

The Role of Cash in the Future Monetary Landscape

Bringing Futures Literacy to the Future of Money

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CashEssentials is a global, independent think tank, whose mission is to monitor ongoing developments and undertake research and analysis on cash and its future, while providing a platform for balanced inquiry and debate about cash, payments and monetary systems, for the benefit, viability and well-being of all.

Banknotes and coins are a collective good integral to society and its proper functioning. The evolution of cash, therefore, should be shaped collectively, that is, in the joint long-term interest of individuals, businesses, regulators, non-state actors and society. In our view, the future of money is not just a technology issue. It is fundamentally a socio-economic issue: the future of the monetary system should be efficient; fair; inclusive; resilient; sustainable; respectful of individual privacy and include a vision for human betterment. A part of that solution is cash.

In a rapidly digitizing society, we believe in the imperative of keeping cash up-to-date and open to change, as it possesses a set of unique attributes. Cash is non-discriminatory and can be used by everyone; protects individual privacy; is a crisis safe-haven — cash does not crash — and is a friend of the poor and unbanked.



Based in Paris, École des Ponts Business School finds its roots in a 270-year history of illustrious researchers and inventors. École des Ponts ParisTech, our mother institution, was the first civil engineering school in the world and is celebrated for having produced inventors such as Louis Vicat, the creator of ‘Grey Gold’ (cement), and Philippe Lebon, the first person to use artificial gas as a means of large-scale illumination successfully. Like our mother school, our business school is committed to fostering an environment where ideas can be explored, challenged, shared, and applied.



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Through its UNESCO Chair for the Future of Finance, École des Ponts Business School is also part of the Global Futures Literacy Network, bringing together academic and government institutions, as well as business and NGOs, to explore the origins and role of the images of the future and how they impact the present. Named by UNESCO as the essential capability for the 21st century, Futures Literacy is the capability to diversify futures and use those futures to expand our spectrum of choices in the present.



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The Lab was moderated by Riel Miller, Senior Fellow at Ecole des Ponts Business School and one of the world's leading designers of processes for using the future. Sessions were facilitated by futurists – Martin Calnan, UNESCO Chair for Futures Literacy; Petteri Lillberg, Demos Helsinki – and experts from the cash community – Katrina Brendle, Deutsche Bundesbank; Päivi Heikkinen, Bank of Finland; Antti Heinonen, former director of Banknotes at the ECB; Richard Wall, former Head of Currency at the Bank of Canada; Alexander Bau, Federal Reserve Bank of San Francisco. Martina Oettl assisted with the co-design process and the facilitation of the virtual sessions.

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1. Abstract

The nature of money has been changing at an accelerating pace, with new forms of money and new issuers of money. What will the monetary landscape look like in 2050? What institutions – if any – will issue it? How will we store and measure value? How will we organise our transactions? Will cash continue to play a role?

This paper is based on a Futures Literacy Lab hosted by CashEssentials and the UNESCO Chair for the Future of Finance at Ecole des Ponts Business School, in September 2022. Our capacity to anticipate the future of money has been limited by our collective poverty of imagination, and this has strengthened the narrative of a linear forward projection of today's circumstances and changes which is assumed to lead to a singular digital future for money.

Futures Literacy provides the capability to overcome this poverty of imagination and avoid path dependence, to imagine a monetary landscape which promotes social as well as technological innovation. This requires defining and anticipating different use cases for different forms of money, including cash. Aspirations for the future monetary landscape include improving inclusion, increasing sustainability, reinforcing resilience, protecting privacy and civil liberties and reducing friction within economies. Cash clearly offers different answers on these perspectives and the cash community needs to take a leadership role in designing a relevant and effective role for cash in the future.



2. Anticipating the Future of Money

Some are calling it the ‘New Space Race’. Or is it mere turf wars, characterised by self-interest? In any case, central and commercial banks – the traditional issuers of money – are being challenged today by a flotilla of disruptive newcomers from FinTechs and telcos, to digital platforms and emerging crypto-assets.

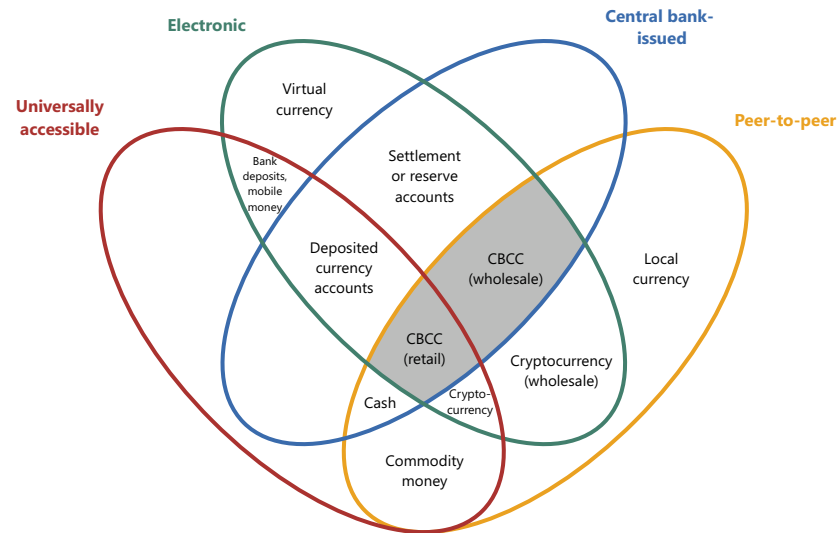
Money is not constant. It has evolved continuously since its inception: from shells and animal skins, to precious metals, coins and banknotes. In the last century, money has experienced waves of digitalization, driven by technology and deregulation: credit and debit cards, chip cards, contactless cards, pre-paid cards and wallets, mobile money, biometrics, cryptocurrencies... But this diversification of form factors is misleading. On the one hand, it can obscure the underlying continuity of functions of the different components of the monetary landscape. On the other hand, it gives the appearance of change and innovation in the digital payments market, when in fact most of these new technologies are concentrated in the hands of a few global giants.

Money has been diverse by nature and multiple forms of money have always co-existed. Money is a hybrid system with both private and public issuers. The resilience of cash in an increasingly digital monetary landscape is a perfect and somewhat counterintuitive illustration of this diversity.

The money flower¹ illustrates this diversity by highlighting 4 key properties of money: issuer (central bank or not), form (electronic or not), accessibility (universal or not) and acceptance (peer-to-peer or not). But it does not address the deeper question of the role of money.

1 Bech M. and Garratt R. Central Bank Cryptocurrencies. BIS Quarterly Review. September 2017.

The Money Flower: a Taxonomy of Money.



Source: Bech M. and Garratt R. Central Bank Cryptocurrencies.

The question of the future of money is not merely a technical issue for central banks, financial institutions, or payment service providers. It is a fundamental societal and political question. It is not only a question of individual freedom – how can I pay? – but also a social issue – how do we collectively measure, exchange and store value? How can we organise our transactions? Therefore, the future monetary landscape will determine our capacity to design a society which is fair, inclusive, resilient, and respectful of individual privacy and civil liberties, as well as providing the means to achieve it.

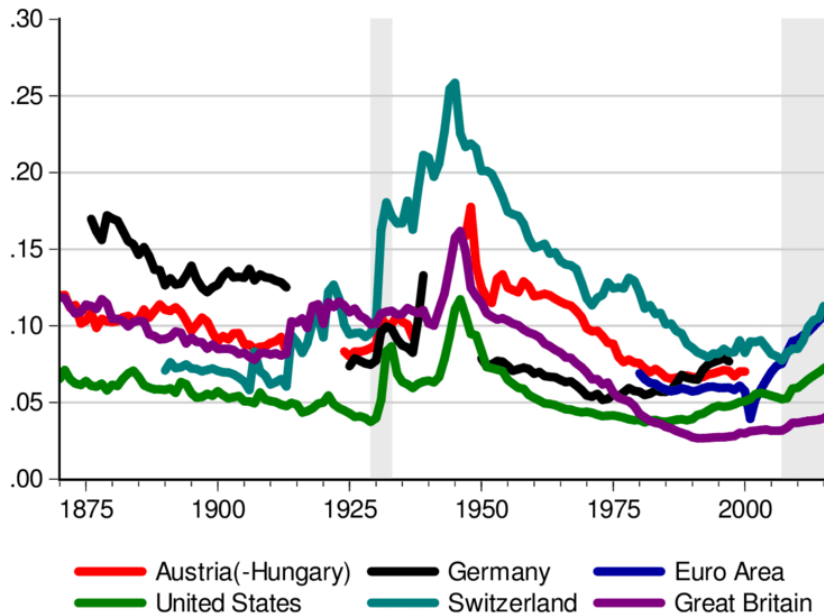
So, as with so many social, technical and political shifts, money is evolving but we have not been very good at anticipating it, nor understanding and taking advantage of this evolution to serve both social and economic aspirations.

For instance, cash in circulation has been growing faster than GDP in most countries since the turn of the century, totally contradicting the often-heard narrative that cash is about to disappear. Jobst and Stix² have presented evidence that, even though low interest rates and increasing uncertainty constitute explanatory factors, many questions remain open with regards to what has been called the paradoxical increase in cash demand. Even in the more recent past, econometric models have not been very successful at forecasting the demand for cash. If we struggle to retrospectively explain the past evolution of cash, how can we effectively anticipate future demand?

Furthermore, as economic and social conditions change, so too does the monetary landscape – the positioning and role of different enablers of transactions, accounting, reallocation, and inter-temporal assets. Efforts to extrapolate the past into the future fail to take into account the on-going changes in societal conditions.

2 Jobst C. and Stix H.. Doomed to Disappear? The Surprising Return of Cash Across Time and Across Countries.CEPR Discussion Paper No. DP12327. 2017.

A Longer-Term View on Currency in Circulation over Nominal GDP (in %).



Source: Jobst C. and Stix H. 2017. Doomed to Disappear? The Surprising Return of Cash Across Time and Across Countries.

Tackling poverty of imagination with collective intelligence

Why is this? Why are we so unable to anticipate the significant changes taking place in economic, social, and political conditions which have been reshaping the forms and functions of money? After all, central banks and the financial sector constantly develop and finetune forecasts of monetary demand.

But human behaviour and the complex emergent systems of our collective activities are not predictable. Our anticipatory processes and systems are fundamentally constrained, leading to a collective “poverty of imagination” that limits our ability to imagine a truly different future for money. An inability to leverage our imagination to question the present, seeking refuge in the comfort and affirmation of what we already know. This inability to imagine a future beyond incremental versions of the present leads to and supports the narrative of the ‘inevitable’ digitalization of money.

We need tools to help us overcome this poverty of imagination and help society, organizations and individuals discern changes in the present that are obscured by projecting the past into the future. Grasping the distinctions between short-term and long-term phenomena, sustainable and unsustainable scenarios, perception and choice, require a better understanding of the reasons and methods used to imagine the future. This is the value added of deploying recent advances in the science of anticipation. As Riel Miller³ points out: “The future does not exist in the present, but anticipation does. The form the future takes in the present is anticipation.”

By exposing the anticipatory systems and processes that underpin people’s imagined futures it becomes practical to overcome poverty of imagination. This is where futures literacy steps in.



3. What is Futures Literacy?

Futures literacy is a capability. Being futures literate means being able “to distinguish the different reasons and methods for imagining the future”. Like most capabilities there are many ways to gain a deeper understanding – to learn to become futures literate.

In the case of anticipation, it is usually necessary to start the learning voyage by drawing people’s attention to the fact that they use-the-future in diverse ways. By starting from direct experiences of anticipation it is easier to clarify the attributes of different kinds of future. This is what happens in a Futures Literacy Laboratory, a process designed and tested for over two decades, including at the OECD and UNESCO. The design principles shaping Futures Literacy Labs bring together theory and practice from a number of fields, including action learning, collective intelligence, and anticipatory systems. Today there is a Global Futures Literacy Network advancing the scientific application of anticipation theory and practice to a wide range of challenges.

Such efforts enable people to gain a much greater understanding of their anticipatory assumptions and the sources and implications of imagined futures. By making these assumptions explicit, we gain the capacity to tap into the full potential of anticipation. In other words, Futures Literacy Labs build our capability to overcome the poverty of imagination that otherwise constrains our ability to use-the-future to sense and make sense of change.

“At the heart of Futures Literacy is the notion of anticipation”

In our view, applying this capability to the monetary landscape is pivotal.

Firstly, money is an enabler of financial as well as social inclusion. Cash has been and remains the most universal form of money. It can be used by all and accepted by all. It is inclusive. It does not require a bank account or a device by either party to a transaction. It does not discriminate against age, gender, wealth, or ethnicity. Declining usage of cash as a payment method may signal changes in the monetary landscape but it does not signal a change to its universality.

Secondly, the resilience of the monetary landscape is essential for societal resilience. Everyone knows that change is the only constant. New opportunities and threats, new crises and surprises, will not go away. A healthy, diversified monetary landscape is one of the key ingredients to finding ways to respond and innovate as changes occur. Cash is essential for such diversification, at a minimum because it plays an important role in coping with and recovering from shocks and disruptions. The cash cycle has demonstrated its robustness and resilience in times of natural and made-man disasters. The last crises – the 2008 financial crisis, the 2020 Covid-pandemic, and the war in Ukraine in 2022 – have shown that a sufficient and elastic supply of cash has contributed to stabilizing the economic situation. (Rösl G; and Seitz F.)⁴. The future resilience of cash is, however, challenged by the shrinking infrastructure required to ensure its smooth and efficient circulation.

Thirdly, there are a variety of ways that different forms of money can be part of addressing societal challenges, including the climate crisis. A uniform monetary landscape, monopolized by digital systems, would likely constrain the ease and fluidity of asset reallocation as well as the ability to change the inter-temporal perceptions that are associated with different forms of money in different contexts and cultures. For example, in certain circumstances, different forms of payment alter people's perception of the value of what they buy or sell. As a result, it might be feasible to encourage changes in behaviour by privileging different parts of the monetary landscape at different times in different places. Research by Esselbach⁵ shows that under certain conditions, use of cash tends to generate greater 'pain of paying', that may lead to less conspicuous consumption, more emotional attachment to purchases, and hence healthier and more sustainable communities.

Bringing Futures Literacy to the role of cash in the monetary landscape is therefore a timely exercise to explore the role and impact that money can and must play in shaping a more sustainable, inclusive and resilient future. Imagining the nature and governance of money in the future provides a strong entry point into describing how human communities function.

4 Rösl G. and Seitz F. On the Stabilizing Role of Cash for Societies. Institute for Monetary and Financial Stability. 2022. <https://cashesentials.org/app/uploads/2022/07/On-the-Stabilizing-Role-of-Cash-for-Societies.pdf>

5 Eschelbach, Martina. Pay cash, buy less trash? – Evidence from German payment diary data, International Cash Conference 2017 – War on Cash: Is there a Future for Cash? 25 – 27 April 2017.

Futures Literacy Lab 2022: The role of cash in the future monetary landscape

It is with this objective that, in 2022, CashEssentials hosted a Futures Literacy Lab on the role of cash in the future monetary landscape, in association with the UNESCO Chair for the Future of Finance at Ecole des Ponts Business School.

The Futures Literacy Lab builds on CashEssentials' 2021 report, [The Future of Cash? A Novel Approach to Re-Imagining the Future](https://cashessentials.org/app/uploads/2021/02/The-Future-of-Cash-LR-3.pdf)⁶. The report concluded that even if a future without cash is possible, it is not probable, nor desirable, as it would create a number of negative outcomes, including in terms of efficiency, inclusion, fairness, resilience, and the protection of privacy. The future of cash is not merely a competition between cash and digital, nor limited to payments only. The discussion should not be focused exclusively on technology (form), but must include the social and economic roles (functions) of money. There is a strong case for diversity in the monetary landscape and cash constitutes one of the well established sources of such diversity. Cash not only contributes to the diversification of the monetary landscape from social and economic perspectives, it also safeguards against the dangers of excessive market concentration in payment methods.

The Lab was moderated by Riel Miller, Senior Fellow at Ecole des Ponts Business School and one of the world's leading designers of processes for using the future. Sessions were facilitated by futurists – Martin Calnan, UNESCO Chair for Futures Literacy; Petteri Lillberg, Demos Helsinki – and experts from the cash community – Alexander Bau, Federal Reserve Bank of San Francisco; Katrina Brendle, Deutsche Bundesbank; Päivi Heikkinen, Bank of Finland; Antti Heinonen, former director of Banknotes at the ECB; Richard Wall, former Head of Currency at the Bank of Canada.

The 35 participants were invited to exercise and diversify their imaginations concerning the future monetary landscape. Such a discussion is not limited to money's forms or technologies that enable such forms. It encompasses the multi-faceted roles that money plays in the way people understand time, value and social and economic relationships. Imagining future monetary landscapes calls for an effort to describe how the traditional functions of money and cash do, or do not, play a role in changing social and environmental contexts.

The Lab's goal was to co-create and re-imagine new futures to address the roles and responsibilities of key stakeholders in contributing to shape a sustainable future monetary landscape. It took the participants through 4 phases, specially designed to implement collective intelligence methods that “use the future” to enable participants to understand key limiting assumptions underlying their ability to imagine the future.

6 Lepecq G. and Lillberg P. The Future of Cash? A Novel Approach to Re-imagining the Future. CashEssentials. 2021. <https://cashessentials.org/app/uploads/2021/02/The-Future-of-Cash-LR-3.pdf>

Phase 1, Reveal – Participants started the conversation by sharing their images of probable and preferable futures of the monetary landscape sector in 2050. This allowed participants to reveal the underlying, and often limiting, assumptions that govern their ability to imagine different kinds of futures.

Phase 2, Reframe – Participants then engaged with a set of new and unfamiliar assumptions. A future that is neither probable nor desirable. The reframing allowed participants to explore novel ideas about the monetary landscape in 2050 and the possible roles of money. The invitation in this phase is to play with the future. To let go of the familiar images and, most importantly, to suspend their habit of imagining the future as something that is likely or desirable. Such non-extrapolatory futures offer new insights into how what people imagine, shapes what they perceive.

Phase 3, Reflect – Arising out of the collective effort to specify the assumptions that shape images of the future, participants reconsidered their perceptions of the present, arriving at new formulations of the problems and questions. They were able to detect and invent newly significant aspects of the monetary landscape that were either invisible or marginal when using conventional extrapolatory scenarios to make sense of the present.

Phase 4, Next steps – Reflecting on the process and the content of the conversations, the participants sketched out avenues for moving forward with the financial sectors' efforts to step-up to the challenges of our times.

This paper aims to share some of the key take-aways and learnings from the lab.



4. Re-Imagining Futures

In the face of the pandemic, climate change, increasing global inequalities, geopolitical tensions and loss of biodiversity, the only certainty is that the future will be very different from today. An anticipatory system needs to go beyond imagining a future, which is an incremental version of the present.

‘No cash accepted’ signs are the most often seen visual manifestation of the dominant current narrative for the future of money. Cash, while handy at times, is expected to gradually disappear at any given date between 2040 and 2050. Anticipating – and claiming – the disappearance of cash has become a symbol of innovation and progress.

This dominant narrative has become the de facto projection of the future, based in fact mainly on what we currently know or indeed see when visiting a local Amazon physical store to try out palm-based cashiers. From this perspective, if there is a future, it is indeed not very different from today.

But different it probably will be and needs to be. Covid-19, the Ukrainian war, the cost-of-living crisis with rising energy prices and our collective inability to halt the climate change anywhere near the 1.5° global warming level, have all heightened the awareness of the need for deep structural, economic, social, and environmental changes. Importantly, the increasing scepticism towards BigTech, including Meta, Google, Apple and Amazon but also the perpetually turbulent Twitter, is no longer restricted to technology denialists, neo-luddites or fringe-thinkers. Now, mainstream regulators and policy makers, NGOs across the political spectrum and citizens are concerned about the privacy of their own data, as devices, chips and the cloud increasingly house everything that makes up who we are.

However, these crises are not new, nor are they the famous black swans we often make them to be. They are the result of the limiting assumptions that constrain our ability to project a future that is significantly different from the present. In other words, they are the long-term developments (to which we are most often blinded) of rigid and one-sided world views resulting from a lack of open public debate, as well as the ability to imagine alternatives, to expand our menu of choices. The difference today is that we are heading towards a multi-crisis situation, combining wars and increasing geopolitical tensions, an ongoing pandemic, the acceleration of global warming, compounded by an energy crisis, food security and supply-chain issues.

In these circumstances, we need to broaden the spectrum of choices by revealing the underlying assumptions that we have used to project the future. The ‘No Cash Accepted’ sign, far from being a sign of innovation, serves to limit individual and collective choice and restricts the future to a single scenario.

“As long as we just project what we know into the future, there is little room for new conversations. But if we start diversifying the futures you imagine, new perceptions of the present emerge”

An important question that emerged in the design phase of the lab was the time frame. In the cash space, the ‘usual’ forecasting period is 3 to 5 years and 10 years is considered as long-term. The accelerating development of new ways to pay has led to a decreasing role of cash in payments globally and many observers quite straightforwardly expect this trend to continue.

The design team chose a horizon of 2050 for the Lab. This time frame is disconnected from current trends, as well as ongoing investment cycles. It raises the question of the role of cash not as a relic surviving from the past, but as a part of a future monetary landscape, based on its potential role in scenarios that imagine both continuity and discontinuity. It is also a time frame that allows participants to more easily move beyond the “expertise” bias that often limits our ability to think beyond “probable” futures.

5. Cash is a Means of Payment, a Store of Value... and so much more

We often focus on the tangibility of cash, which is an obvious and specific attribute of cash. This tangibility underlies some of the core attributes of cash.

- It is universal because everyone understands and sees how it works.
- It is efficient as it does not require intermediation. The payee receives in real-time the amount handed over by the payer.
- It is resilient because it works in the absence of an electrical or internet infrastructure.



But there are multiple dimensions of cash including intangible features. Cash is not just a tool or an aggregate of technical characteristics. It also has social, historic, and cultural dimensions.

Countries use notes to promote their heritage and values and the national currency is in many cases a symbol of sovereignty. All over the world, children learn to count and to read with banknotes and coins; they are an essential educational element in financial literacy.

Cash is a vital tool of social cohesion and trust, creating a “community of payment” (Dissaux⁷). The same banknotes and coins are used by all, young or old, rich, or poor. It enables transactions between people who do not need to know each other and thereby creates a system of trust.

On the other hand, the profusion of new payment methods and issuers of money could have a negative impact on social dynamism by further fragmenting and ghettoizing certain communities and regions. More sophisticated and differentiated monies might be used to discriminate and aggravate fragmentation between different groups.

Cash acts as a connector between different social groups and tribes and over time. If you don't have a universal form of money, people invent something else. Think about cigarettes as a measure of value and means of exchange in times of war time or in prisons.

During the Lab, the discussion shifted from cash as merely a means of payment with certain material and technical properties to the underlying role of cash, not just within the monetary system, but within society as whole. Exploring the “why” of cash, as it were, as opposed to its “how” or “what”, opened the discussion for cash to a more prominent role in the future, in terms of some of its most crucial intangible aspects: inclusion, social cohesion and anonymity.

7 Dissaux T. The Social Role of Money in an Age of Digitalisation. Building Societal Resilience. The Role of Inclusion in a Fragmented World. Axa Research Fund 2022.

6. From Backward Looking to Living the Present...

Banknotes and coins are subject to constant innovation. New security features protect banknotes from counterfeiting; improved substrates increase their lifecycle and sustainability; policy decisions such as recirculation improve the efficiency and reduce the environmental footprint of the cash cycle.

This incremental approach, largely limited to single initiatives of marginal product and service innovation, is however insufficient to face the global challenges facing society. When anticipating the future, we naturally tend to project images from the past.

In order to escape this path dependence, we need to start asking new questions. How can we shift innovation strategies from focusing on an improved version of today to one that contributes to emerging ways of creating value through new economic, social, environmental, and political organization? How can we imagine a future cash model that integrates some of the weak signals of changes in the way people transact, in the way they store value or in the way they organize their privacy? Answering these questions will require putting aside some of the underlying background assumptions and biases to design a system which meets future challenges for cash.

“If we start thinking about the future of cash, we’ll spend less time thinking about whether it will disappear or not!”

7. Extrapolating Tools and Uses... Time for a Paradigm Shift

The debate around the evolution of money has been largely dominated by technology, and the underlying dominant assumption that the digitilisation of money is inevitable and desirable. As such, technology has been the main driver behind the digitalisation of money, or more precisely the different waves of digitalisation.

In some cases, policies aimed at nudging people away from cash have been introduced, as the resistance of cash was seen as an obstacle to going “full digital”. This includes, for instance, imposing caps on payment in cash, incentivising merchants and consumers to use digital payments, or commercial and government communication campaigns promoting the use of digital payments. Undeniably, the digitalisation of money presents several advantages, in terms of efficiency or convenience. Arguably it is also a factor of inclusion as demonstrated by the growing population with access to digital financial services. But it is also a factor of exclusion for those who cannot or those who choose not to participate.

Furthermore, cash is not an obstacle to innovation – including the digitalisation of money. On the contrary, it provides a safety net that protects against the risks and downsides of digitalisation. Digitalisation creates a series of new risks and uncertainties, including for instance cybercrime, loss of privacy, corporate and/or state surveillance as well as social fragmentation. Historically, these factors have all favoured an increase in cash demand for precautionary motives. Preserving a more diverse monetary landscape emphasizes the importance of concepts such as resilience, privacy and trust.

The pandemic has provided a powerful illustration that cash is a part of a critical public infrastructure. Many countries declared that those in charge of delivering and collecting cash or replenishing ATMs, were essential workers and were not subject to lockdown. If cash is a critical part of public infrastructure, then it has value. But we need to change the business model, and this could involve rethinking the involvement of the public sector and striking a balance between market forces and the public sector. We are seeing weak signals: in France, in Spain, municipalities are paying for ATMs. In Sweden, the central bank has opened new cash centres.

How can we create a monetary system which challenges the narrative of a future dominated by technological innovation? How can we create a future which improves inclusion, increases sustainability, reinforces resilience and protects privacy?

8. Changing Concepts of Trust and Privacy Force a Rethink of Payment Systems

Trust and privacy are foundational elements of all communities. But these concepts are not static nor should they be taken for granted. Trade-offs are being made constantly between convenience and speed versus privacy and freedom. Article 12 of the Universal Declaration of Human Rights reads: “No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.” In stark contrast, Mark Zuckerberg CEO of Meta has claimed that “privacy is no longer a social norm”.



The anonymity of cash is one of its unique key attributes. It preserves users from both state and corporate surveillance. On the other hand, bank statements and card information ultimately say more about what we are doing than our social media accounts or our emails. Policymakers now fully recognize the importance of privacy considerations in financial services, including payments.

Cash also enables consumers to achieve their goals and desires with no intermediation. Giving a cash tip to reward good service in a restaurant or hotel; making a donation to a homeless person or to a charity; flipping a coin to select sides at a sports event; distributing red envelopes with crisp new notes for the Lunar New Year... In these cases, the value of cash exceeds its monetary value and includes a social and sentimental value for the donor. It also reduces friction within the economy as it facilitates peer-to-peer transactions which do not depend on a device, a technological infrastructure or an intermediary.

Cash is currently the only form of central bank money available to the public. It is legal tender, backed by a central bank and is an element of critical public infrastructure. It creates a system of checks and balances between central banks, governments, financial institutions, and citizens. People's trust in cash relies on responsible monetary policies and good governance. Cash guarantees competition that keeps financial institutions from charging exorbitant fees for their services and acts as a safeguard against negative interest rates.

However, the way we own, control and take responsibility for data is changing. Including new ways of relating to privacy and trust. Exploring the futures of the monetary landscape therefore also implies being able to question existing norms and to allow for the system to adapt to shifts in uses and how they will impact the future of money and cash.

9. Call to Action: Time for Leadership

“Money is like an army. If you don’t have your own, you have someone else’s”

Over time, the specific economic, social and institutional topography of the monetary landscape changes. Private and public money, institutional power and social experiments all call for openness and ongoing innovation. It is clear that cash offers different answers to different perspectives on privacy, data, path dependence, technology and legacy investments.



It is time for the cash community to take a leadership role, rather than a defensive or a merely reactive one. The cash community needs to improve its futures literacy in order to detect new roles and opportunities for cash to serve economic and social ends. Being able to use the future for different reasons, with different methods, in different contexts enables greater creativity and openness to change. This will enable the cash community to (re)design cash and formulate experiments that test ways to reinforce existing roles or play new ones, rather than taking a defensive and fatalistic view of the future of cash.

The results of this Futures Literacy Lab underscore the importance of multi-dimensional and multi-disciplinary efforts to detect changes that alter the monetary landscape and the position of cash. Such efforts require the involvement of a wide range of actors and interests. The fruits of this Lab point to the benefits of the cash community initiating this kind of discussion and research. Achieving industrial efficiencies at scale, defending existing markets and habits, has merit as part of a strategy of continuity. But there must also be strategic engagement with discontinuity, including endings and beginnings. The much-needed sustainability discussion has quite rightly focused on material use, production techniques, logistics and supply chain, but still falls short of considering the broader socio-economic changes that are underway. The cash community can be as active in thinking about the potential of different components of the monetary landscape as those promoting, often in a narrow and self-serving manner, digital means of payment.

Participants in the Lab concluded that the future of the monetary landscape should be diversified and therefore needs both cash and digital forms of money. Diversity is a virtue in this context, as is the openness to a wide range of relationships amongst different mediums. The major questions and challenges faced today by cash – access, acceptance, efficiency, sustainability, resilience – were not called into question by the Lab. However, the Lab reinforced the view that taking on these challenges in the name of ensuring the diversity of the monetary landscape continues to be important. The Lab emphasized that cash is more than just a payment instrument and a store of value. These attributes need to be integrated into the discussions on shaping the monetary ecosystems of the future.

During the Futures Literacy process we uncovered often uncritically held assumptions, challenged them to pave the way for new thinking and started changing the present in ways that reveal new aspects of the present and sketch a range of continuously changing probable and desirable futures. The process offered participants new vantage points for human agency, a sense of being able to thoughtfully and purposefully change one's perceptions and choices.

The hope, coming out of the Lab, is to broaden and deepen the conversation around cash, money and payments. Not merely as technical and technological tools, but as part of the pervasive and constant changes taking place in the world around us.

