



Expert Speak

The Growth of Fintech: Implications for Financial Systems

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The rising popularity of fintech services is gradually altering the delivery and demand of financial services across the globe. These services hold great relevance for developing countries like India as they have the potential to bring about tangible social benefits. In this article, Udaibir Saran Das explores how the financial landscape is changing and what measures financial sector policymakers could consider to ensure the smooth adoption of these services into all aspects of our life.

A multidimensional and material transformation in the provision of financial services is presently underway. This occurs via the active adoption of technology, almost “without borders”. Financial technology (fintech) impacts both the market structure—the way service providers are organised—and the characteristics of financial services, such as speed, security, and transparency. Several studies argue that the types of service providers are blurring, barriers to entry are changing, and improvements in cross-border payments are likely. While the final form and shape of this transformation remain unclear at this stage, there is no doubt that the nexus between technology and finance is taking centre stage. We must remember that throughout the history of financial services, technology has always been a significant driver of change, both on the demand and the supply side. It has shaped risk-taking behaviour, risk tolerance, business models, and choices facing households and corporates. As many may know, technological innovation in the financial services sector began almost 150 years ago when the electromagnetic telegraph was born in the 1800s. We are witnessing an accelerated pace of technological innovation and its rapid adoption by all categories of financial services providers and consumers.

Against this backdrop, it will be good to use an ‘economics framework’ to examine various aspects of fintech and how it has started to impact international financial markets. As mentioned earlier, with the several changes in the services being offered, the active use of technology is also changing the organisation of service providers – let us call it the market structure.

This technological progress promotes the development and adoption of services targeted at unmet user needs – some call it the ‘gap’ or the shortcomings of financial services. The bigger the ‘gap’—the more significant the incentive for firms to improve their services as permitted by technological advances—leading to faster adoption by consumers. As Larry Summers, an American economist,¹ said, fintech is ultimately about removing “frictions” from the financial marketplace. What are these frictions? These could range from transaction costs to economic exclusion and access issues. Therefore, fintech services are altering some dimensions from

¹Lawrence Henry Summers is an American economist who served as the 71st United States secretary of the treasury from 1999 to 2001 and as director of the National Economic Council from 2009 to 2010.

both the consumers' and service providers' points of view. Moreover, it is not just about the product, process, or service. It is the whole financial services architecture that is evolving!

Is Fintech Resulting in Volatility or Stability?

On the question of volatility, it is essential to understand that we need many more observation points—across a diverse set of financial markets—before drawing concrete conclusions. It is hard to measure the magnitude of fintech impact at this early stage and say whether it is adding to volatility or helping to stabilise.

The rapid growth of fintech is undoubtedly increasing the scope for potential vulnerabilities, market turbulence, contagion, and thus posing challenges to financial stability. There are a couple of reasons for this. One is that new firms, as well as some traditional firms who aspire to make a mark in this space or want to make a quick buck, are making inroads into some critical financial services. In this process, they often take on more risks than traditional, well-established, and sound financial firms. The premise is that the fintech growth will increase efficiency and competition and broaden access to financial services.

However, in this change process, we also see an expansion of less regulated markets, products, and entities.



The interconnection with the traditional financial system is becoming worrisome at the policy level, mainly because policymakers cannot speedily disentangle or anticipate what this entails for financial stability.

The prime concern is that a wrong move could contaminate markets. Despite the best efforts of central banks and policymakers to see that new activities in the financial system do not impair trust, such contamination of financial markets could very well sow the seeds of mistrust and grow into a source of instability. And, that is why it is vital that regulatory authorities balance carefully, efficiency and stability trade-offs. Also, as a problem afflicting all countries, the importance of international cooperation in the provision of technology based cross-border finance has never been higher.

Foreign Exchange and Cross-border Payments

A critical aspect of the active use of financial technology and new fintech providers relates to foreign exchange and cross-border payments. The G20 has just come up with a road map on cross-border payments,² so it just shows the importance this aspect of international markets has assumed. The process involves new players, new technology



or application of technology, various time zones, and different currencies. The implications fintech carries for cross-border international payments are ripe for change. Much work is going on at the global level to understand and address this. In part, it comes from technological limits—the shortcomings of today’s system—and partly from a highly concentrated market structure.

It might seem surprising to many, but cross-border payments differ significantly from domestic payments. Consider the era before the internet when communication took place via snail mail. Even then, sending snail mail overseas involved a fundamentally different process – pricing, infrastructure, or payment agreements. Cut to the internet age, that distinction between domestic and foreign recipients seems to have almost disappeared, with the common perception being that everything is just a click away. However, this is not the case in reality.

Various users are involved in these transactions, ranging from households and small enterprises to large corporations. All of them expect and emphasise aspects like low-cost security, convenience, and an assurance that the intermediaries will preserve the confidentiality of the transferred information. However, all of what is described above is currently not in place in the cross-border payments architecture. The price paid for these payments is not clear and is unknown to the consumer at the time of initiating the transaction in most cases. So essentially, these transfers

² Financial Stability Board (FSB). (2021, October 13). G20 Roadmap for Enhancing Cross-border Payments. <https://www.fsb.org/2021/10/g20-roadmap-for-enhancing-cross-border-payments-first-consolidated-progress-report/>

work but are costly and cumbersome. Most of all, especially for transactions in developing countries or from one part of the developing world to the other, it is relatively slow. It has to go through many banks and multiple compliance checks that create layers of friction—such as considerable delays, exorbitant prices, and uncertain receipt of money—before they reach its destination.

To what extent fintech and new technologies will help alter these shortcomings and make more favourable market platforms? Here, the hope is that these innovations might target areas such as backend processes, compliances, means of payment, etc., to improve efficiency, traceability, speed, and cost of cross-border payments. However, it is worth mentioning that money laundering might become a significant hurdle in technology-based cross-border financial transactions. Therefore, banks and institutions must ensure processes that can help determine what kind of money is moving and accordingly be able to trace suspicious transactions.

Central Bank Digital Currencies (CBDCs): To Have One or Not?

Contrary to popular belief, Central Bank Digital Currencies (CBDCs) are not parallel currencies. It is merely a digital form of central bank money that can be exchanged in a decentralised manner, i.e., it can be transferred or exchanged directly from peer to payee or peer-to-peer without the need of an intermediary. Such a CBDC could be exchanged at par with other central banks' liabilities like its cash and reserves, and it could be done either through banks or directly with the central bank.

A question that gets asked is, why issue CBDCs in the first place? How is a CBDC beneficial? These are still very early stages in the global evolution of CBDCs, and evaluating the actual benefits and costs of CBDCs will need more observation and study. Also, the reasons behind many countries and central banks introducing CBDCs differ, the most common being that a CBDC will increase the efficiency of domestic payments and encourage financial inclusion. In economic terms, two arguments are often made on whether CBDC is beneficial or detrimental. One is that CBDC will help counter the monopoly power through solid network externalities or the inability to ensure complete stability and safety of private attempts at creating digital currencies. A second argument is that it could help overcome the coordination failure that is often involved when there is an inability to agree on a single new technological standard for electronic payments, and a third argument I

see is from a retail point of view that gradually replacing notes and coins with the CBDCs would entail cost savings associated with currency management function of the state and central banks.

While many arguments in favour of CBDCs prevail, one must understand that the outcome does not depend merely on the above three considerations. Implementation of CBDCs is context dependent. It heavily relies on social and cultural preferences, technology, and infrastructure. Ultimately, several technological, design and organisational choices come along with CBDCs. Even after all this evaluation, every country's central bank will have to decide how to design the digital currency carefully and the confidence and trust it must maintain in its CBDC. Design aspects are important; would it be issued in the same unit of account as fiat money,³ and thus end up being liability of the central bank? Can it be exchanged at par with the other non-equity liabilities, mainly cash and commercial bank reserves? However, beyond this, other features of CBDCs would differentiate them from commercial bank reserves in one way or the other.

The whole debate going on at the international level on whether they should centrally let banks issue, and what type of CBDC they should issue is leading to many social, cultural, economic, and in some cases, very political questions. Hence, there is a lot of observation and learning between countries and financial institutions. Everyone should watch each other and grasp the understanding they can get, to gradually implement a well-studied and matured technology.

Policy Measures

The policies and measures being adopted by central banks and financial institutions differ from economy to economy. The varied adoption preferences, financial literacy, and participation rates guide the policy choices. The risks that fintech could undermine competition, and impact monetary policy transmission and financial stability, remain open issues. The main challenge for policymakers is to create an environment within which CBDC and fintech, more broadly—can grow in a sensible, prudential, and sound manner—without making any dislocation from the point of view of the user or amplifying pre-existing frictions.

³ Fiat money is a currency not backed by any commodity, such as gold or silver. It is typically declared by a decree from the government to be legal tender.

In large developing financial systems, financial literacy is a significant consideration in how the adoption of fintech-based financial services activities will evolve. Technology-based services being cheaper and faster does not mean that the surety and security of economic activities are also ensured. Presently, across countries, we are observing a move from the traditional regulated banks to entities and platforms with little or no oversight. Furthermore, when this happens, the risks also increase alongside. Additionally, even though fintech is stepping in to challenge traditional banks, it brings much competition resulting in much play between the regulator and the less regulated or the unregulated. The argument being made is that they require more supervisory and regulatory action so that there is better consumer and investor protection. To put it out briefly, we need policies that target both fintech firms and traditional banks proportionally to be conducive to growth and contain the risks.

Lessons for India and the Way Forward

“ India is in a precious moment, wherein the country has caught international attention for its creativity and innovation in this area. The world is learning from the experience of India, as opposed to the popular belief that it is vice versa!



Having mentioned that, it is imperative to understand that India cannot afford hubris or complacency at this stage. Given its own socio-economic needs, a heterogeneous set of consumers, and a large pool of financial service providers—what India should do while the rest of the world is watching and learning—is to keep itself engaged in improving its policy landscape and aggressively (versus incrementally) address gaps like technological and financial illiteracy, data privacy, and security. Several highly creative and proactive initiatives from the Reserve Bank of India (RBI) are reassuring, the most recent being a blockchain-based cross-border payment system as part of the second cohort under its regulatory sandbox (RS) framework.⁴

The global attention fintech is receiving shows how rapidly fintech is leveraging on advances in artificial intelligence, computing power, and the internet. The complementarities among these technologies is seeing an explosion of applications in the financial services industry. Consumers are demanding more, as competitive alternatives to traditional financial intermediaries, markets, and infrastructures come about. India's evolving fintech ecosystem is no longer just another business or a technological gig. It is becoming a core component of the social-economic fabric of India. A collaborative set of policy initiatives and oversight, along with market-based innovation in the provision of financial services, could help ensure that the fintech sector is appropriate for the development needs of India and supports India's quest to become a developed economy.

⁴ Reserve Bank of India (RBI). (2022, July 19). Regulatory sandbox (RS): Second cohort on 'Cross-Border payments' - exit [Press release]. https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=54057

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