Bank Governance Leadership Network

August 2021

BGLN

VIEWPOINTS

# A shifting payments landscape and the future of money

*"It is really an astonishing moment right now in payments, and a special moment in the history of money."*

– Participant

On July 22, 2021, Bank Governance Leadership Network (BGLN) participants met virtually to discuss how retail and commercial payments are changing and the risks and opportunities that presents for banks. A range of payments providers are acquiring market share from banks and expanding into banking services, digital currencies and assets continue to gain circulation, and finance is becoming increasingly embedded in commerce. This evolution has implications for banks and the financial system and raises strategic questions for banks regarding how they will respond. This *ViewPoints* draws on pre-meeting conversations with participants and the discussion on July 22nd, and focuses on the following areas:[1]

- The payments landscape is rapidly changing
- The future of money is digital
- Banks are reassessing their approach to payments and money

## The payments landscape is rapidly changing

The world of payments is changing quickly. A variety of factors have driven accelerated digitalization, resulting in the emergence of a complex payments ecosystem. According to one participant, *"It is really an astonishing moment right now in payments, and a special moment in the history of money. It feels like a real shift for all of financial services."* Banks and their customers are preparing for a cardless, cashless world, as alternatives including account-to-account, QR payments, digital wallets, buy-now-pay-later (BNPL), cryptocurrencies and stablecoins gain prominence, and new providers capture market share.

### Demand for more efficient payments is growing

Retail and corporate customers look at the ways technology has transformed much of their daily lives and now expect making and receiving payments to be no different. They struggle to understand how data and commerce can move seamlessly across borders while payments can remain stalled in queues for days. The proliferation of faster internet speeds, mobile phone

*"We have seen tremendous acceleration across the board towards digital payments … The change has been rapid, and it appears to be permanent."*

– Participant

technology, and ecommerce has contributed to a rising demand for simpler and more efficient means to transact.

The COVID-19 pandemic accelerated demand for digital payments as consumers increasingly moved away from cash and even credit cards for purchases. Corporates and small businesses also established or expanded processes to transact more easily in a digital environment. A participant said, *"We have seen tremendous acceleration across the board towards digital payments, contactless payments, particularly in the in-store environment, and unbelievable growth of e-commerce. The change has been rapid, and it appears to be permanent."* Recent data supports this assertion. Use of cash declined 35% in the UK in 2020, and was already declining by approximately 15% per year before the COVID-19 pandemic.[2] In-store contactless payments usage increased by 29% in the US and younger consumers in particular displayed a strong preference for the option.[3] The trend is expected to continue ramping up globally, as some projections suggest as many as 420 billion transactions worth $7 trillion could shift from cash to cards and digital payments by 2023, and as much as $48 trillion by 2030.[4] As these trends continue, banks are working to respond. A director said, *"The pandemic massively accelerated this shift to digital payments. It was already going to happen, but this moved the timeline ahead significantly and now the industry has to grapple with that."*

## Digital challengers are gaining scale and taking market share

*"It has rapidly become a very competitive environment in the payments space for banks."*

– Executive

The growth of digital payments has enabled non-banks to take market share from banks (see Figure 1 below). As one executive noted, *"It has rapidly become a very competitive environment in the payments space for banks."* Participants discussed emerging trends as the competitive landscape continues to evolve:

- **Fintechs are finding success in payments.** According to EY, "Fintech competitors have walked through an open door by exploiting digital-first business models and offering interesting payment solutions. These new rivals often target specific customer verticals (and their differentiated needs), employ new value propositions, and scale rapidly. Banks have been slow to respond to this competitive threat and have fallen behind."[5] Though most fintechs continue to operate on the rails provided by banks, they could still pose a threat. A participant said, *"It's a business risk because I do not think banks are very good in this area. We are seeing fintechs doing much more of the payments business. Banks are playing a* *role, but not necessarily a robust or highly profitable one."* A recent analysis found fintech firms in payments grew at an annualized compound rate of 27% between 2016 and 2020, while banks saw their market capitalization decline by 1% over the same period.[6]

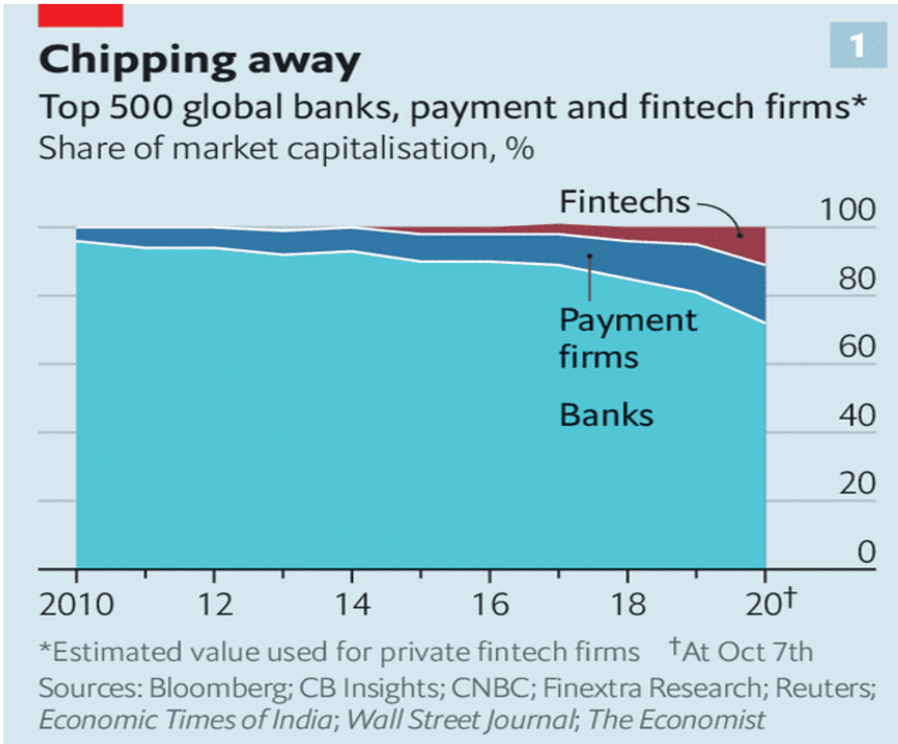


Figure 1.

*Source: The Economist, October 8, 2020*

- **Payment firms are growing rapidly.** Non-banks are a growing presence in the financial lives of consumers. Firms including PayPal, Visa, Mastercard, Ant Group, and even tech companies like Facebook, now have over 3bn customers who use e-wallets and payments apps.[7] PayPal, the biggest online-payment platform outside of China, now has a market capitalization over $300 billion, a valuation greater than most large banks in the world.[8] The firm saw a major boost as a result of the pandemic, with total payment volume increasing by 31% in 2020 alone.[9] As of July 2021, Visa was valued at over $500 bn, greater than JPMorgan Chase.[10] Stripe, an online payments firm, is the US's largest ever unlisted company, with a recent $95bn valuation.[11]

- **Embedded and account-to-account payments could further accelerate movement out of banks and traditional providers.** Many point to embedded finance—the idea that finance appears at the point of customer need, rather than as a stand-alone product, and that payments, credit, banking, and investment can be integrated into nonfinancial apps or websites—as the future. Through APIs and banking-as-a-service applications, payments can be embedded into commerce, providing a seamless experience for customers. Account-to-account (A2A) payments could contribute to a trend whereby banks are invisible to users. While not new—bank transfer services have existed for many years and direct debit is common for bill payment—"through open banking and real-time payments, A2A has a genuine opportunity to become a credible rival to the card payment rail for everyday transactions too," according to one commentator, noting that the introduction of open banking allows third parties to initiate payments on behalf of consumers and make payments directly from a bank account, potentially reducing fees for merchants, banks and the consumer.[12]

*"The question is, as financial services move towards platforms, who provides the financial services? … Will those services then be provided by the platforms themselves, fintechs, or banks?"*

– Participant

- **Challengers aim to expand offerings and capture customers**. In China and other parts of the world where mobile transactions are more ubiquitous, "super apps" have been dominating payments for quite some time, becoming diversified financial institutions as they facilitated more and more customer interactions. Ant Group and WeChat together process some 90% of all mobile transactions in the country.[13] In the US, PayPal has announced an intention to similarly become a "super app," aiming to become a "one-stop shop for all consumer financial needs," by expanding into banking and stock trading.[14] US payments firm Square is also expanding its reach, most recently announcing plans to acquire BNPL firm Afterpay for $29 billion, "illustrating how financial technology companies are seeking scale to challenge banks for a bigger slice of the payments industry," according to *The Wall Street Journal.*[15] A participant observed, *"It is the platformization of the economy. The question is, as financial services move towards platforms, who provides the financial services? The China model says the platforms themselves provide them; Alipay, Ant Financial, and Alibaba. First, financial services will be embedded in platforms, but will those services then be provided by the platforms themselves, fintechs, or banks?"*
- **Big tech could use payments as an entryway into financial services dominance**. Though some have shared skepticism that "super apps" can be successful in the US or European markets in the way they have been in China, the potential for big tech companies to capture more business and more mindshare from customers is clear. Tech giants like Apple and Google continue to tap into existing customer relationships to expand

their own payments platforms. A Basel Committee report stated, "The concern is that when big tech firms enter the payments market, their access to user data from associated digital business lines may allow them to achieve a dominant position…"[16]

*"On the grand sweep of history, we are in the final stages of the battle between physical and digital money."*

– Participant

## The future of money is digital

As the business of moving money continues to evolve, a more fundamental disruption – the digitalization of money itself – could upend payments. Digital money is rapidly gaining acceptance; the questions now are how quickly and what format will become widely adopted. As one participant put it, *"We are in a format war when it comes to digital money. On the grand sweep of history, we are in the final stages of the battle between physical and digital money."* A director agreed, *"It's a strange time and we are in the endgame now; I do believe that."*

### Multiple forms of digital money will compete for broad adoption

*"The cliff edge of cash becoming unsustainable is now rapidly approaching and we are entering the age of digital money."*

– Director

Perhaps unsurprisingly, as demand for efficient digital payments has accelerated, so too has traction for digital forms of money. A director said, *"Things have accelerated because of COVID. The cliff edge of cash becoming unsustainable is now rapidly approaching and we are entering the age of digital money. Before, it might have been 20 years away, but now it's probably 10 or even closer to five years from broad adoption."* The digitalization of money is underway, both inside and outside the regulated sector, with a few key forms emerging (see Figure 2).

A participant explained, *"There really are five horses in the race."* They are:

- **Central bank money:** *"Everyone has access to physical central bank money. Digital is not a player at the moment but well could be if they go forward with plans to launch retail or general purpose central bank digital currency (CBDC) … If it enters the playing field, it could become a very intriguing opportunity for people to make payments using CBDCs."*
- **Commercial bank money:** *"This is traditional bank money and it is 20 times bigger than central bank money in terms of reach. It is by far the biggest. At the moment, it's only available in account-based format. It's the 800-pound gorilla at the moment, but will it be in the future?"*
- **Cryptocurrencies:** *"These are public cryptocurrencies, like Bitcoin. A lot of people believe Bitcoin's goal is to be currency, not just a digital asset. Some countries have already said it is legal currency."*

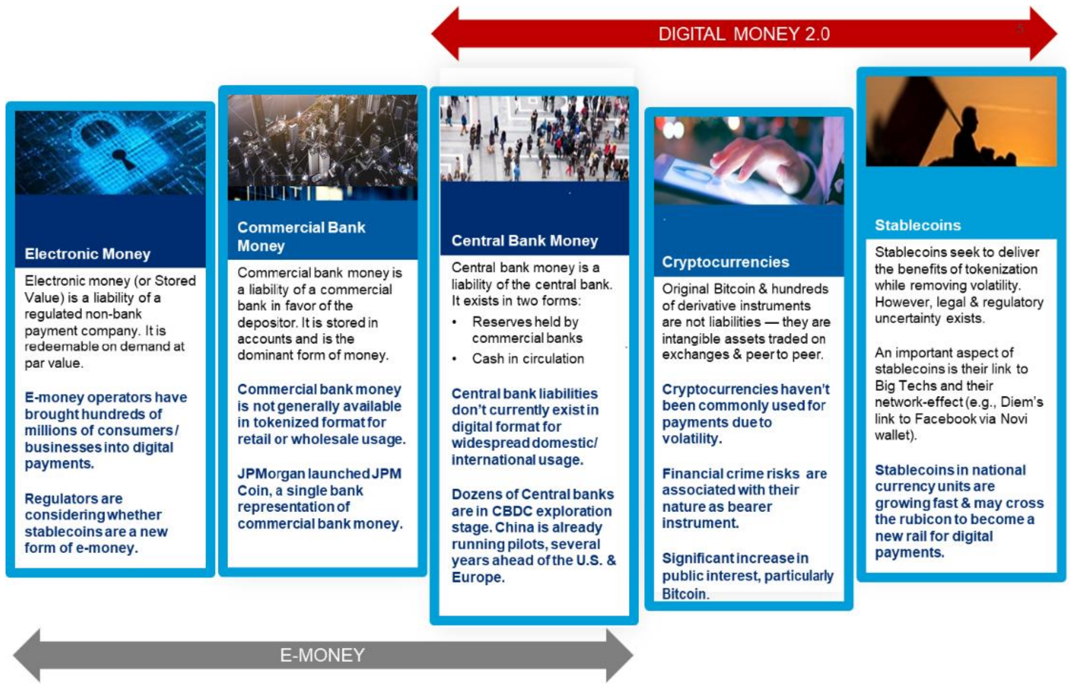


Figure 2.

*Source: Citi*

- **Electronic money:** *"Think of PayPal-type money, digital money offered by an unregulated non-bank. It differs from commercial money because it has to be essentially 100% collateralized. It's got hundreds of millions of customers around the world. You've got 300 million in India, a billion in Asia…This is a very serious contender in the future of digital money."*
- **Stablecoins:** *"This is Libra with Diem. Tether is the biggest player with a $62bn market cap. The idea is stablecoins remove the volatility inherent in instruments like bitcoin and become a type of money."*

Commercial bank money and electronic money are fairly well understood. Participants discussed cryptocurrencies, stablecoins, and central bank digital currencies in more detail.

### Cryptocurrencies

Already a growing trend in recent years, cryptocurrencies have soared in popularity and value since 2020. As one commenter put it, "Bitcoin has gone from being an obsession of anarchists to a $1 trillion asset class that many fund managers insist belongs in any balanced portfolio."[17] A director said, *"For now, we still look at it from the digital asset perspective not from a currency perspective. I do not see that changing anytime soon."*

*"I see broader regulation coming in cryptocurrencies. It's a complex regulatory landscape, but I see that on the horizon."*

– Participant

A June report from the Basel Committee stated, "It is clear that cryptocurrencies are speculative assets rather than money, and in many cases are used to facilitate money laundering, ransomware attacks, and other financial crimes."[18]

Governments and regulators around the globe are also increasingly wary of the risks cryptos pose to the financial system more broadly. Some participants suggested cryptocurrencies are likely to face increased regulation in the coming years. One said, *"I see broader regulation coming in cryptocurrencies. It's a complex regulatory landscape, but I see that on the horizon."* In Europe, EU policymakers recently proposed tighter regulation of cryptocurrencies.[19] Yet, experimentation with cryptocurrencies to facilitate payments is beginning. Hundreds of companies, including PayPal, Visa, Tesla (though it later halted acceptance of the crypto due to environmental concerns), AXA Insurance, and prominent food chains, have begun experimenting with allowance of Bitcoin as payment.[20] Though banks remain skeptical about the practical use of crypto as a form of currency, participants recognized that there may still be value. One said, *"Bitcoin is not a useful payment tool, but I would not dismiss it outright. I think a couple of horses can win this race for digital money, and crypto could be one of them."*

### Stablecoins

*"If cash is going away, then central banks will have clear and obvious incentive to truly get into the digital market."*

– Director

Like Bitcoin and other cryptocurrencies, major stablecoins like Tether and Circle's USDC have exploded in popularity. Tether, which claims to be backed by the US dollar, reported earlier this year that commercial paper constituted approximately half of the firm's $60bn in reserves, which would make it the world's seventh-biggest holder of commercial paper.[21] Participants were skeptical regarding the use cases for stablecoins and also drew attention to potential risks. One said, *"Retail CBDCs have great potential because they are both stores of value and a medium of exchange; they provide both functions. In contrast, stablecoins are probably terrible stores of value long term."* Another added, *"There is an extreme need to regulate stablecoins as they represent a national security risk. Look at something like Tether, it represents a global payment system outside of US sanctions. The emergence of a parallel non-US payment system is a major risk."*

### Central bank digital currencies

The rise of forms of digital money outside of the regulated financial system has spurred concern among central banks, resulting in many around the world to start exploring and even testing CBDCs in response. A director said, *"If cash is going away, then central banks will have clear and obvious*

> *"I view the evolution of payments as the most fundamental threat to the banking system."*
>
> – Director

*incentive to truly get into the digital market. The unregulated nature of cryptocurrencies and stablecoins is additional incentive."* Some commentators see CBDCs as inevitable. According to *The Economist,* "Over 50 monetary authorities, representing the bulk of global GDP, are exploring digital currencies. The Bahamas has issued digital money. China has rolled out its e-yuan pilot to over 500,000 people. The EU wants a virtual euro by 2025, Britain has launched a task-force, and America, the world's financial hegemon, is building a hypothetical e-dollar." [22] Digital currencies could have a profound impact on the financial system by increasing the speed of domestic and cross-border transactions, reducing transaction costs, and broadening poor and rural households' access to the financial system.[23] A director said, *"My gut view is that when the chips are down, central banks want to have some form of control over digital money. There will be CBDCs; it's going to happen. The question is what it will look like and how it will play out."*

## Banks are reassessing their approach to payments and money

> *"Pretty much every bank has payments up on their strategic agenda at the board level."*
>
> – EY Expert

Bank leaders will need to develop a strategy for how they will play in a transforming payments landscape as they consider the implications of a changing competitive environment and digital money. A director stated, *"I view the evolution of payments as the most fundamental threat to the banking system."* According to EY, "It is difficult to overstate the importance of payments to the banking industry. Facilitating transactions sits at the center of the customer relationship and bank profitability, accounting, directly or indirectly, for up to 30% of some banks' income. Now that position is under threat."[24]

The rapid changes to the payments landscape, and the potential for more change on the horizon, is bringing payments to the fore in strategic discussions. An EY expert said, *"Pretty much every bank has payments up on their strategic agenda at the board level ... One thing driving a lot of the response among the banks is the tremendous valuations that you're seeing for payments firms. There is enormous value there and banks see it."* Another participant observed*, "Banks are now having very strategic debates about what role they want to play in payments and there are widely varying responses to that from different banks. Some are saying, 'This is a strategic part of our business, we want to invest in it and monetize it and make the value of the payments business visible to the market.' Others are looking at it and basically saying, 'We cannot do it on our own. This is a mighty task; every*

> *"Every subpart of payments now has a well-funded competitor that is trying to eat the banks' lunch."*
>
> – EY Expert

*subpart of payments now has a well-funded competitor that is trying to eat the banks' lunch.'"*

Participants identified key risks that have emerged as the payments evolution continues:

- **Partnering in an expanding ecosystem.** Particularly in the consumer space, where digital challengers have made the most headway, banks may risk losing access to customer relationships and data if payments moves increasingly to other providers. A director explained, *"As long as banks are still involved in the process, they still largely get the data and know the transactions. But then what can they do with it? Once you have ceded that business interface to others, the data becomes a lot less useful."* While the risk of disintermediation is a legitimate concern, some participants emphasized the need to offer banking-as-service and embed services into platforms. *"If the economy is to continue migrating toward digital platform models, banks will have to make critical decisions about what role they want to play in such an ecosystem … Banks are just balance sheets. The business lines, loans, mortgages, etc., they all serve the balance sheet. The real question for banks is, how do we plug into the digital economy?"* Another asserted, *"We must embrace APIs … We built banks on High Street because that is where the foot traffic was. Foot traffic is now eyeballs and the eyeballs are on platforms. If you do not embrace APIs, your bank will be bypassed."* Banks have long harbored concerns about becoming the "dumb pipes" of financial services, operating in the background with limited brand recognition and customer interaction. But a participant stated, *"Nobody wants to be 'dumb pipes', but I'll tell you what is worse than being a dumb pipe is being an empty pipe."*

> *"Nobody wants to be 'dumb pipes' but I'll tell you what is worse than being a dumb pipe is an empty pipe."*
>
> – Participant

- **Investing in payments innovation.** According to one survey, 75% of bank executives stated that the pandemic increased the urgency of their plans to modernize payment systems.[25] If banks want to be major players in the payment evolution, investments today will be critical. One participant said, *"We've seen some banks begin to communicate how they want to strengthen the e-commerce proposition and be part of the game and drive growth for the bank through payments."* Another said, *"We've seen banks found their own payments entities, and others forming payments business units and consolidating assets and capabilities there."* Earlier this year, Santander and JPMorgan each announced plans to launch global payments platforms. Santander's executive chair Ana Botin recently

*"In international payments, digital challengers are raising awareness that there is a big price differential between the challengers and the banks."*

– Participant

stated, "In five years, there will be ten, maybe fifteen global payment platforms, half of them will be banks and half non-banks … we will be one of them."[26]

- **Collaborating with peer institutions.** Though some suggest consumer payments migrating to digital providers is inevitable, there have been some collective efforts by banks to respond. In 2017, the largest US banks collaborated to launch Zelle, a digital payments platform.[27] Elsewhere, the European Payments Initiative is a collaborative effort among 30 of Europe's largest banks, including Deutsche Bank, ING, UniCredit, and Santander, attempting to create a payments giant. "The idea is to build a European payment champion that can take on PayPal, Mastercard, Visa, Google and Apple," stated the group's chair.[28] Yet, participants also noted that banks face obstacles in attempting to compete with such payment firms. A director observed, *"Zelle is great. Yet Venmo just keeps eating its lunch. There's nothing wrong with the product design … Good luck calling PayPal if something goes wrong with Venmo, they just don't care or don't know what I'm talking about. It's quite interesting."*

- **Anticipating the potential threat to corporate and cross-border payments.** Though much of the competition remains in the retail consumer space, other areas may be ripe for similar disruption. One participant said, *"In international payments, digital challengers are raising awareness that there is a big price differential between the challengers and the banks. Foreign exchange is costly, and we're now seeing banks react to that and realizing they have already lost a bit of market share to challengers there. They do not want this story to repeat itself in the corporate payments space."* A director said, *"The reality is that foreign exchange and exchange rates remain important and fundamental to bank profitability in many cases."* To date, banks have enjoyed deep relationships with global corporate clients, given the broader suite of services banks can provide. Yet, some are beginning to wonder if corporations will eventually be enticed by digital challengers. One participant said, *"The midsized corporations and upwards, would they think about going to a fintech organization? If you can take the frustration out of it for the corporate by digitalizing the journey and making it simpler … that's what some of the challengers can offer."* Another warned, *"If you think of any big platform, there is a business side and consumer side. Look at Amazon, for example. There is no reason the same platform models won't threaten parts of corporate banking."*

## Preparing for the "*winner-take-all*" competition in digital money

If payments evolution presents business model risk, the digitalization of money presents an even more daunting threat of disruption. An executive said, *"We all know that format wars are brutal, winner-take-all competitions. Commercial banks happen to be the dominant force at the moment, but they are no longer alone on the playing field. They may be joined by central banks, they may be joined by fintechs, they may be joined by big tech, so this is going to be a wild ride."* Many participants agreed that while CBDCs are likely to arrive, several questions still remain as to their viability and adoption. One participant said, *"I think CBDCs could have a lot of unintended consequences. One could be an acceleration of the big tech takeover of finance. Why not store your CBDC in your Google wallet? Right now, you do not do that because Google does not have a banking license, but with CBDCs, will they need one?"* An executive simplified the concept of CBDCs, referring to the concept as *"government PayPal,"* and wondered whether governments could compete in the digital space with corporate firms: *"CBDCs are not competing with cash, they're competing with PayPal and the like. I don't think you need government broadband, electricity, or food, so I don't think you need government money."*

*"Crypto and stablecoins have thrived in the absence of CBDCs, but can they still thrive once CBDCs arrive?"*

– Participant

According to one director, *"It's less of a question of which of the five horses will win the race, but rather which horses can survive in a regulated fashion? Is there a point to cryptocurrency once it is regulated appropriately? That's not clear."* Another participant noted, *"Crypto and stablecoins have thrived in the absence of CBDCs, but can they still thrive once CBDCs arrive?"* For now, this remains difficult to assess. Despite experimentation with CBDCs, many practical questions remain unanswered. For bank leaders hoping to prepare for the future, this makes decisions about where to invest difficult. A participant said, *"What's most difficult as you try to prepare for all the potential possibilities is that we still do not know what CBDCs will actually look like in many cases. A lot of this will simply depend on design choices that have yet to be made by a lot of central banks."*

With the digital money space moving quickly, but still unclear as to how the "money form war" will play out, a participant advised that bank leaders consider three big questions about the future of digital money: *"One, will our money be regulated or non-regulated? Two, will our money be a liability, a non-liability, or a quasi-liability? And three, will our money come in tokens or accounts?"*

## Tracking the regulatory response

*"There is an uneven playing field in payments … These unregulated entities can do things that banks simply are not allowed to do."*

– Director

With so much going on across payments, banks are carefully monitoring the activity of the regulators as well. Some leaders see regulatory arbitrage as being key to the success challenger institutions have played in the payments space. A director said, *"There is an uneven playing field in payments, certainly in the consumer space and increasingly in the small business space. These unregulated entities can do things that banks simply are not allowed to do. It would be challenging for a bank to emulate any of these non-bank payment firms given the regulatory limitations placed on banks."* As new products and forms of money continue to emerge, regulators are still determining how best to respond, including tackling questions around consumer protection in things like BNPL, and how to oversee the expansion of payments outside the regulated banking sector.

*"We will all look back on this as the 'before times' for cryptocurrency and stablecoins."*

– Participant

For now, cryptocurrencies and stablecoins stand out among other forms of digital money due to their unregulated nature, but that may be changing. Some regulators and lawmakers have warned of the risks of stablecoins like Tether and also questioned the validity of its underlying backing by the US dollar.[29] One participant stated, *"We need to bring the non-regulated space into the regulated perimeter, that is clear. It is about making sure something like Tether cannot be used to avoid US sanctions."* In a recent meeting US Treasury Secretary Janet Yellen reportedly "underscored the need to act quickly to ensure there is an appropriate US regulatory framework in place" regarding stablecoins.[30] In early 2021, the European Central Bank said it wanted veto power over stablecoins entering the EU and said issuers of the tokens should be subject to "rigorous liquidity requirements. " A participant observed, *"The regulatory landscape is super intense right now, to use the official term. Stablecoins are in the regulatory spotlight in the US now and have been for some time in Europe."* Another said, *"I do think stablecoins will be the one that comes out with more definitive regulations or existing regulatory tools will be applied to them in some way."*

A participant predicted, *"We will all look back on this as the 'before times' for cryptocurrency and stablecoins, where they were unregulated and that will transition in the coming years and be regulated, and that's when we will really see a shakeout when it comes to formats of digital money."* A director said, *"I look forward to the regulatory perimeter clarifying around much of this and getting some guidance for how we should be thinking this through at the board level."*

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*"Some of these things are going to become clearer soon, and you do not want to be the bank that is surprised by what happens."*

– Participant

The future of digital money and payments continues to rapidly evolve – and banks must determine what role they want to play in this evolution. For bank leaders, charting and overseeing an effective strategic course will be challenging. A participant said, *"There is a lot going on right now and it's hard to keep track of everything, but some of these things are going to become clearer soon, and you do not want to be the bank that is surprised by what happens."* Another described the challenge thus: *"As you consider time allocation for a bank risk committee trying to think through these new forms of risks that could have major implications but are continuing to shift and evolve, it's quite daunting, honestly."*

## About the Bank Governance Leadership Network (BGLN)

The BGLN addresses key issues facing complex global banks. Its primary focus is the non-executive director, but it also engages members of senior management, regulators, and other key stakeholders committed to outstanding governance and supervision in support of building strong, enduring, and trustworthy banking institutions. The BGLN is organized and led by Tapestry Networks, with the support of EY. *ViewPoints* is produced by Tapestry Networks and aims to capture the essence of the BGLN discussion and associated research. Those who receive *ViewPoints* are encouraged to share it with others in their own networks. The more board members, members of senior management, advisers, and stakeholders who become engaged in this leading-edge dialogue, the more value will be created for all.

## About Tapestry Networks

Tapestry Networks is a privately held professional services firm. Its mission is to advance society's ability to govern and lead across the borders of sector, geography, and constituency. To do this, Tapestry forms multistakeholder collaborations that embrace the public and private sector, as well as civil society. The participants in these initiatives are leaders drawn from key stakeholder organizations who realize the status quo is neither desirable nor sustainable, and are seeking a goal that transcends their own interests and benefits everyone. Tapestry has used this approach to address critical and complex challenges in corporate governance, financial services, and healthcare.

## About EY

EY is a global leader in assurance, tax, transaction, and advisory services to the banking industry. The insights and quality services it delivers help build trust and confidence in the capital markets and in economies the world over. EY develops outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, EY plays a critical role in building a better working world for its people, for its clients and for its communities. EY supports the BGLN as part of its continuing commitment to board effectiveness and good governance in the financial services sector.

# Appendix

The following individuals participated in these discussions:

## Participants

- Nora Aufreiter, Corporate Governance Committee Chair, Scotiabank
- Agnes Bundy Scanlan, Non-Executive Director, Truist
- Nanci Caldwell, Non-Executive Director, CIBC
- Martha Cummings, Non-Executive Director, Marqeta
- Mark Cuthbert, Senior Strategy Officer–Bank, USAA
- Beth Dugan, Deputy Comptroller for Large Bank Supervision, Office of the Comptroller of the Currency
- Morten Friis, Risk Committee Chair, NatWest Group
- Tobias Guldimann, Audit Committee Chair, Commerzbank
- Phil Kenworthy, Non-Executive Director, ClearBank
- Tom Killalea, Non-Executive Director, Capital One
- Christine Larsen, Non-Executive Director, CIBC
- Jai Massari, Partner, Davis Polk and Wardell
- Tony McLaughlin, Managing Director, Emerging Payments and Business Development, Citi
- Andy Ozment, Chief Technology Risk Officer and Executive Vice President, Capital One
- Marty Pfinsgraff, Risk Committee Chair, PNC Financial
- Mary Phibbs, Non-Executive Director, Morgan Stanley International, and Chair, Virgin Money Trust Managers, Morgan Stanley International
- Phil Rivett, Audit Committee Chair, Standard Chartered, and Non-Executive Director, Nationwide Building Society
- Sarah Russell, Audit Committee Chair, Nordea
- Gavin Smyth, Chief Risk Officer, Nationwide Building Society
- Tom Woods, Non-Executive Director, Bank of America

## EY

- Andreas Habersetzer, Partner and Managing Director, Strategy, EMEIA Payments Leader

## Tapestry Networks

- Dennis Andrade, Partner
- Brennan Kerrigan, Senior Associate
- Tucker Nielsen, Principal

# Endnotes

[1] *ViewPoints* reflects the network's use of a modified version of the Chatham House Rule whereby comments are not attributed to individuals, corporations, or institutions. Network participants' comments appear in italics.

[2] Claer Barret, "Cash Use Plunges During Pandemic," *Financial Times,* June 16, 2021.

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[4] "How Digital Payments Can Help Unlock Revenue," *Harvard Business Review,* June 10, 2021.

[5] Rodrigo Dantas e Silva and Sara Elinson, "How Banks Can Win at Payments," *EY,* June 25, 2021.

[6] Rodrigo Dantas e Silva and Sara Elinson, "How Banks Can Win at Payments," *EY,* June 25, 2021.

[7] "The Digital Currencies That Matter," *The Economist,* May 8, 2021.

[8] "How Fintech Will Eat into Banks' Business," *The Economist,* May 8, 2021.

[9] Telis Demos, "Pandemic Payment Habits Are Looking Sticky," *The Wall Street Journal,* May 6, 2021.

[10] Olaf Storbeck, "Europe's Largest Banks Plan Joint Attack on US Payments Giants," *Financial Times,* May 3, 2021.

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[13] "How Fintech Will Eat into Banks' Business," *The Economist,* May 8, 2021.

[14] Ron Shevlin, "PayPal Wants to be a Super App," *Forbes,* May 26, 2021.

[15] David Winning, "Square Agrees to Acquire Afterpay for $29 Billion in All-Stock Deal," *The Wall Street Journal,* August 1, 2021

[16] Eva Szalay, "Central Banks Step Up Fight Against Cryptocurrencies," *Financial Times,* June 23, 2021.

[17] "The Digital Currencies That Matter," *The Economist,* May 8, 2021.

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