investable asset." Survey respondents see a use for cryptocurrencies (80%), CBDCs (77%) or corporate-issued digital currencies (76%) as diversifiers in a portfolio or treasury account. Perhaps as a result of that outlook, eight in ten also agree there is a need for an international, institutional-only digital currency exchange (such as with the Bank of International Settlements).

Figure 8: Institutional and corporate barometer

Survey question: To what extent do you agree or disagree with the following statements? Select one in each row

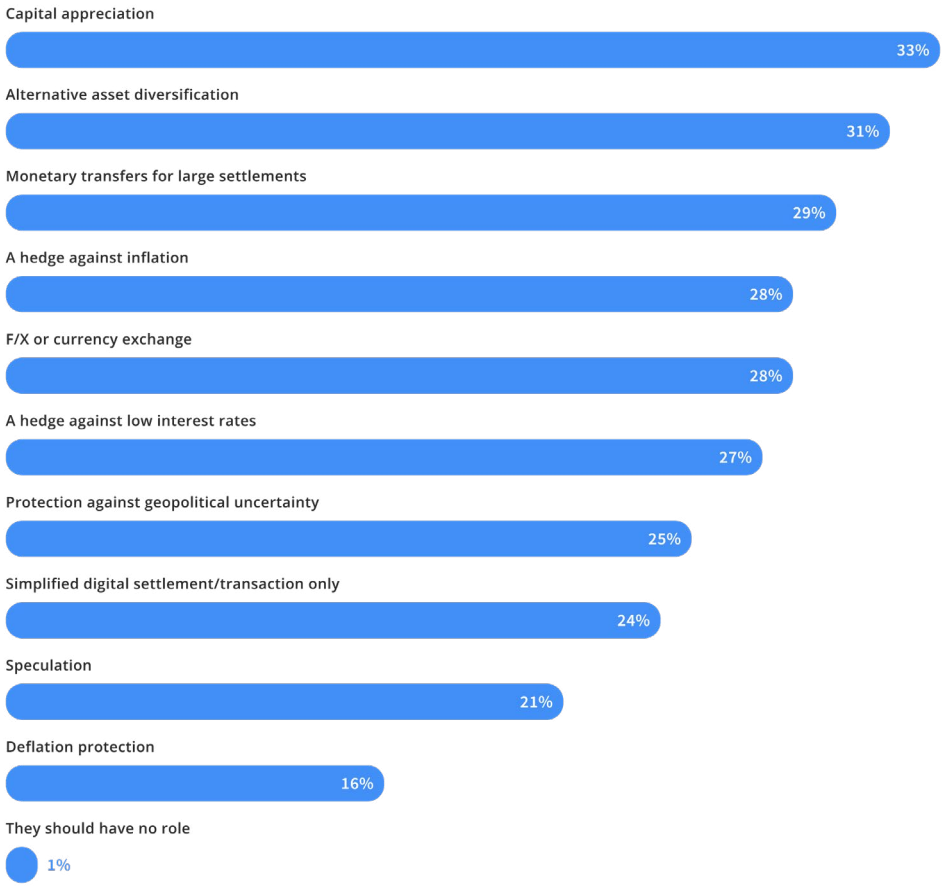


Source: The Economist Intelligence Unit

The primary roles of open source digital currencies or assets within a portfolio or treasury account, according to survey respondents, are capital appreciation (33%) and alternative asset diversification (31%) with more function features such as large settlements following. A hedge against inflation (28%) rounds out the top five choices. Speculation (21%) is near the bottom, implying maturity in the market. "A lot of experts will tell you that Bitcoin has a role to play as part of a diversified portfolio," says Mr Arslanian. "Despite the volatility, Bitcoin can be a hedge potentially against inflation, against currency devaluation, and that's something that a lot of people are looking at."

Figure 9: More asset than currency

Respondent view of primary role for a cryptocurrency in a portfolio or treasury account



Source: The Economist Intelligence Unit

Over the next couple of months, we're going to see the continuous entry of institutional investors in this space.

– Henri Arslanian

Crypto leader, PwC

Moving forward

"Over the next couple of months, we're going to see the continuous entry of institutional investors in this space," says Mr Arslanian. "I think, like any other new asset class, it takes time," he notes, pointing to the fact it took institutional investors many years to get comfortable with emerging markets and derivatives. "What was needed was a catalyst and there have been many, from COVID-19 to increased regulatory clarity."

As if on cue, on May 4th 2021 S&P Dow Jones Indices, an index provider, launched three new benchmarks to measure the performance of Bitcoin and Ethereum, another open-source digital currency, on recognised cryptocurrency exchanges—thereby aiming to provide some of the aforementioned comfort. A widely circulated quote from the press release announcing the indices came from the firm's global head of innovation and strategy, Peter Roffman, who quips: "Traditional financial markets and digital assets are no longer mutually exclusive markets."

That merging does appear to be under way, but nearly three-quarters of respondents (72%) in our institutional and corporate survey still say a cryptocurrency with no intermediary or sovereign organisation controlling the supply (as is the case with Bitcoin) presents relatively greater risk as an asset in a portfolio or treasury account compared with other currency holdings. As Mr Arslanian points out, regulatory clarity may go a long way to easing such concerns. Similar with that view, respondents rank regulations (32%) as the fourth most pressing obstacle to gaining greater institutional or corporate comfort with crypto or other digital currencies. Overall market trust or understanding of digital currencies and assets (47%), and financial market structures (43%) took the top spots in the question on primary obstacles to greater adoption.

Conclusion

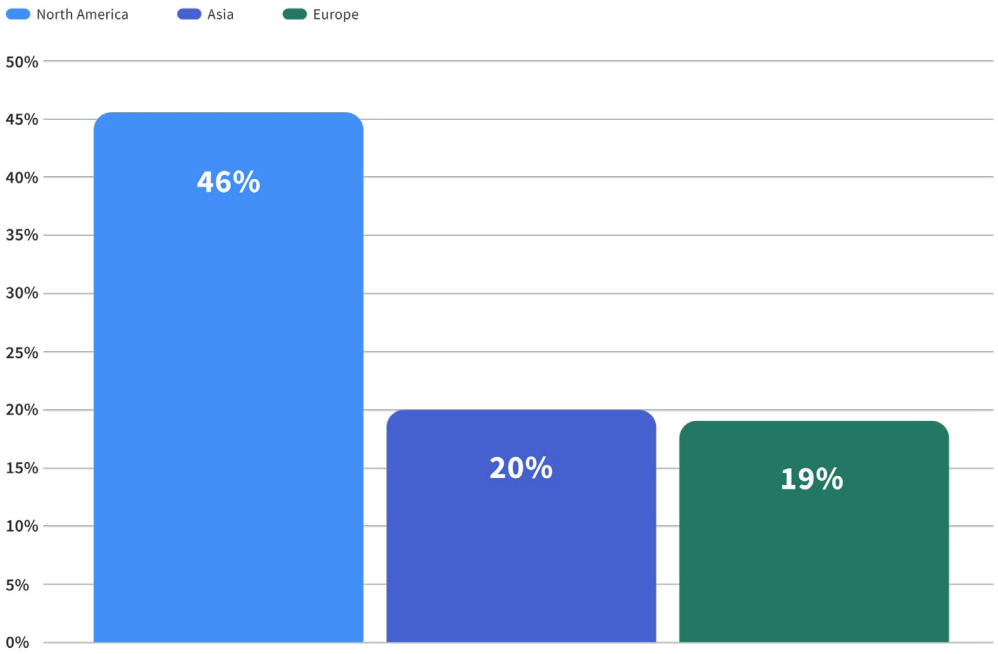
More than one-half (56%) of consumer respondents believe that CBDCs are likely to replace physical or fiat national currencies in their country. And eight in ten institutional survey takers agree that consumer demand for all digital currencies (CBDC, open-source or corporate issued) has increased in their country over the past three years, while a similar number (76%) say covid-19 has accelerated demand and adoption. For corporate organisations, digital currencies are on the radar—both as a transactional unit and a store of value or appreciation; there is likely a reinforcing correlation between consumer and corporate use and acceptance.

"Our clients want to get exposure to Bitcoin and increasingly more different cryptocurrencies, like Ether [the native currency of the Ethereum blockchain]," says Mr McDermott. "It's still a very nascent market but we are looking at different ways to facilitate client appetite to get exposure in a way that's compliant from a regulatory perspective."

Wider adoption and acceptance of CBDCs (31%) and availability of an institutional-only digital-currency exchange platform and (29%) appear to be the main triggers from the institutional and corporate survey for greater portfolio and treasury activity in cryptocurrencies, with respondents in North America most interested in an institutional-only exchange platform.

Figure 10: Bourse in the USA

Respondents believing an institutional-only digital-currency exchange would trigger more portfolio and treasury activity in open-source digital currencies, by region.



Source: The Economist Intelligence Unit

"Bitcoin is—by nature, by design—a deflationary asset because we know exactly how many Bitcoin will come in the market," says Mr Arslanian. "There is no quantitative easing; you cannot simply mine more Bitcoin, in the same way you cannot come up with more gold."

"I think cryptocurrencies will be a very accepted asset class." He predicts CBDCs will not be as hypothetical, theory or pilot; these will be live, in use. "What we are going through, right now, is the most exciting period in financial history," he says. "This is such a pivotal moment in the history of money, in the future of money and there's been a couple of catalysts to it, and one of them was actually covid-19."

Key takeaways

- Consumers are increasingly adopting cashless payment methods while countries pilot CBDCs and companies experiment with open-source digital solutions. The different digital currencies are viewed as supplementary instead of contradictory, meaning one option can lead to another.
- The covid-19 pandemic has been an impetus for greater digitalisation generally, and that influence and favour also holds true with digital currencies.
- Benefits of digital currencies include contactless transactions, real-time monitoring of the economy and improved money laundering initiatives, as digital currencies have better track and trace potential compared with physical cash. Risks include asset volatility, and uncertainty regarding market structures and regulations.
- Institutional investors and corporate treasurers appear to be using cryptocurrencies more as a store of value with a deflationary hedge than as a currency, although a majority claim preference for transactional use.
- A parallel of cryptocurrency as "digital gold", holding similar patterns in terms of limited supply, benefits of being dividable and acting as a portfolio diversifier is gaining acceptance. However, regulatory, trust and understanding concerns linger.

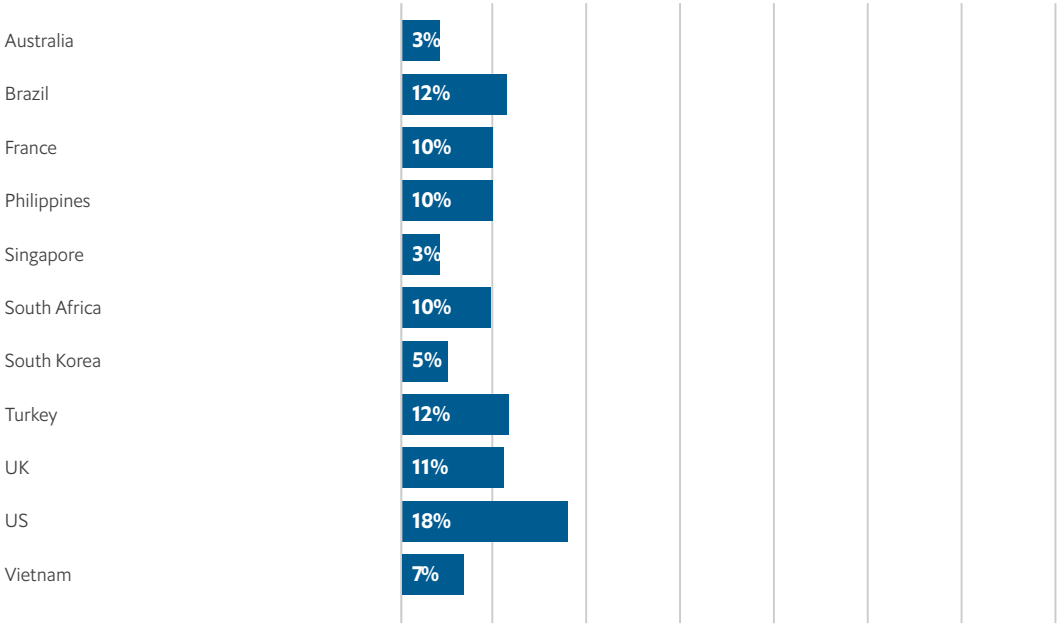
59%

of corporate treasury and institutional investor executives believe CBDCs will increase demand for other forms of digital currencies and assets

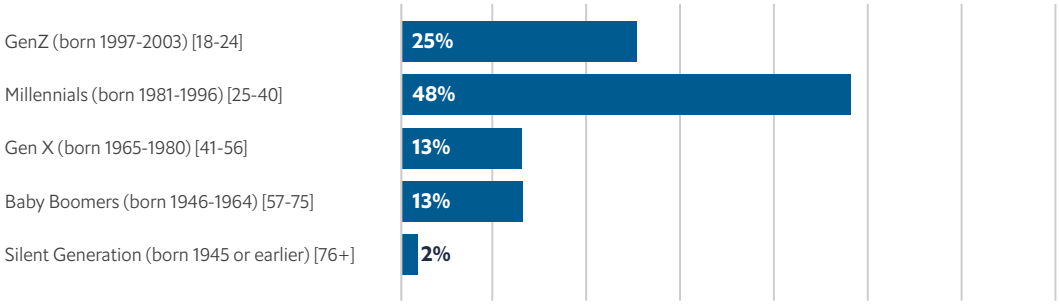
Appendix 1: Consumer survey demographics

Unless otherwise specified, all answers represent the percentage of total survey respondents.

D1. In what country are you personally located? Select one.

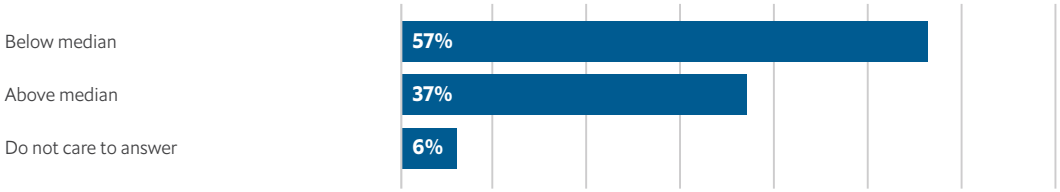


D2. In what year were you born?

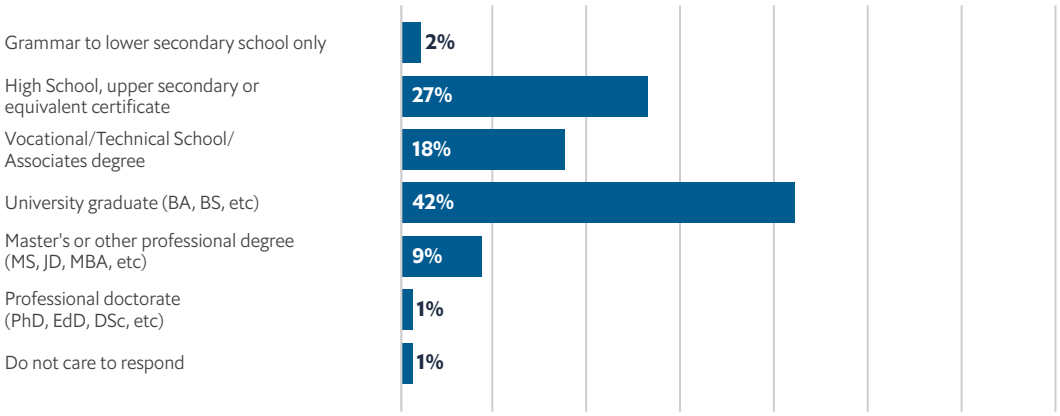


D3. Which best represents your gender?

D4. Which range best describes your annual salary?



D5. Which of the following best describes your educational background?

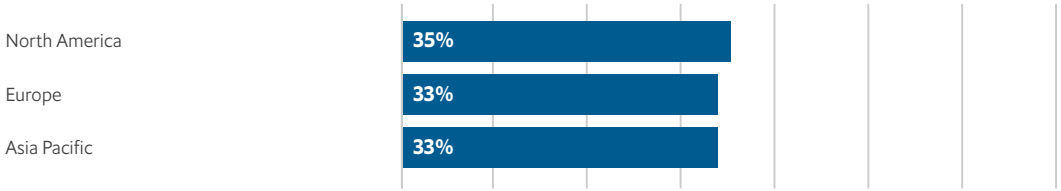


Appendix 2: Institutional survey results

Unless otherwise specified, all answers represent the percentage of total survey respondents.

Demographics:

Region



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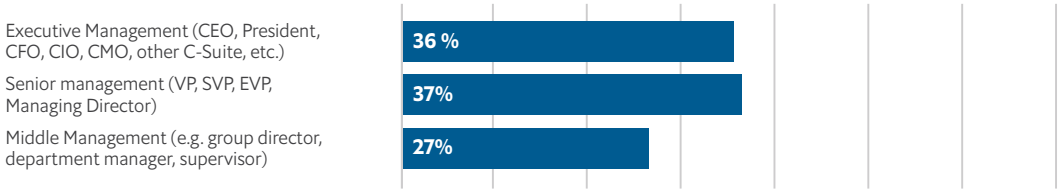
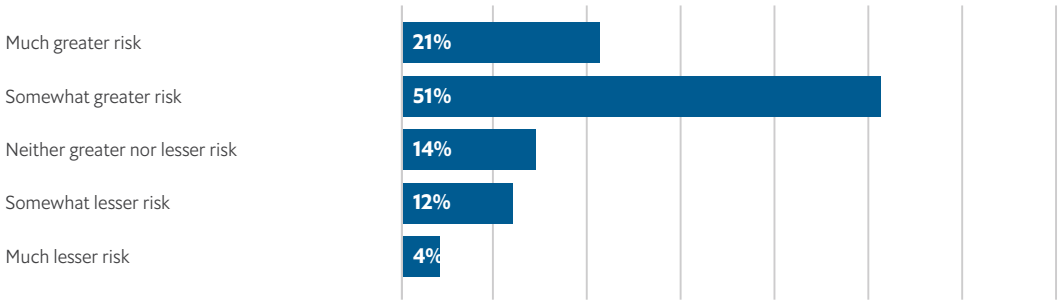
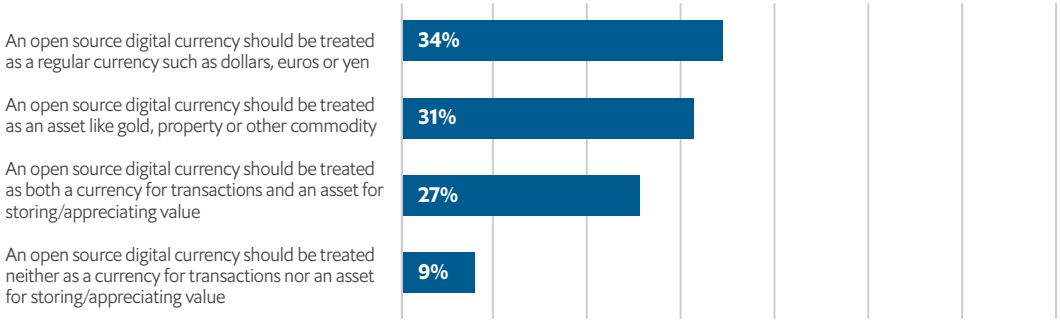


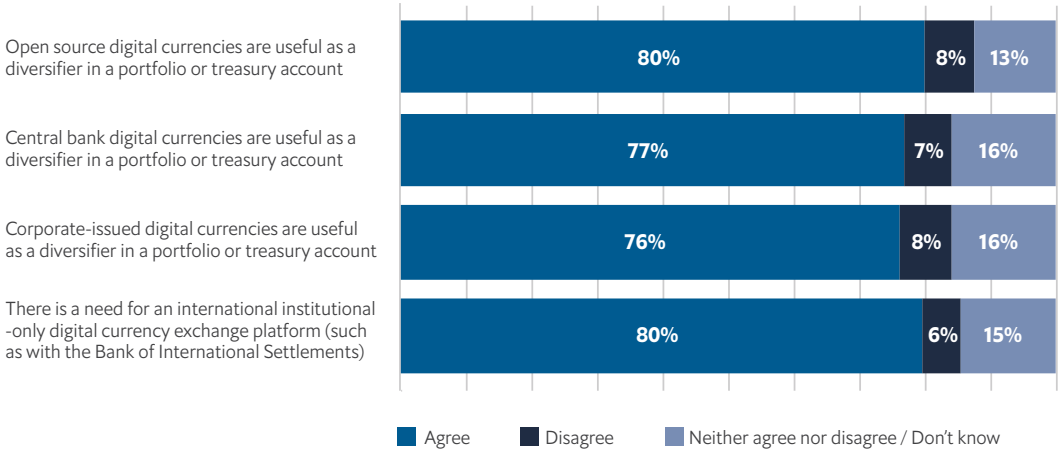
Q1. In your opinion, does an open source (non-bank) digital currency (cryptocurrencies such as Bitcoin), where no dedicated intermediary organisation or sovereign government controls supply, present relatively greater or lesser risk as an asset in a portfolio or treasury account compared with other currency holdings? Select one.



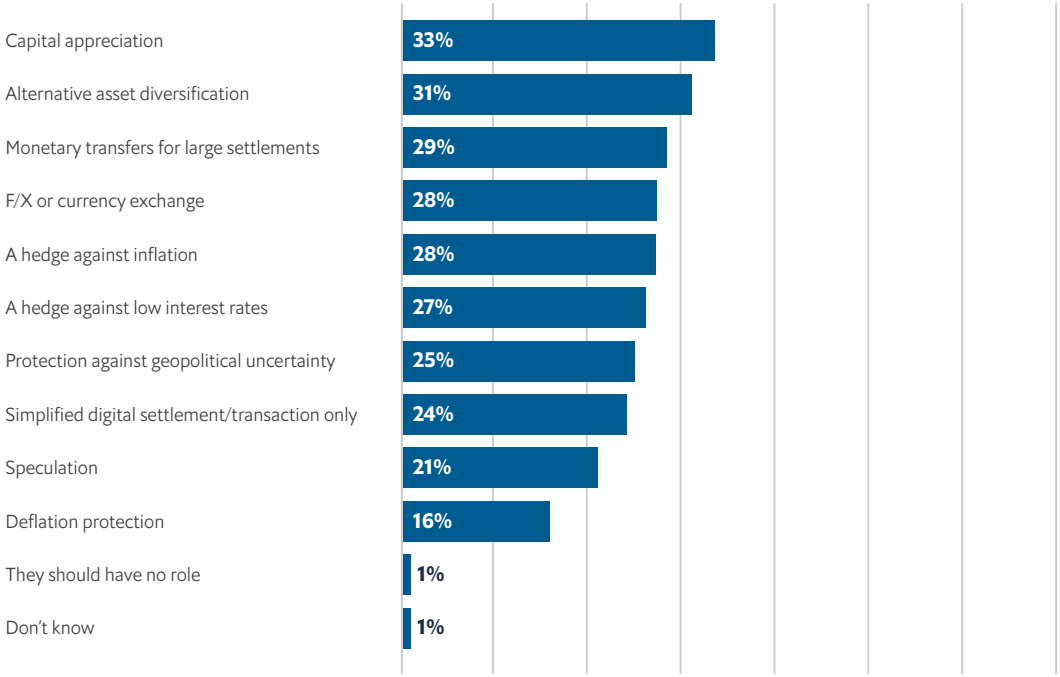
Q2. In your opinion, should open source (non-bank) digital currencies (cryptocurrencies such as Bitcoin, Litecoin, etc) be considered strictly as a currency for settling transactions or as an asset for storing/appreciating value? Select one.



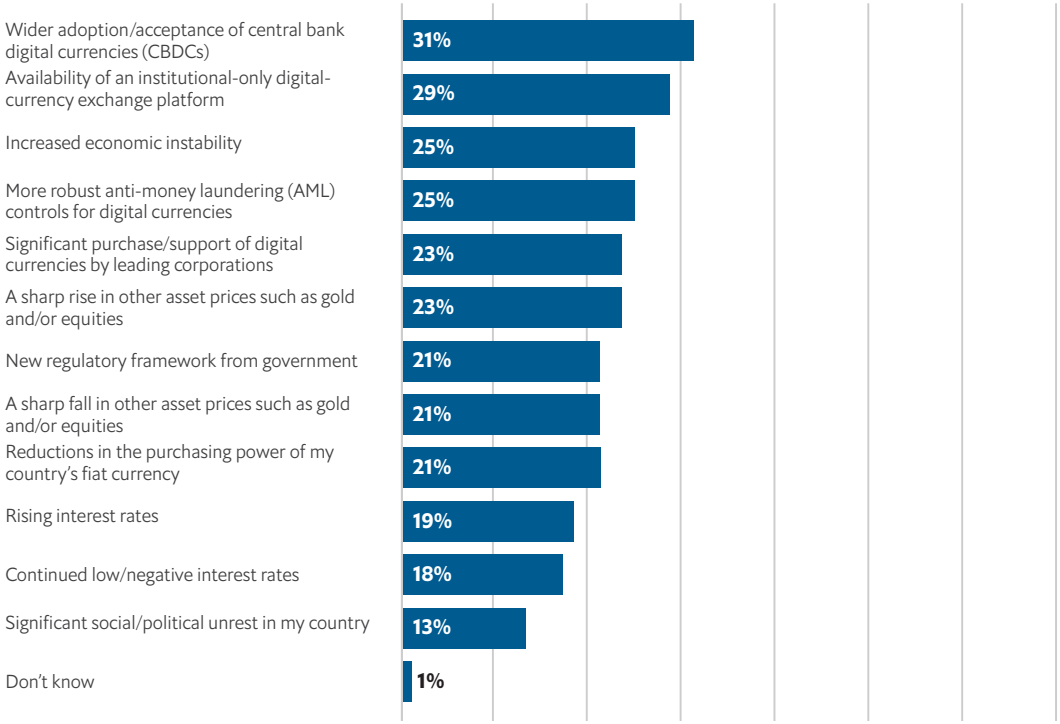
Q3. To what extent do you agree or disagree with the following statements? Select one in each row.



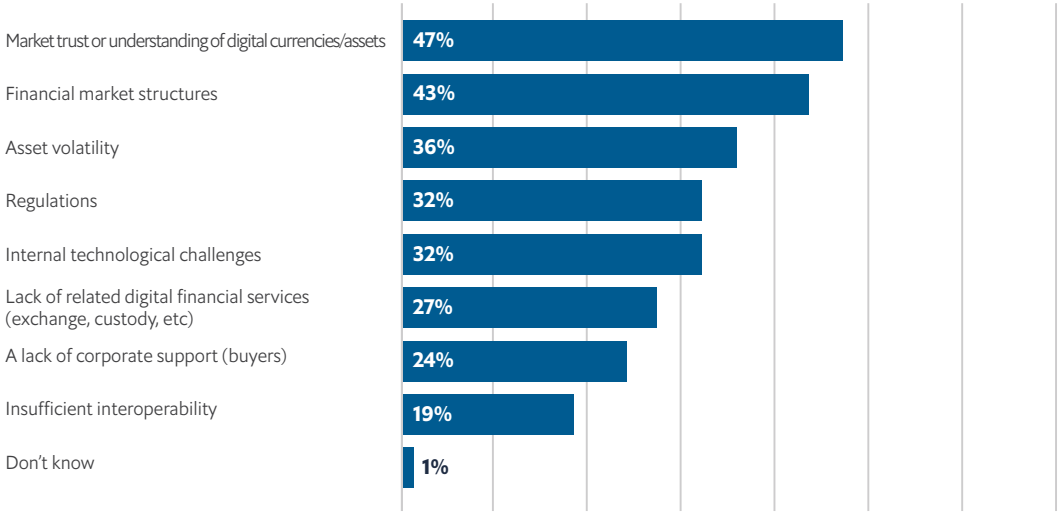
Q4. What should be the primary roles of open source digital currencies/assets (cryptocurrencies such as Bitcoin) within a portfolio or treasury account? Select up to three.



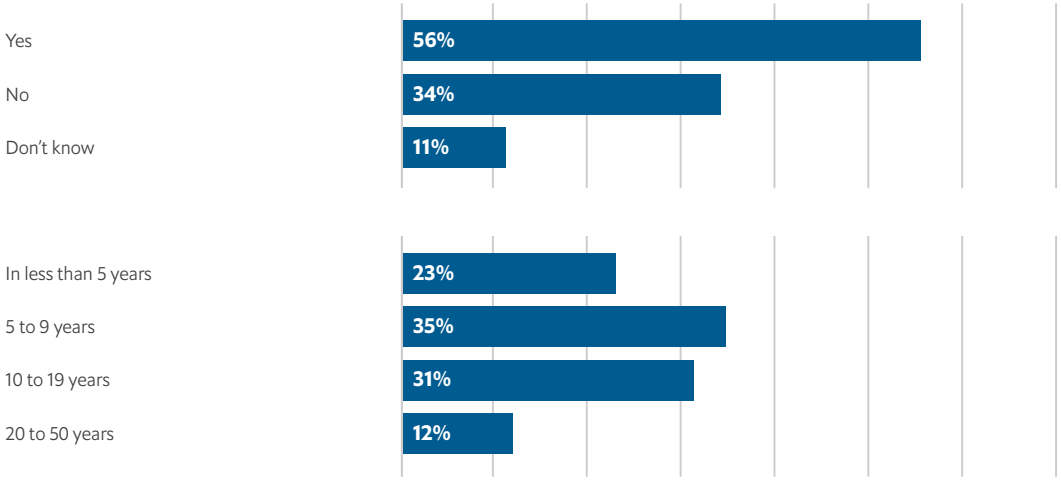
Q5. In your opinion, what would trigger more portfolio/treasury activity in open source digital currencies (cryptocurrencies such as but not limited to Bitcoin)? Select up to three.



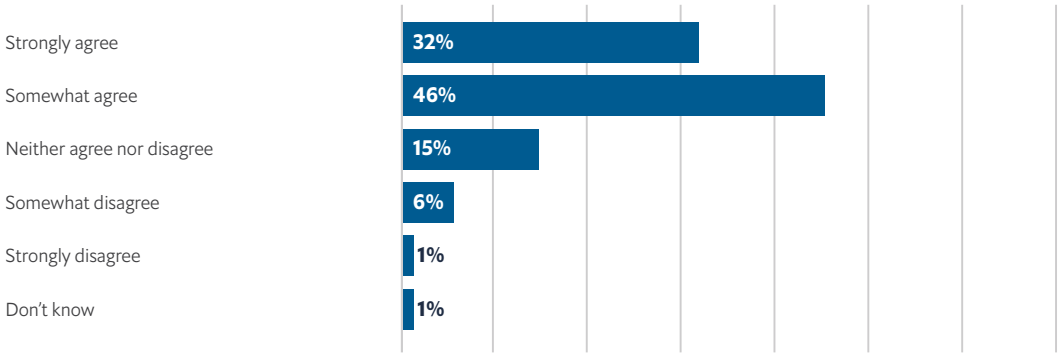
Q6. In your opinion, which best describes the primary obstacles to greater institutional investor or corporate treasury use of open source digital currencies (cryptocurrencies such as but not limited to Bitcoin)? Select up to three.



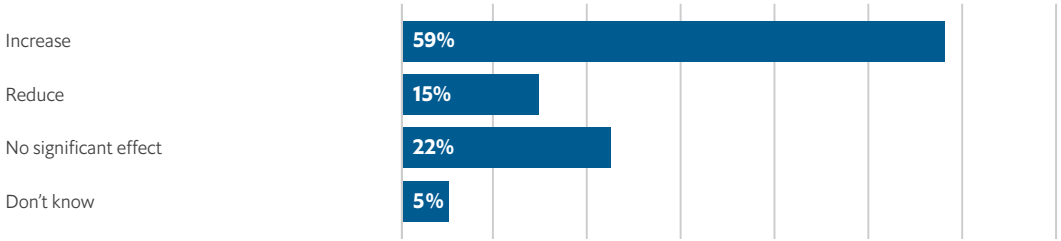
Q7. In your opinion, are CBDCs likely to replace physical or fiat national currencies in your country? Select one. (If yes, how long will it take?)



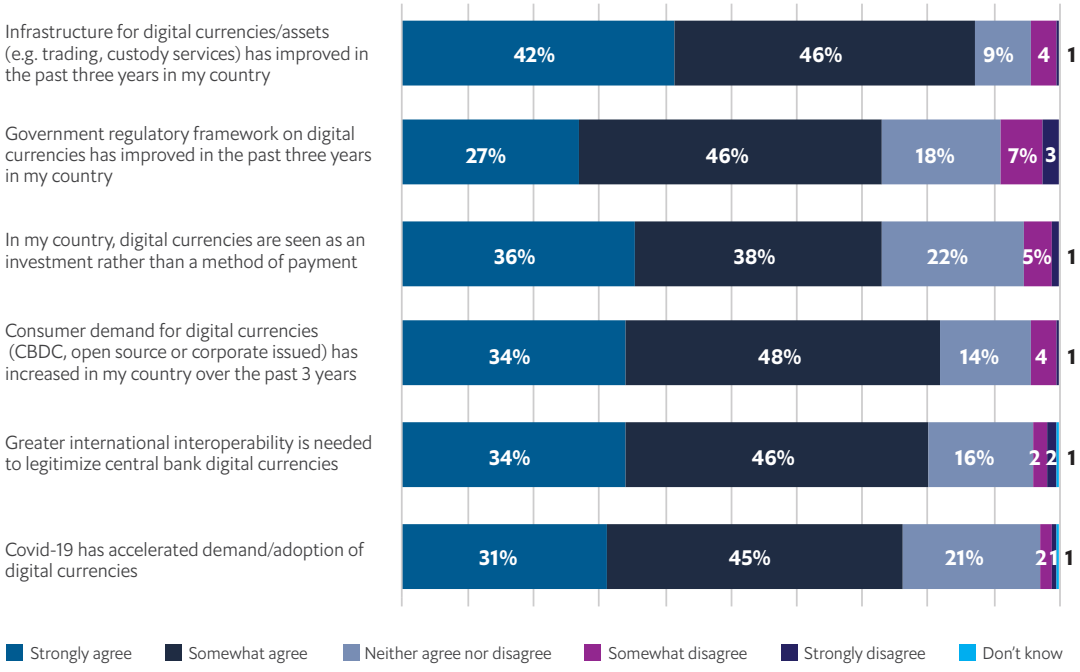
Q8. To what extent do you agree or disagree that issuance of CBDCs are necessary to establish a functioning market for new financial instruments such as digital bonds or other forms of digital assets? Select one.



Q9. In your opinion, will establishment of CBDCs reduce or increase general demand for other forms of digital currencies and assets that are not government backed? Select one.



Q10. To what extent do you agree or disagree with the following statements? Select one in each row.



The Economist INTELLIGENCE UNIT

LONDON

20 Cabot Square
London, E14 4QW
United Kingdom
Tel: (44.20) 7576 8000
Fax: (44.20) 7576 8500
Email: london@eiu.com

GENEVA

Rue de l'Athénée 32
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
Email: geneva@eiu.com

NEW YORK

750 Third Avenue
5th Floor
New York, NY 10017
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 1181/2
Email: americas@eiu.com

DUBAI

Office 1301a
Aurora Tower
Dubai Media City
Dubai
Tel: (971) 4 433 4202
Fax: (971) 4 438 0224
Email: dubai@eiu.com

HONG KONG

1301
12 Taikoo Wan Road
Taikoo Shing
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
Email: asia@eiu.com

SINGAPORE

8 Cross Street
#23-01 Manulife Tower
Singapore
048424
Tel: (65) 6534 5177
Fax: (65) 6534 5077
Email: asia@eiu.com