



FINTECH, FINANCIAL INCLUSION, AND CYBER RISK: TACKLING THE POST-COVID-19 CHALLENGES

On 9 April 2021, Toronto Centre convened a meeting of central bank governors and heads of supervision authorities from developing and developed countries to explore how supervisors and regulators can maximize the benefits and minimize the risks of FinTech, in particular with respect to financial inclusion. They discussed how to increase access to financial services for the poor and vulnerable, especially women, during and beyond the COVID-19 pandemic.

This was the fourth roundtable discussion hosted by Toronto Centre on this important subject. Babak Abbaszadeh, CEO of Toronto Centre welcomed the participants, outlined objectives and thanked funders for their support of the Centre's mission. Previous discussions during the IMF and World Bank autumn and spring meetings had explored the benefits of FinTech for financial inclusion; the risks arising from the use of FinTech to consumers, financial inclusion, financial institutions, and financial stability; and the impact of the COVID-19 pandemic in accelerating the digitization of payments.¹

The discussion was moderated by Alan AtKisson, Assistant Director-General, Swedish International Development Cooperation Agency (Sida). He opened the discussion by **emphasizing the importance and timeliness of this topic for the 125 million additional people cast into poverty during the COVID-19 pandemic and for all those seeking to enhance financial inclusion and gender equality.** Six months on from the October 2020 roundtable, many elements of the new normal are becoming clear, not least the shifting nature of financial products and services, and the massively increased use of FinTech. This was echoed by a participant who observed that only 1 in 2 men and only 1 in 5 women in Pakistan had a bank account.

The discussion focused on improving financial inclusion by:

- Harnessing the potential for further growth in digital retail payment systems through more harmonized and open systems, and through reducing the frictions that arise from the inherently multi-jurisdictional nature of the cross-border payments market;
- Protecting the use of cash. Many people, especially women, are part of the informal financial system. They are paid in cash and pay for food, education, and shelter for their families in cash;
- Developing central bank digital currencies as enablers of financial inclusion;
- Taking further steps to enhance cyber security, and to reduce other threats to the successful development of FinTech opportunities, not least through greater domestic and international information sharing and coordination; and
- Taking more account of digital transformation in financial education and literacy campaigns.

¹ See the record of the [October 2019](#), [April 2020](#), and [October 2020](#) roundtable discussions, also the Toronto Centre Note on [Supervising FinTech for Financial Inclusion](#) that developed further some of the issues covered in the October 2019 discussion.



RECORD OF PROCEEDINGS

Panel session

Stefan Ingves (Governor, Riksbank; Chair, Toronto Centre) opened the discussion by considering how supervisors and regulators can help to maximize the benefits of FinTech. He focused in particular on retail and cross-border payment systems, where the impact of FinTech has accelerated during the COVID-19 pandemic.

One key question here is how the laws and regulations that govern the payment industry should adapt to technological innovation. If there is a gap between what technology offers and what regulation allows then the benefits of innovation will not materialize or could move off-shore or to unregulated sectors of the financial system.

Central bank money has traditionally been used as a settlement asset for the general public (in the form of cash) and for financial institutions (settlement accounts held at the central bank). Central bank money is a safe asset that can be provided to its users on a level playing field. However, as the role of cash diminishes and industry incumbents are challenged by both start-ups and big techs, the legal and regulatory perimeter on how central bank money can be employed in the financial system needs to be updated. This should include a review of the types of institutions that should be allowed to provide settlement services, and clarity of regulatory and supervisory responsibilities – in many countries the central bank runs the payment system, but the supervision of payment service providers lies outside of the central bank.

Supervisors and other authorities need to understand the payment ecosystem and need to push for a harmonized and open infrastructure to drive down the cost of payments and to reduce the frictions that arise from the inherently multi-jurisdictional nature of the cross-border payments market. This is of particular importance for remittances.

There is currently important work being undertaken among central banks, banks, and financial infrastructures to implement a new shared language for payments worldwide (ISO 20022), but to create this standard the payment market must cooperate and agree on which information is to be included so that all parties in the payment chain are speaking the same language. Worldwide, the transition to this new standard is expected to proceed until 2025. Alongside this, there is also scope to reduce the cost of cross-border payments by promoting a more consistent application of AML/CFT standards, facilitating cross-border data flows and information sharing, fostering improved digital identity frameworks, and implementing consistent shared customer due diligence infrastructures.

Socorro Heysen (Superintendent, Superintendency of Banks, Insurers and Pension Funds, Peru; Board Member, Toronto Centre) noted the importance of a supervisory authority analyzing and understanding FinTech developments, proposing policies in response, and liaising with other authorities with shared responsibilities (for example for promoting digitization, and for data privacy and security).

Responses to FinTech need to be flexible, technology neutral, based on a same activity, same regulation approach, and avoid stifling innovation. Many FinTech developments do not need specific regulation, but rather an update to the regulatory perimeter and to existing regulations to reflect outsourcing (in particular cloud computing), cyber security, crowdfunding, and e-money, especially where FinTech is being introduced by incumbent financial institutions working closely with FinTech start-ups.



Digital transformation is bringing benefits, including for financial inclusion through digital payments and deposit accounts for those who have not previously participated in the financial system, although COVID-19 may slow the provision of credit to new participants.

Stefan Ingves highlighted two risks from FinTech. First, the increase in cyber risks in relation to COVID-19. Cyber risks are increasing, and this is only partly due to COVID-19. The increase in cyber risk has been a clear trend over the past decade, and regulators and supervisors as well as the industry are struggling to keep up. Numbers can be misleading, and even though many financial firms see an increase in attempts, it is the more advanced attacks that matter most. Good data on cyber incidents are scarce, and this is partly due to a lack of incentives for firms to report incidents.

One lesson from two recent cyber attacks – on SolarWind's Orion software, and on Microsoft Exchange Servers – is that we cannot put all our efforts into protecting our systems and processes. We need to spend just as much time and effort on how to respond to and recover from an attack. In short, we need to adopt an assume-breach attitude, where we are no longer surprised by successful cyber attacks, but are prepared and able to act swiftly and decisively in response.

A second risk is digital – and by extension, financial – exclusion. There is a risk that parts of the population, for various reasons, are unable to use digital technology to its full extent. These people will find it harder to make payments, as shops become increasingly averse to accepting cash, and harder to conduct their banking affairs as banks close down their branch offices.

We need to ensure that making payments is a basic right for individuals in society. There are several measures to help achieve this, for instance giving cash legal protection so that it will always be possible to get hold of and pay with cash. Another possible measure is to issue a central bank digital currency (CBDC), and – if needed – to ensure that there are incentives for the private sector to develop easy-to-use solutions for segments of the populations with particular needs. Indeed, international discussions on CBDC have moved from “if” to “when”, although the driving forces for introducing CBDC differ across countries – to address financial inclusion in remote communities where traditional banking services are limited; to reflect a major shift away from the use of cash; or to reflect the widespread use of FinTech payment applications.

Socorro Heysen stressed that the challenges in identifying and managing risks were considerable, across areas such as cyber security, fraud, anti-money laundering, consumer protection, and crypto assets. Addressing these risks required coordination among many authorities, nationally and internationally, not only to share information but also to identify events that may not cause losses to financial institutions but do harm consumers and investors.

Financial education also has a role to play here to support financial inclusion and to cover digital entry to the financial system – although it has to be noted here that complaints from the public were still increasing despite all the efforts of supervision and education.



Roundtable discussion²

Digital retail payment systems

Many participants commented on the impact of COVID-19 in accelerating the use of digital retail payment systems, with a positive impact on financial inclusion. In part, this reflected an unbundling of payment services through the entry of new firms focusing on specific payment services, but it also reflected some examples of a re-bundling of payment services with related activities such as e-commerce.

Building on Stefan Ingves' opening remarks, participants agreed with the need to develop retail payment systems as a public good to provide low cost, rapid, seamless, and safe payments, with everyone being able to send or receive payments. In countries where mobile phone usage exceeds the use of financial services, this could be based on providing electronic payment services to all smartphone holders in the country.

A dynamic digital payments ecosystem also requires some key safeguards and building blocks, such as:

- A mechanism to identify and authenticate potential customers;
- Consumer protection for digital services offering and provision;
- Clear responsibilities in fraud cases;
- A solid cyber security framework;
- Security and transparency in each transaction;
- Basic infrastructure, such as a real-time gross payment system, so that secondary services produced by FinTech and traditional intermediaries are offered through that system; and
- Setting standards and fair terms for open access, interconnection, and interoperability purposes, such as APIs that allow information exchange and authorization of operations.

The supervisory and regulatory response therefore needs to balance innovation against consumer protection and financial stability. Key principles suggested by participants included universal access, openness, and interoperability; a same risk, same regulation and technologically neutral approach; adequate customer protection; cyber security; and the business continuity of, and protection of data by, large foreign third-party service providers.

Participants also mentioned some specific issues with cross-border payments, where the technical, policy, and coordination frictions and the risks of fraud all tended to be more pronounced than with purely domestic payments. This argued for international efforts to tackle the frictions and to address the risks of fraud through international standard setting, information sharing, and oversight of cross-border payments.

Financial inclusion

Participants also noted that the scope for FinTech to improve financial inclusion extended well beyond retail payments systems, through its impact on lower fixed costs, innovative new products, and the ability to reach a larger segment of the population. For example, these impacts were being seen in the insurance and securities sectors, and in the ways in which data on customers derived from the payments system-enabled financial intermediaries to offer a wider range of products such as deposit accounts and credit.

² The discussion was conducted under the Chatham House rule – the themes reported here reflect the sense of the discussion but do not attribute observations to individual participants.



This in turn has implications for regulation and supervision. For example, insurance supervisors were considering new products such as index-based insurance (where the insurer pays out benefits on the basis of a predetermined index based on weather and catastrophic events), while securities supervisors were focusing on cyber security, outsourcing, crypto assets, and the use of artificial intelligence and machine learning.

Again, there may also be trade-offs here between innovation and regulation when seeking to maximize the advantages of innovation while delivering consumer protection and financial stability.

Cyber security

As the COVID-19 pandemic has shown, harnessing technology will continue to be a key development goal for developing countries. Participants observed that cyber security could contribute to reducing the risks from digitization. Indeed, cyber security has been on the top priority list of many supervisors for a number of years, and the number of cyber attacks has increased significantly during the COVID-19 pandemic. There is a strong need to ensure that cyber risks are identified and addressed, including by adopting low-cost prevention measures.

Developing and emerging market economies are particularly vulnerable to cyber attacks because of various factors, including a lack of standardization, information asymmetry, and capacity development. Capacity building in developing and emerging markets can strengthen financial stability and support digital financial inclusion. Information sharing and collaboration, both domestically and across countries, was also seen as being critical to countering threats to cyber security.

Central bank digital currencies (CBDC)

Participants agreed with the opening remarks by Stefan Ingves that CBDC can focus on delivering universality. Private providers are more interested in accumulating and reaping the benefits of transactions data. It was also noted that another driver of CBDC was that this can help to protect against money laundering and terrorist financing – managed anonymity enables the authorities to track and trace suspicious activity.

Conclusion

The leaders concluded there is still much work to be done to foster access to financial services for the poor, especially women. The COVID-19 pandemic has advanced the discussions and accelerated the implementation of digital solutions. However, there is scope to build on this through the development of more open, accessible, and harmonized digital retail payment systems, and though the careful encouragement and facilitation of other FinTech opportunities. Meanwhile, the regulatory and supervisory response needs to strike the right balance between innovation on the one hand, and consumer protection and financial stability on the other.

ABOUT TORONTO CENTRE

Toronto Centre for Global Leadership in Financial Supervision (Toronto Centre) is an independent not-for-profit organization that promotes financial stability and access to financial services globally by providing training that strengthens the capacity of financial sector regulators and supervisors, particularly in emerging markets and low-income countries.

We believe that for countries to thrive, their financial systems must be stable and inclusive. By helping to build these economic foundations, our mission supports sustainable growth and job creation, and helps to reduce poverty.

Since 1998, we have trained more than 14,000 supervisors and regulators from over 190 countries and territories. Toronto Centre is supported by Global Affairs Canada, the IMF, Swedish Sida, Jersey Overseas Aid, Comic Relief and United States Agency for International Development (USAID) and other valuable international partners such as the World Bank.

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