Fast Payments and the Role of Central Banks


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Fast Payments: A Disruptive Innovation

In just one year of operations, Brazil's fast payments system, Pix, became its most used payment instrument, recording 120 million users and 10 billion transactions. Today, 9 out of 10 small businesses rely on Pix. For most of these businesses, it is their main payment method.

In Thailand, the domestic fast payment system, PromptPay, is estimated by ACI Worldwide to generate an additional economic output equivalent to 2 percent of Thailand's forecasted GDP in 2026, resulting from increasing transactions and associated net savings for consumers and businesses.

In India, fast payments were developed to pursue the vision for a "less-cash" economy through higher accessibility. As of March 2023, 400 banks are live on the Unified Payments Interface (UPI), with nearly 9 billion transactions carried out using the infrastructure in a month alone.

These successful fast payment systems (FPS) exemplify the transformative potential of fast payments. Also known as instant, real-time, or immediate payments, these payments are primarily characterized by the real-time (or near real-time) transmission of the payment message and the availability of final funds to the payee, possibly on a 24/7 basis.

Fast payments are an important layer in digital public infrastructures — i.e., foundational systems back boning the provision of essential functions and services in a modern society — with the potential to drive economic growth and sustainable development.

Fast payments can indeed:

- **Boost financial inclusion and operate as a key for users to access the broader universe of financial services.** Fast payments could reduce the average gender gap of 6 percentage points affecting developing economies both in account ownership and usage of digital payments. These payments can provide women with new opportunities to access money, obtain a greater degree of control over their finances, and more broadly favor women's business ownership and empowerment. Compared to other payment services, fast payments are indeed more affordable, safe, and convenient and as such they are easier to be adopted by women. Additionally, they reduce transaction and logistic costs (to reach agent locations), which can represent significant barriers to adoption for women. A similar impact is produced in rural and remote areas, where fast payments can remediate for the shortfalls of traditional financial services, including the limited access to traditional financial institutions in these areas.
- **Foster competition and innovation** between payment service providers (PSPs), including banks and non-traditional players such as microfinance institutions, e-money providers, and fintechs.
- **Improve time-critical payments**, such as the delivery of social assistance programs by the government during times of emergencies. For example, fast payments can reach the more vulnerable segments of the population in case of natural disasters or pandemics.
- **Deepen and expand the acceptance of digital payments,** especially by small and micro businesses. Fast payments allow these merchants to accept payments faster and at a lower cost. Moreover, fast payments can leverage advanced contactless and checkout channels (such as QR codes, NFC, Bluetooth) to optimize the payment process and consequently drive an increase in sales.
- **Enable efficiency gains** in the forms of greater speed and transparency at lower cost in multiple types of payment transactions, both domestically and internationally.

In the case of cross-border remittances, which constitute an important income source for many families in developing economies, fast payments can help drive down high

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remittance costs. According to the Remittance Prices Worldwide database, at the end of 2022 the global average for sending a remittance of $200 was 6.24 percent, or $12.48 — an amount still higher than the target of 3 percent (to be reached by 2030) set by the United Nations Sustainable Development Goals (SDGs). With a global average cost recorded at 4.71 percent, digital remittances can contribute to reducing the overall cost of cross-border remittances in line with the SDGs.

Motivations for Development

Perspectives on fast payments differ across stakeholders in terms of the ideal drivers for their implementation. The common denominator is the significant economic and financial returns expected from the efficiency gained by broad adoption of fast payments.

In the absence of market initiatives, central banks typically have led fast payments initiatives to further their financial and public policy objectives and drive broader digitalization of the payment ecosystem. Digital by nature, fast payments can indeed trigger virtuous innovation and competition dynamics which ultimately translate into better services delivered to individuals and businesses. Moreover, the pervasive potential of fast payments to reach the underserved and underbanked — especially where the presence of the traditional banking sector is limited — can effectively sustain the financial inclusion efforts of central banks and governments.

For banks and non-bank PSPs, participating in a fast payment system may be a strategic opportunity to deliver an innovative service to their customers, offering a better user experience at a lower price, as fast payments can unlock operational cost savings compared to other payment alternatives such as cards. Financial institutions can be motivated to develop their fast payments offering to increase their market share, consolidate their competitive positioning (as in the case of incumbent banks), or challenge the status quo and acquire new customers (as in the case of challenger banks and fintech). To all PSPs, fast payments offer an opportunity to increase revenues directly based on transaction values and volume (based on the pricing model applied to the service) and indirectly through cross-selling of other financial services.

The Global Landscape

Fast payments systems have been implemented by about 100 jurisdictions worldwide, with several others planning to go live soon. Still, many jurisdictions lag on adoption or have implemented systems which lack key design elements and features. Adoption of fast payments is greater among advanced economies. Low- and Middle-Income Countries (LMICs) — the ones that could benefit the most from fast payments — need to accelerate their development agenda as fast payments can help them solve for the limitations of traditional payment services — or even leapfrog the rollout of the latter — which may fail to adequately serve businesses and individuals in these jurisdictions.

It is worth highlighting that the development of fast payment systems is a continuous, iterative journey of enhancement and innovation, rather than an isolated infrastructure or IT development project. Many jurisdictions that have implemented fast payments are just starting the first steps of the evolutionary path towards full maturity of the system (Figure 1).

Moreover, while adoption has been exceptionally quick in some countries, in many others the fast payments journey is still in nascent stages. All jurisdictions, at any stage of the system development lifecycle, should keep their payment ecosystem focused and remain committed to developing their systems further.

Existing initiatives have proven that fast payments can be a disruptive innovation substantially enhancing the payment ecosystem, especially in developing countries. In an ever-faster world, fast payments can produce a transformative impact on economies, acting as a driving force for sustainable development and a prominent component of a country's payments-related strategy to address major challenges such as digital transformation of the economy and crisis response.

Any delay in development hinders the possibility of unlocking the potential of fast payments. If countries want to embrace this evolution and be ready for the challenges ahead, they must act now and with ambition.

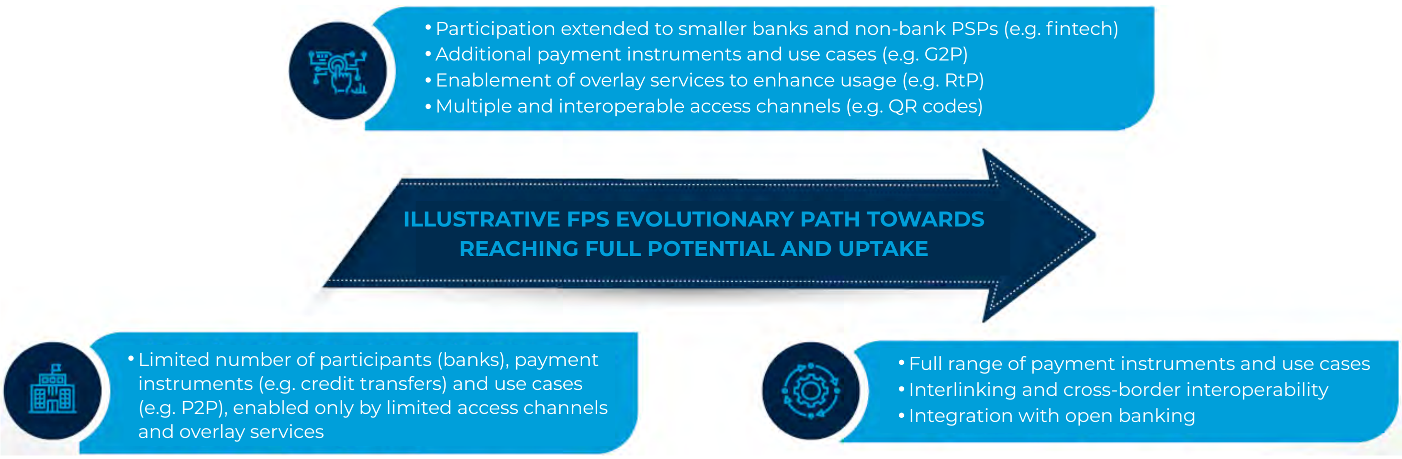

Figure 1. Fast Payment Systems Evolutionary Path

Fast Payments and the Role of Central Banks

The Role of Central Banks

In many instances, central banks have led fast payments initiatives towards reaching their full potential. They have done so by playing a variety of roles in these systems.

Firstly, central banks typically oversee payment systems. The overseer role is generally accompanied by a regulatory function. In some cases, depending on the institutional setting, this regulatory function may be shared with a different regulatory authority or performed independently by the latter. Since fast payment arrangements are usually considered a critical national payment infrastructure, the overseer puts in place a monitoring mechanism to try to ensure that the system operates in a safe and efficient manner. Toward this end, the overseer performs monitoring activities and requires the operator to have adequate measures in place to address operational risk, liquidity risks, security, and anti-money-laundering (AML). In its role as overseer, the central bank takes action to address any problems that arise in the system.

The central bank can also act as payment system operator (PSO) itself, directly influencing the system's design and operation. The operator (which could be of the infrastructure and/or scheme) is responsible for ensuring compliance with the scheme rulebook, operating procedures, and official regulations.

The central bank can also take on the role of operator through a subsidiary. This is the case of Nigeria, where the Central Bank of Nigeria owns and operates a subsidiary called the Nigeria Interbank Settlement System (NIBSS). NIBSS operates the NIBBS Instant Payments (NIP) system on behalf of the central bank.

Alternatively, the central bank can operate the system through a separate legal entity, owned by the central bank on its own or jointly with participants in the arrangement. In the case of Malaysia, the central bank (Bank Negara Malaysia) is the largest shareholder of PayNet, which is the owner and operator of the system. In Mexico, the central bank (Banco de México) owns, operates, and oversees SPEI.

Overall, there seems to be a slight predominance of private-sector entities as operators of fast payment arrangements.

Lastly, the central bank can act as catalyst of the fast payments venture, an indirect role aimed at fostering the development of the system, ensuring that this latter aligns with the objectives of public policy.

As catalysts, central banks provide leadership and support by advocating for the benefits of fast payments as policymakers and the public authorities, working with financial institutions and other stakeholders to develop a national strategy for fast payments, providing funding for the development of fast payment systems, and setting the standards.

The Reserve Bank of India (RBI) offers a successful example in this regard. RBI played a key role in the development of the Unified Payments Interface (UPI) by working with NPCI and financial institutions, as deemed necessary, to ensure that UPI was interoperable with other payment systems. However, UPI is owned and operated by a private sector company — the National Payments Corporation of India (NPCI) — which is an initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA). NPCI is authorized under the provisions of the Payment and Settlement Systems Act, 2007 to operate UPI. NPCI is a not-for-profit organization owned by a consortium of major banks, with ownership now diversified to include non-banks. Under RBI's action as a catalyst, UPI was developed to pursue the vision for a “less-cash” country through higher accessibility and a unified interface.

The key factors determining the role that the central bank should play in a fast payment system include:

- **Needs of the target users, both individuals and businesses.** For example, in countries with high demand for fast payments, the central bank may need to play a more active role in the development of fast payment systems.
- **Level of development of the financial system.** In countries with well-developed financial systems, the central bank may not need to play as active a role in the development of fast payment systems and can limit its scope of action to regulatory and oversight. On the other hand, where the financial ecosystem is underdeveloped or lacks initiative, the central bank may take a more active role.
- **Legal and regulatory framework in the jurisdiction**. Based on the specific country context, the central bank may designate the fast payment system as a systemically important payment system (SIPS). SIPS are payment systems which have the potential to trigger or transmit systemic disruptions; this includes, among other things, systems that are the sole payment system in a jurisdiction or the principal system in terms of the aggregate value of payments, and systems that mainly handle time-critical, high-value payments or settle payments used to effect settlement in other FMIs. The central bank is responsible for the oversight of SIPS, which through this designation becomes subject to the Principles for Financial Market Infrastructures (PFMIs) published by CPMI and the International Organization of Securities Commissions (IOSCO). Moreover, there may be jurisdictions where the mobile money fast payment system is the only one that a large share of the population relies on. In these cases, disruption of the most vulnerable segments of the population, and of those transacting with these segments, represent a unique risk outside banking risks.
- **Resources of the central bank**. System development is a complex journey that absorbs a large amount of financial and non-financial resources, from the allocation of a dedicated team of experienced professionals to the investment in IT development. In countries with limited resources, the central bank may not be able to play as active a role in the development of fast payment systems and may need to act as a catalyst for development by the private sector.

Ultimately, the role of the central bank in a fast payment system is determined by the specific circumstances of each country and the objectives to pursue through the fast payment venture.

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The World Bank's Project FASTT

The World Bank has been assisting central banks on fast payments adoption over the years.

In the first phase of our work, we developed a Toolkit consisting of a global fast payments tracker, a main report including a Framework for the development of fast payments systems, and an extensive body of case studies and technical focus notes.

The Toolkit is available online at https://fastpayments.worldbank.org/.

In the new phase of our work that we recently launched under the name Project FASTT (Frictionless Affordable Safe Timely Transactions), we are embarking on a comprehensive program to accelerate the adoption and use of fast payments, particularly in low- and middle-income countries. With the invaluable support of the Bill & Melinda Gates Foundation, Project FASTT will focus on expanding the body of knowledge comprised in the Toolkit, building capacity for central banks and other key stakeholders, implementing a dissemination strategy to create awareness on fast payments and advocate for their adoption, and continuing to provide technical and financial assistance for existing fast payment system enhancements and new implementations.

With Project FASTT, the World Bank stands available to support countries in their fast payments journey.

About the Authors

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