AS PREPARED FOR DELIVERY

Winds of Change: The Case for New Digital Currency By Christine Lagarde, IMF Managing Director Singapore Fintech Festival, November 14, 2018

Introduction

Distinguished guests, ladies and gentlemen—good morning and thank you for the opportunity to participate in this important event.

In Singapore, it is often windy. Winds here bring change, and opportunity. Historically, they blew ships to its port. These resupplied while waiting for the Monsoon to pass, for the seasons to change.

"Change is the only constant," wrote the ancient Greek philosopher, Heraclitus of Ephesus.

Singapore knows this. You know this. It is the true spirit of the Fintech Festival—opening doors to new digital futures; hoisting sails to the winds of change.

And yet change can appear daunting, destabilizing, even threatening. This is especially true for technological change, which disrupts our habits, jobs, and social interactions.

The key is to harness the benefits while managing the risks.

When it comes to fintech, Singapore has shown exceptional vision—think of its regulatory sandbox where new ideas can be tested. Think of its Fintech Innovation Lab, and its collaboration with major central banks on cross-border payments.

In this context, I would like to do three things this morning:

- First, frame the issue in terms of the changing nature of money and the fintech revolution.
- Second, evaluate the role for central banks in this new financial landscape—especially in providing digital currency.
- Third, look at some downsides, and consider how they can be minimized.

1. The changing nature of money and the fintech revolution

Let me begin with the big issue on the table today—the changing nature of money.

When commerce was local, centered around the town square, money in the form of tokens metal coins—was sufficient. And it was efficient. The exchange of coins from one hand to another settled transactions. So long as the coins were valid—determined by glancing, scratching, or even biting into them—it did not matter which hands held them.

But as commerce moved to ships, like those that passed through Singapore, and covered increasingly greater distances, carrying coins became expensive, risky, and cumbersome.

Chinese paper money—introduced in the 9th century—helped, but not enough. Innovation produced bills of exchange—pieces of paper allowing merchants with a bank account in their home city to draw money from a bank at their destination.

The Arabs called these *Sakks*, the origin of our word "check" today. These checks, and the banks that went along with them, spread around the world, spearheaded by the Italian bankers and merchants of the Renaissance. Other examples are the Chinese *Shansi* and Indian *Hundi* bills.

Suddenly, it mattered whom you dealt with. Was this Persian merchant the rightful owner of that bill? Was the bill trustworthy? Was that Shanxi bank going to accept it? Trust became essential—and the state became the guarantor of that trust, by offering liquidity backstops, and supervision.

Why is this brief tour of history relevant? Because the fintech revolution questions the two forms of money we just discussed—coins and commercial bank deposits. And it questions the role of the state in providing money.

We are at a historic turning point. You—young and bold entrepreneurs gathered here today are not just inventing services; you are potentially reinventing history. And we are all in the process of adapting.

A new wind is blowing, that of digitalization. In this new world, we meet anywhere, any time. The town square is back—virtually, on our smartphones. We exchange information, services, even emojis, instantly... peer to peer, person to person.

We float through a world of information, where data is the "new gold"—despite growing concerns over privacy, and cyber-security. A world in which millennials are reinventing how our economy works, phone in hand.

And this is key: money itself is changing. We expect it to become more convenient and userfriendly, perhaps even less serious-looking.

We expect it to be integrated with social media, readily available for online and person-toperson use, including micro-payments. And of course, we expect it to be cheap and safe, protected against criminals and prying eyes.

What role will remain for cash in this digital world? Already signs in store windows read *"cash not accepted."* Not just in Scandinavia, the poster child of a cashless world. In various

other countries too, demand for cash is decreasing—as shown in recent IMF work. And in ten, twenty, thirty years, who will still be exchanging pieces of paper?

Bank deposits too are feeling pressure from new forms of money.

Think of the new specialized payment providers that offer e-money—from AliPay and WeChat in China, to PayTM in India, to M-Pesa in Kenya. These forms of money are designed with the digital economy in mind. They respond to what people *demand*, and what the economy *requires*.

Even cryptocurrencies such as Bitcoin, Ethereum, and Ripple are vying for a spot in the cashless world, constantly reinventing themselves in the hope of offering more stable value, and quicker, cheaper settlement.

2. A case for Central Bank Digital Currencies

Let me now turn to my second issue: the role of the state—of central banks—in this new monetary landscape.

Some suggest the state should back down.

Providers of e-money argue that they are less risky than banks, because they do not lend money. Instead, they hold client funds in custodian accounts, and simply settle payments within their networks.

For their part, cryptocurrencies seek to anchor trust in technology. So long as they are transparent—and if you are tech savvy—you might trust their services.

Still, I am not entirely convinced. Proper regulation of these entities will remain a pillar of trust.

Should we go further? Beyond regulation, should the state remain an active player in the market for money? Should it fill the void left by the retreat of cash?

Let me be more specific: **should central banks issue a new digital form of money?** A statebacked token, or perhaps an account held directly at the central bank, available to people and firms for retail payments? True, your deposits in commercial banks are already digital. But a digital currency would be a liability of the state, like cash today, not of a private firm.

This is not science fiction. Various central banks around the world are seriously considering these ideas, including Canada, China, Sweden, and Uruguay. They are embracing change and new thinking—as indeed is the IMF.

Today, we are releasing a new paper¹ on the pros and cons of central bank digital currency or "digital currency" for short [link, hold up copy of paper]. It focuses on domestic, not cross-border effects of digital currency. The paper is available on the IMF website.

I believe we should consider the possibility to issue digital currency. There may be a role for the state to supply money to the digital economy.

This currency could satisfy public policy goals, such as (i) financial inclusion, and (ii) security and consumer protection; and to provide what the private sector cannot: (iii) privacy in payments.

a) Financial inclusion

Let me start with financial inclusion, where digital currency offers great promise, through its ability to reach people and businesses in remote and marginalized regions. We know that banks are not exactly rushing to serve poor and rural populations.

This is critical, because cash might no longer be an option here. If the majority of people adopt digital forms of money, the infrastructure for cash would degrade, leaving those in the periphery behind.

What about subsidizing cash usage in those areas? But that means that economic life in the periphery would become disconnected from the center.

Of course, offering a digital currency is not necessarily the only answer. There may be scope for governments to encourage private sector solutions, by providing funding, or improving infrastructure.

b) Security and consumer protection

The second benefit of digital currency relates to security and consumer protection. This is really a David versus Goliath argument. In the old days, coins and paper notes may have checked the dominant positions of the large, global payment firms—banks, clearinghouses, and network operators. Simply by offering a low cost and widely available alternative.

Without cash, too much power could fall into the hands of a small number of outsized private payment providers. Payments, after all, naturally lean toward monopolies—the more people you serve, the cheaper and more useful the service.

For a start, private firms may under-invest in security to the extent they do not measure the full cost to society of a payment failure. Resilience may also suffer—with only a few links in the payment chain, the system may stop working if one of these links breaks. Think about a cyber-attack, a glitch, bankruptcy, or a firm's withdrawal from the local market.

¹ IMF Staff Discussion Note entitled "Casting Light on Central Bank Digital Currency," published today on our website.

Regulation may not be able to fully redress these downsides. A digital currency could offer advantages, as a backup means of payment. And it could boost competition by offering a low-cost and efficient alternative—as did its grandfather, the old reliable paper note.

c) Privacy

The third benefit of digital currency I would like to highlight lies in the privacy domain. Cash, of course, allows for anonymous payments. We reach for cash to protect our privacy for legitimate reasons: to avoid exposure to hacking and customer profiling, for instance.

Consider a simple example. Imagine that people purchasing beer and frozen pizza have higher mortgage defaults than citizens purchasing organic broccoli and spring water. What can you do if you have a craving for beer and pizza but do not want your credit score to drop? Today, you pull out cash. And tomorrow? Would a privately-owned payment system push you to the broccoli aisle?

Would central banks jump to the rescue and offer a fully anonymous digital currency? Certainly not. Doing so would be a bonanza for criminals.

3. Downsides of Bank Digital Currencies

This brings me to my third area—the potential downsides of digital currency. The obvious ones are risks to financial integrity and financial stability. But I would also like to highlight risks of stifling innovation—the last thing *you* want.

My main point will be that we should face these risks creatively. How might we attenuate them by designing digital currency in new and innovative ways? Technology offers a very wide canvas to do so.

a) Risks to financial integrity

Let's return to the tradeoff between privacy and financial integrity. Could we find a middle ground?

Central banks might design digital currency so that users' identities would be authenticated through customer due diligence procedures and transactions recorded. But identities would not be disclosed to third parties or governments unless required by law. So when I purchase my pizza and beer, the supermarket, its bank, and marketers would not know who I am. The state might not either, at least by default.

Anti-money laundering and terrorist financing controls would nevertheless run in the background. If a suspicion arose it would be possible to lift the veil of anonymity and investigate.

This setup would be good for users, bad for criminals, and better for the state, relative to cash. Of course, challenges remain. My goal, at this point, is to encourage exploration.

b) Risks to financial stability

The second risk relates to financial stability. Digital currencies could exacerbate the pressure on bank deposits we discussed earlier.

If digital currencies are sufficiently similar to commercial bank deposits—because they are very safe, can be held without limit, allow for payments of any amount, perhaps even offer interest—then why hold a bank account at all?

But banks are not passive bystanders. They can compete with higher interest rates and better services.

What about the risk of bank runs? It exists. But consider that people run when they believe that cash withdraws are honored on a first-come-first-serve basis—the early bird gets the worm. Digital currency, instead, because it can be distributed much more easily than cash, could reassure even the person left lying on the couch!

In addition, if depositors are running to foreign assets, they will also shun the digital currency. And in many countries, there are already liquid and safe assets to run toward—think of mutual funds that only hold government bonds. So, the jury is still out on whether digital currencies would really upset financial stability.

c) Risks to innovation

If digital currency became too popular, it might ironically stifle innovation. Where is your role if the central bank offers a full-service solution, from digital wallet, to token, to back-end settlement services?

What if, instead, central banks entered a partnership with the private sector—banks and other financial institutions—and said: you interface with the customer, you store their wealth, you offer interest, advice, loans. But when it comes time to transact, we take over.

This partnership could take various forms. Banks and other financial firms, including startups, could manage the digital currency. Much like banks which currently distribute cash.

Or, individuals could hold regular deposits with financial firms, but transactions would ultimately get settled in digital currency between firms. Similar to what happens today, but in a split second. All nearly for free. And anytime.

The advantage is clear. Your payment would be immediate, safe, cheap, and potentially semi-anonymous. As you wanted. And central banks would retain a sure footing in payments. In addition, they would offer a more level playing field for competition, and a platform for innovation. Meanwhile your bank, or fellow entrepreneurs, would have ensured a friendly user experience based on the latest technologies.

Putting it another way: the central bank focuses on its comparative advantage—back-end settlement—and financial institutions and start-ups are free to focus on what they do best—client interface and innovation. This is public-private partnership at its best.

Conclusion

Let me conclude. I have tried to evaluate the case this morning for digital currency.

The case is based on new and evolving requirements for money, as well as essential public policy objectives. My message is that while the case for digital currency is not universal, we should investigate it further, seriously, carefully, and creatively.

More fundamentally, the case is about change—being open to change, embracing change, shaping change.

Technology will change, and so must we. Lest we remain the last leaf on a dead branch, the others having decided to fly with the wind.

In the world of Fintech, we need to harness change so it is fair, safe, efficient, and dynamic. That was the goal of the Bali Fintech Agenda launched by the IMF and World Bank last October.

When the winds of change pick up, what will guide us in our journey? The captains sailing through the Straits of Singapore followed the North Star.

And today? Tomorrow?

I suggest we follow a girl. A young girl. A fearless girl. [show picture of statue]. If you are lucky, you might be able to meet her in person in New York's financial district.

She is bold. She is brave. She is confident. She faces forward, toward the future, with grit and determination—a future she herself is going to shape, with eyes wide open, eagerly, steadily.

I hear her say: Let us sail ahead. I am not afraid. (pause) I, am not afraid.

Thank you.