Driving Digital Transformation and Inclusion

Fast Payments in Latin America and the Caribbean

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ACRONYMS AND ABBREVIATIONS

ACH	automated clearing house
CBDC	central bank digital currency
DPI	digital public infrastructure
EMDE	emerging market and developing economy
FPS	fast payment systems
G2P	government to person
LAC	Latin America and the Caribbean
NFC	near field communication
NPCI	National Payments Corporation of India
PFMI	Principles for Financial Market Infrastructures
PIS	payment-initiation services
POS	point of sale
PSP	payment service provider
P2G	person to government
P2M	person to merchant
P2P	person to person
P2PM	person to person and merchant
QR	quick response
RTGS	real-time gross settlement
SPEI	*Sistema de Pagos Electrónicos Interbancarios* (Interbank Electronic Payments System)
UPI	Unified Payments Interface

All dollar amounts are US dollars unless otherwise indicated.

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1 EXECUTIVE SUMMARY

Fast payments are transforming digital finance ecosystems in Latin America and the Caribbean (LAC) by improving the speed, affordability, and user experience of digital payments. Transferring money has historically been a cumbersome and expensive task. It could require traveling to a bank branch during business hours, paying a fee, and waiting several days for the recipient to receive the funds. The introduction of digital wallets reduced some of these frictions, but many remained due to siloed payment infrastructures and uncompetitive markets—challenges that have been particularly persistent in LAC.[1] The recent growth of fast payments—payments that can be sent 24/7 with real-time availability of funds to the payee—have transformed digital finance ecosystems by driving improvements in affordability, interoperability, and user experience. Millions of consumers in LAC can now make free or low-cost digital payments from their mobile phones, with recipients receiving the funds within seconds, regardless of their financial institution.

Fast payments can drive digital financial inclusion, with positive impacts on financial resilience, digital transformation, and productivity growth. By alleviating the cost, accessibility, and product design barriers that have historically constrained the uptake of accounts and digital payments, fast payments can promote greater usage of digital financial services among banked populations and attract unbanked populations into the formal financial system. Empirical studies have found positive impacts of fast payments on account opening and usage, access to credit, and bank efficiency.[2] Greater digital financial inclusion, in turn, strengthens financial resilience for vulnerable populations and enables economy-wide digital transformation and productivity growth.

Recognizing the transformative potential of fast payments, policy makers and financial-sector participants in LAC have prioritized the development of fast payment systems (FPS). FPS are the underlying infrastructure platform and set of common rules that support fast payments. FPS can be new purpose-built systems or enhancements of existing systems. They can be operated by central banks or private entities. Well-designed FPS can be core elements of

digital public infrastructure (DPI),[3] together with digital ID and data-exchange frameworks.[4] FPS were first introduced in LAC in the early 2000s by first-mover countries like Mexico and Chile. However, the key inflection point began in 2020, with a period of multicounty FPS reforms (e.g., Argentina, Brazil, and Paraguay) coinciding with the COVID-19 pandemic. FPS or similar arrangements are now operational in at least 12 LAC countries, and several more are developing their FPS strategies and infrastructure.

This report analyzes new data on FPS in LAC and offers policy messages to support the further development of fast payments. This report provides one of the first regionally-focused, cross-country analyses of fast payments data, leveraging a unique dataset derived from a survey of 11 central banks in LAC countries with operational FPS or similar arrangements: Argentina, Bolivia, Brazil, Chile, Colombia,[5] Costa Rica, the Dominican Republic, El Salvador, Mexico, Paraguay, and Peru (referred to subsequently as "LAC-11"). The report analyzes transactional data and information on the FPS design characteristics and governance models. Based on this analysis and the World Bank's regional and country-level engagements with policy makers and FPS operators, the report also offers several key policy messages.[6]

KEY FINDINGS

KEY FINDING 1 Fast payments are driving the acceleration of digital payments growth in LAC, now representing approximately 45 percent of digital payments volume, up from 2 percent in 2017.

Fast payments in LAC-11 have experienced remarkable growth, with transaction volumes increasing 130-fold in eight years, from 620 million in 2017 to 79.8 billion in 2024. In 2024, each accountholder in LAC-11 made 265 fast payments per year, on average—up from 2.9 in 2017.[7] Across LAC-11, approximately $9.5 trillion was transferred via FPS in 2024.

The key inflection point began in 2020: seven countries—Argentina, Brazil, Colombia, El Salvador, Paraguay, Bolivia, and Peru—deployed FPS or fast-tracked FPS expansion between 2020 and 2023. At the same time, the COVID-19 pandemic triggered an urgent need for safe, contactless transactions, accelerating both consumer demand—particularly for person-to-person (P2P) payments—and policy action. While digital payments were already growing steadily, driven by cards and traditional credit transfers, the launch of FPS introduced a new layer of speed, flexibility, and reach that significantly accelerated usage. Regional growth in fast payments accelerated during 2020–24, with average annual growth in fast payments volume per adult of 145 percent—representing 63 percent of the total growth in digital payments volume. Fast payments now account for nearly 45 percent of digital payments volume in LAC-11—up from just 2 percent in 2017 and overtaking card payments for the first time in 2024. Throughout this report, digital and fast payments refer only to payments made across payment service providers (PSPs), i.e. inter-PSP transactions and/or cleared through a central infrastructure, in order to provide a like-to-like comparison between FPS and other retail payment systems.

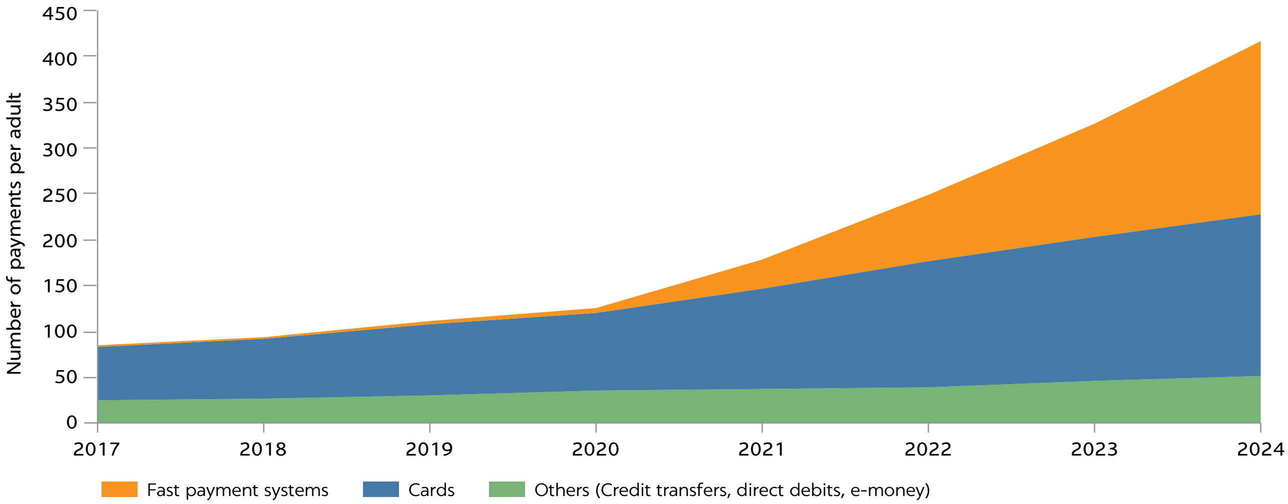
KEY FINDING 2 The growth of fast payments in LAC has been shaped by the increasingly proactive role of central banks as well as FPS design choices—with significant heterogeneity in FPS operating models, scale and impact .

The exponential growth of fast payments in LAC is the product of a range of factors, including expansions in digital connectivity, the growing market power of fintechs, and shifting consumer behaviors. Central banks have also been key players through their various and evolving roles as payment system overseers, regulators, catalysts, and, increasingly, operators. In the late 2010s and early 2020s**,** several LAC central banks began to conclude that the persistence of market dynamics that impeded innovation, competition, and financial inclusion—for example, vertically integrated market structures and fragmented payment ecosystems—may require that they expand their role. By 2023, the central banks of Brazil, Bolivia, El Salvador, and Paraguay had joined the central banks of Costa Rica and Mexico in operating their own FPS. The central banks of Colombia and Peru are currently in the process of launching their own FPS, alongside existing private-sector FPSs in those countries. On the other hand, central banks in Argentina, Chile, and Uruguay opted to continue to leverage their roles as FPS catalysts and regulators/overseers to drive FPS ecosystem reforms.

Whether a central bank operates an FPS tells only part of the story. Indeed, the experience across the region reveals diverse trajectories in FPS adoption and impact, also driven by heterogeneity in FPS design, governance and regulatory approaches, and ecosystem integration.

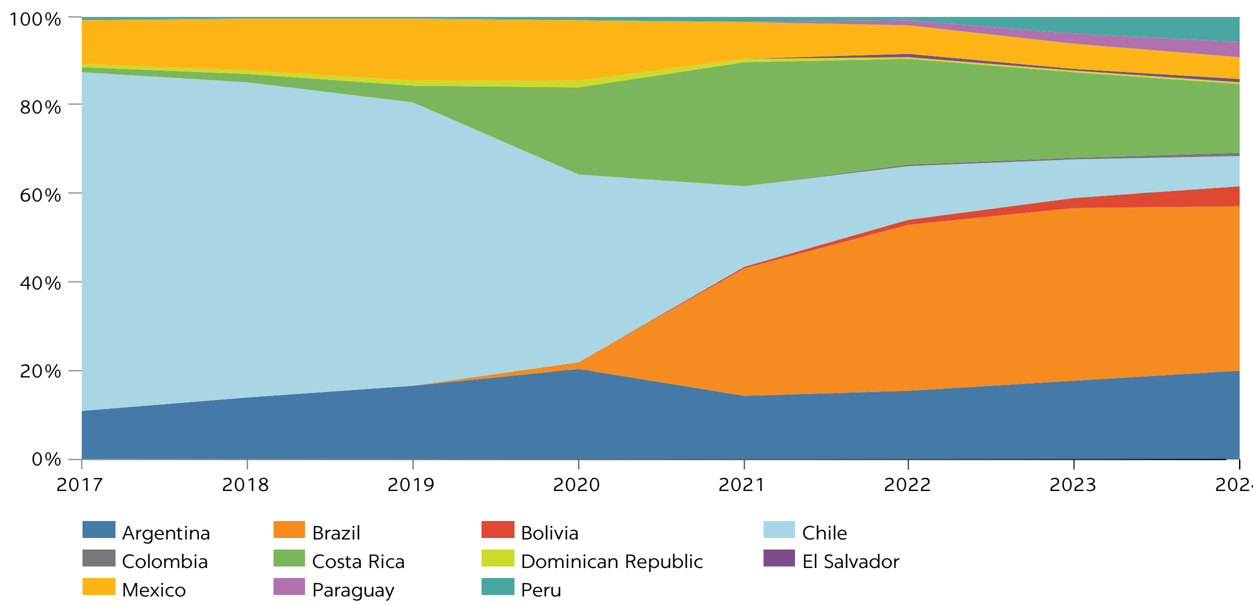
Early reformers like Chile and Mexico were among the first LAC countries to foster the development of fast payments prior to 2020. By 2024, however, Brazil, Argentina, and Costa Rica have emerged as clear top regional performers in terms of FPS transactions per adult (see Figure ES 2). Brazil, in particular, stands apart, with an average of 372 FPS transactions

FIGURE ES.1 **Fast payments are driving the acceleration of digital payments growth in LAC-11, now representing approximately 45 percent of centrally cleared digital payments volume**



Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Data includes only centrally cleared transactions, i.e. inter-PSP transactions. "Cards" include payments made with debit, credit, and prepaid cards.

FIGURE ES.2 **Chile and Mexico were early adopters of fast payments, but Brazil, Argentina, and Costa Rica now lead in terms of FPS transactions per adult (FPS transactions per adult, by country, 2017–24)**



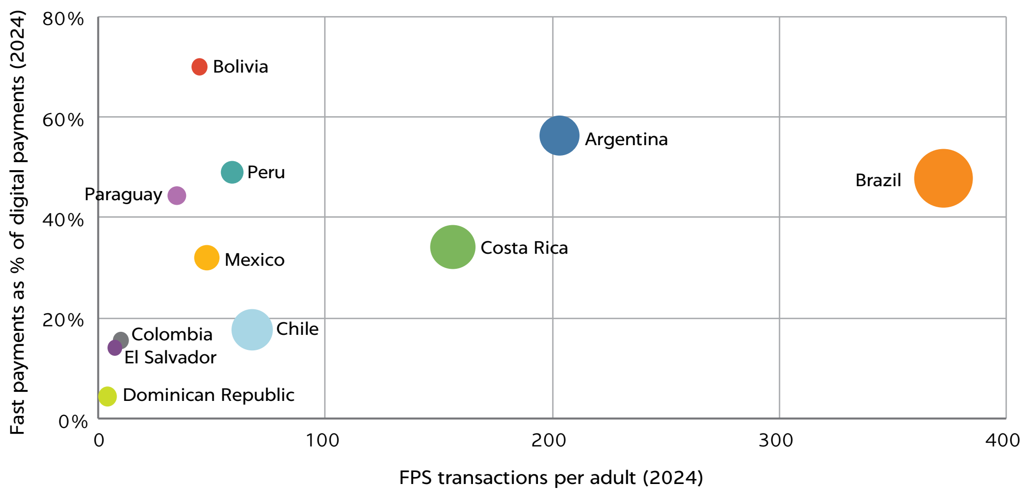
Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Each country's relative share per year is determined by first calcuating the FPS Volume per adult in each country, then summing the values, then calculating the relative share of each country. Thus the population of each country is weighted equally. Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

per adult in 2024 and accounting for 80 percent of all FPS transactions in LAC-11. Brazil's *Pix* model has demonstrated how solid regulatory foundations, open infrastructure, and a wide range of use cases can quickly transform the retail payments market; FPS now anchors Brazil's digital payments landscape. Brazil's progress is remarkable even by global standards: while India continues to lead the world in overall FPS volumes, it lags behind Brazil on a per-adult basis with 167 FPS transactions per adult in 2024. Based on available data, it appears that only Thailand exceeds Brazil's per-adult volume of fast payments, with 399 in 2024. Brazil's achievement is even more notable given that Thailand's *PromptPay* was launched in 2017, India's *UPI* in 2016, while Brazil's *Pix* only began operations in 2020.

Argentina also stands out as a high-performing case in LAC, albeit through a different approach, characterized by incremental reforms led by the central bank and an infrastructure operated by the private sector. Argentina's fast payment scheme—*Transferencias 3.0*, officially launched in 2020—represents the culmination of nearly a decade of policy reforms and infrastructure enhancements in fast payments. In Argentina, FPS transactions have reached 203 per adult in 2024, on average, up from 2.9 in 2017.[8] Costa Rica's FPS—*SINPE Móvil,* operated by its central bank—was established in 2015 but gained rapid adoption beginning in 2020 with the onset of the COVID-19 pandemic; as of 2024, Costa Rica registered 156 FPS payments per adult, on average, up from 0.3 in 2017.

Bolivia, Mexico, Paraguay, and Peru have also seen strong and sustained growth in fast payments since 2020 as their ecosystems mature; adults in these countries now make 30–60 fast payments per year, on average, up from fewer than one in 2017. In Argentina, Brazil, Bolivia, Paraguay, and Peru, fast payments now account for more than 40 percent of all digital payments, demonstrating strong competitive traction within the broader ecosystem.

FIGURE ES.3 Fast payments now represent more than 40 percent of all digital payments in Argentina, Bolivia, Brazil, Paraguay, and Peru



Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: The size of the bubble represents the total number of digital payments per adult in each country. Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

TABLE ES.1 Growth in fast payment transactions, 2017–2024

	FPS TRANSACTIONS PER ADULT					2023–24 Growth in FPS Transactions per Adult (%)
Country	**2017**	**2019**	**2021**	**2023**	**2024**	
Argentina	2.8	6.8	29	115	203	76
Bolivia	0	0	0.7	16	45	182
Brazil	0	0	57	247	373	51
Chile	19	26	36	54	68	25
Colombia	0	0	0.2	2.5	10	308
Costa Rica	0.3	1.6	56	123	156	27
Dominican Republic	0.2	0.5	1.4	2.8	4	43
El Salvador	0	0	0	3.7	7.2	93
Mexico	2.6	5.7	17	35	48	38
Paraguay	0	0	0	15	34	132
Peru	0.2	0.2	2.5	26	59	130
LAC-11 average	**1.6**	**3**	**32**	**124**	**190**	**53**

Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

Some of the variation can be attributed to FPS design maturity. The analysis in section 2.2 shows that several countries still have opportunities to expand and strengthen FPS design to maximize scale and impact—learning from both regional and global experiences. Brazil demonstrates the highest level of FPS design maturity in LAC, thanks to a broad range of use cases, universal access with direct- and indirect-participation options, extensive access channels, and alias functionality. Most FPS in LAC demonstrate middle to high design-maturity levels, with some notable areas for further enhancement, including enabling direct access of nonbank PSPs (for example, Argentina and Paraguay), expanding use cases (as in Costa Rica and Mexico) and payment instruments (Peru). Finally, El Salvador and the Dominican Republic lack key elements of fast payment arrangements such as 24/7 availability (as in the Dominican Republic) and instant crediting of funds to the payee (El Salvador).

Several countries are taking important steps to strengthen their FPS frameworks. Colombia, the Dominican Republic, and Peru, while initially limited by fragmented implementation and narrow use cases, are preparing more comprehensive upgrades to their FPS ecosystems. In El Salvador, the capabilities of *Transfer365* will be enhanced with a digital financial identity system and interoperable QR codes. With solid foundations in place, Mexico and Costa Rica also have opportunities for continued innovation—for example, to expand use cases.

Several other LAC jurisdictions are at different stages of developing their FPS strategies and infrastructures. In South America, Uruguay has significantly accelerated FPS reforms in the last few years, achieving 24/7 operations in the private sector-operated clearinghouse and introducing a P2M use case in 2023 and 2024, respectively. Ecuador is characterized by fragmentary and partial solutions: in this context, the central bank has recently promoted interoperability through regulation. In Central America, Honduras, Guatemala and Nicaragua have nascent fast payment ecosystems, often characterized by interoperability challenges. In the Caribbean region, Aruba and St. Martin and Curacao have live FPS, whereas Barbados, Belize, Guyana, Trinidad and Tobago are at different stages of developing FPSs.

KEY FINDING 3 In most LAC countries, fast payments are deepening digital financial inclusion for populations with a transaction account, with more mixed evidence on expanding financial access.

Financial-sector policy makers have long distinguished between financial access and usage. Financial access is the ownership of a transaction account, while usage refers to whether the account is utilized to make payments or save. Those who have an account and use it regularly are financially included. Leveraging digital technologies such as digital wallets can generate *digital* financial inclusion. Beyond payments, data generated from the use of fast payments can be leveraged by financial institutions, with user consent, to offer appropriate financial products and services, particularly to individuals and small businesses with thin credit files. For those with financial access, the convenience and affordability of fast payments can significantly increase account usage. In theory, by increasing the utility of accounts and digital payments, fast payments can also pull unbanked adults into the formal financial sector, increasing financial access.

Have fast payments in LAC deepened digital financial inclusion or expanded financial access or both? The evidence on increasing account usage is clear: digital payments per accountholder have increased 280.1 percent between 2017 and 2024, from 154.4 to 587.0 payments per accountholder per year, on average—with 60.7 percent of this growth attributable to fast payments. The increased use of digital payments via FPS also appears to be widespread across consumer segments: in Brazil and Costa Rica, more than 75 percent of adults use *Pix* and SINPE, respectively.[9] The data also shows that FPS growth complemented—rather than cannibalized—existing digital payment instruments, helping to expand the overall digital ecosystem and reduce reliance on cash. In many LAC-11 economies, card payments, after a drop in 2020, have continued to grow at or above prepandemic rates, even alongside dramatic FPS expansion. FPS have also spurred innovation and amplified other strategies to deepen digital financial inclusion, such as open finance in Brazil—notably one of the few LAC countries with a data sharing framework to enable permissioned third-party access to customer data. As fast payment ecosystems mature and the broader policy frameworks evolve, further analysis is needed on the implications of FPS for other financial services.

The evidence for the impact of FPS expanding financial access is more mixed. Many of the LAC countries that launched or reformed FPSs around 2020 with strong subsequent growth in fast payments during 2020–24 have also seen strong growth in account ownership between 2017 and 2024 (Findex data-collection periods). For example, account ownership grew by 33 percentage points in Argentina and 12–17 percentage points in Brazil, El Salvador, Mexico, Paraguay, and Peru during that period. For some countries—Argentina, El Salvador, and Paraguay—the growth in account ownership was spread across both data-collection periods: 2017–21 and 2021–24. For others, like Brazil, Mexico, and Peru, there was minimal or even negative growth during 2021–24. This may be because the initial burst of FPS-driven account opening was concentrated during 2020–21, at the height of the pandemic. In Costa Rica and Bolivia, there was little growth in financial access between 2017 and 2024, despite strong growth in fast payments.[10]

Recent empirical research from Brazil does suggest that mature FPS ecosystems can drive account opening. The 2024 study finds that a 1 percent increase in the number of active users of *Pix* in a municipality leads to an increase of 0.8 percent in the number of people opening bank accounts for the first time. The study also finds complementarity effects across other dimensions, suggesting that *Pix* drove increases in the use of a range of payment instruments (not only fast payments) as well as access to credit and client growth in both traditional and digital banks. These findings suggest that more mature and inclusive FPS ecosystems—which encompass a wide range of use cases and promote interoperability across providers—do have the potential not only to deepen digital financial inclusion but also to expand financial access. More research is needed to determine the causal impacts of FPS on financial inclusion and access. As highlighted in the policy messages that follow, policy makers and FPS operators should take deliberate measures to design FPS ecosystems not only to deepen digital financial inclusion for the banked but also to drive expansions in financial access among unbanked populations.

POLICY MESSAGES

Despite progress, a range of challenges constrain the scale of live FPS and its impact on digital financial inclusion and financial access in several LAC countries. A lack of interoperability across platforms and payment instruments weakens ecosystem efficiency and inhibits user centric experiences. Governance frameworks and high compliance costs restrict participation and interoperability, particularly for fintechs and e-money issuers, reducing the potential for equitable growth. FPS have often focused primarily on P2P use cases—leaving untapped opportunities in such areas as person-to-merchant (P2M), bill payments, government-to-person (G2P) transfers, transit, and e-commerce. Emerging fraud risks, cybersecurity threats, and weak consumer protection frameworks threaten user confidence if not addressed holistically. Looking ahead, FPS must evolve to integrate with DPI and align with emerging technologies. A strategic, future-proof approach—anchored in inclusive design, regulatory clarity, and public-private coordination—is essential to ensure that FPS remains a pillar of digital transformation in the region.

POLICY MESSAGE 1 Nonbank access and effective interoperability—within and across FPS—should be prioritized to address system fragmentation and support scalability and market efficiency.

Effective interoperability is critical for promoting competitive digital payment ecosystems as well as enhancing the utility of fast payments for consumers. From the user perspective, effective interoperability means the ability to send and receive fast payments regardless of the payer or payees' payment service provider (PSP), whether it be a bank, mobile money operator, fintech, financial cooperative, or microfinance institution.

FPS implementations in the region have frequently emerged as isolated initiatives of different stakeholder groups, often with different objectives. The resulting fragmentation can result in poor user experience and inefficiencies, poses increased costs for integration, and is especially problematic for large-volume users, such as governments and utility companies, as well as for merchants, who must support redundant systems. Fragmentation would be deleterious to smaller markets now approaching FPS implementation in the region and should be avoided through timely central bank involvement.

The LAC experience illustrates two main approaches to interoperability predicated on (i) "system-wide" interoperability through a single open FPS that sets the market standard, or (ii) "cross-network" interoperability, often mandated through regulation and supported by shared/centralized infrastructure components/functionalities. Brazil, Costa Rica, and Mexico are examples of the system-wide model, whereas Colombia and Boliva have set out a framework for operationalizing the cross-network model among various FPS. Both strategies require central bank involvement: LAC illustrates different combinations of central bank roles across the two models, though more often system-wide interoperability relies on infrastructure owned and operated by the central bank. A third approach (multitenant interoperability) relies on a national quick response (QR) standard and the ability of payment-initiation channels such as QR codes and near field communication (NFC) to grant seamless access to multiple networks.

Network-wide constructs emphasize the need for a robust, inclusive governance framework, fair and open access, and system scalability and operational resilience. Participation of nonbanks in FPS is the backbone of (system-wide) interoperability. However, indirect (only) access models for nonbanks increasingly raise concerns about sponsor banks' fees, service levels, and access to commercially sensitive information. Inclusive access models that allow direct participation by nonbanks have several advantages, including increased competition. Some countries with significant nonbank sectors, such as Argentina and Paraguay, still lack direct-participation models for some types of nonbank PSPs, constraining interoperability and competition. Network-wide interoperability is particularly relevant for countries at the early stage of FPS development and/or jurisdictions characterized by a lack of economies of scale and coordination issues. In this context, timely action to promote the development of an open FPS that serves the entire market can help create a common infrastructure layer and a governance framework for standardization, potentially dispensing with the need of more-complex cross-network constructs.

Cross-network interoperability can be a complex undertaking. Cross-network interoperability frameworks must go beyond enabling the exchange of messages and require broader standardization and alignment efforts encompassing technical aspects and business rules. Regulatory interoperability mandates might create a sense of urgency and mobilize the private sector, but effective implementation rests on a set of common rules and standards across schemes as well as technical components for alias management and inter-scheme clearing and settlement.

Multitenant interoperability emerges as a pragmatic solution to handle complexity and fragmentation, with a focus on the point of interaction. The most immediately viable option for enabling ecosystem-level interoperability in LAC might be a multitenant model that allows multiple payment schemes to coexist and interoperate through a shared access point.

POLICY MESSAGE 2 Governance arrangements for FPS should ensure alignment with public policy objectives and a level playing field for private sector operators.

Retail payments efficiency and other important public policy objectives such as financial inclusion are largely influenced by a complex interplay of cooperation and competition. For decades, LAC central banks have endeavored to achieve a better cooperation-competition nexus following very different patterns of involvement in retail payments governance. Starting in the mid-2010s, central banks became more actively involved in the regulation/oversight of retail payment systems, including earlier FPS initiatives. Several central banks nevertheless considered that these efforts would not be sufficient to change the status quo and began analyzing the possibility of directly developing and operating an FPS (see Chapter 1).

The experience of Brazil with *Pix* illustrates the merits of public-service provision in “bypassing” the complexity and fragmentation of traditional retail payments infrastructure that constrained FPS development. Central banks in the region are increasingly taking up operational roles in FPS, including where private FPS are already operational. Of the 11 countries analyzed in this report, central banks operate FPS in seven countries (Bolivia, Brazil, Costa Rica, the Dominican Republic, El Salvador, Mexico, and Paraguay), while the private sector operates FPS in five (Argentina, Bolivia, Chile, Colombia, and Peru). In Bolivia, FPS are operated by both the private sector and central bank, as will soon be the case in Peru and Colombia. Argentina provides a unique example of private infrastructures operating under a public mandate and harmonized rules. New FPS projects in the Caribbean region are led by the respective central banks.

When the central bank acts as owner/operator and is also the regulator and overseer of retail payment systems and services, it needs to consider how best to address any possible tensions between functions. This issue may be exacerbated where an FPS operated by a central bank coexists with FPS operated by the private sector. The central bank must ensure that it applies regulatory and oversight standards consistently to all FPS and may need to review the internal organization of payment functions to ensure separation of operational and regulatory/oversight roles. Transparency of key decisions regarding the FPS and open consultations help foster trust and accountability. Ultimately, operating an FPS requires an extraordinary effort from central banks, particularly as they must keep pace with market innovations. Central banks should regularly review the mix of roles and forms of public intervention.

When the central bank relies on its regulatory and oversight functions to influence FPS governance, it should have sufficient powers (for example, licensing/authorization, sanctioning powers, powers to obtain information) and resources to undertake these functions. In practice, though, enforcement has been limited in the area of governance, and many private FPS still preserve a governance structure misaligned with international standards and best practices. More often, central banks have played a pivotal role in revising access policies enabling direct participation of nonbank PSPs. However, these efforts may be frustrated by the lack of modern regulatory frameworks for payment services. International experience also points to additional tools that could be explored by LAC central banks, such as central bank representation in the FPS board of directors and the publication of strategic blueprints that steer and guide the FPS operator to make improvements or remedy identified gaps.

Notably, there are no examples in LAC of joint public-private ownership models as seen in other regions—for example, in Jordan, Malaysia, and Türkiye. These experiences can provide helpful references as the respective roles of the public and private sector are re-evaluated from time to time, and central banks consider options to increase private sector's "skin in the game" while preserving a strong influence on FPS governance.

POLICY MESSAGE 3 Diversifying use cases beyond P2P payments to include P2M and large-volume recurrent streams such as bill and government payments can drive adoption, innovation, and inclusion.

Use-case diversity is a key benchmark of FPS design maturity, yet LAC FPS are generally characterized by low use-case diversification. Indeed, P2P payments have been the primary driver of FPS in most LAC-11 countries, representing the vast majority of FPS transaction volumes. As of 2024, only a few countries (Argentina, Brazil, Peru, and Colombia) have deployed dedicated P2M functionality, with a few others in the process of implementation.[11] In LAC-11, Brazil stands out as the only country where P2M have achieved consistent scale, increasing from 5 percent in 2020 to 35 percent of total FPS volume in 2024.

Use-case diversification is also instrumental to sustainability and ecosystem growth. FPS pricing policies have generally prioritized affordability and user uptake. In most LAC-11 countries P2P transactions are free for end users, with zero-fee policies often mandated through regulation or embedded in FPS rules. This reflects a deliberate strategy to support affordability and mass adoption. However, in the absence of use-case—and pricing—diversification, PSPs may lack incentives for innovation, such as via high-quality user interfaces. On the other extreme, pricing and merchant acquiring practices for P2M tied to traditional business models may negate the added value of FPS. In Peru, fast payments have been effective in undercutting long-standing bank transfer pricing structures—only to raise P2M prices to similar levels as other payment instruments once mass adoption had been reached. FPS pricing requires close central bank scrutiny.

P2M functionality can also help recalibrate fiscal policies to address rising concerns about "tax asymmetry" between FPS and other payment systems, supporting small merchant formalization as their transaction volumes and values increase, and striking a balance between broadening the tax base and financial inclusion. One promising approach is the use of transitional merchant categories, such as India's P2PM (person-to-person-and-merchant) designation for low-volume sellers.

FPS across the region also remain underutilized for large-volume recurrent payment streams such as government payments, bill payments, and mass-transit payments. For example, integration with government payment systems remains limited, with a few exceptions (for example, Brazil, Costa Rica). A more coordinated strategy across treasury-management information systems, frameworks for the delivery of social-protection payments, e-government platforms, and FPS operators is required for designing G2P payment mechanisms anchored in interoperable, real-time payments infrastructure. Mass-transit use cases are in the early stages of exploration, where FPS and QR codes can represent a mechanism to facilitate the transition from closed- to open-loop transit payments. In contrast to other regions (e.g., East and South Asia), LAC FPS operators have not leveraged or planned to leverage these systems for cross-border regional payments. Different implementation models and level of development of FPS across the region, among other factors (e.g., legacy arrangements with mixed results, cross-border acceptance models through partnerships between PSPs rather than system interlinking), may have discouraged action on this front.

A narrow focus on P2P threatens to stall FPS adoption and relevance. Policy makers and operators should develop a strategic road map to guide the rollout of new use cases through a broader, structured process whereby the operator identifies new functionalities and products to be developed over time and engages participants and other relevant stakeholders in the design and implementation of new solutions.

POLICY MESSAGE 4 The sustainable growth of fast payments requires urgent action to address fraud and security challenges and ensure operational resilience.

FPS are attractive targets for fraud due to their speed, finality, and relative novelty. Many FPS are still building advanced capabilities for fraud detection, transaction monitoring, and consumer protection—features that have long been standard in mature networks like card systems.

In Brazil, the value of *Pix* fraud increased more than sixfold between 2023 and 2024 while still accounting for less than 1 percent of *Pix* volumes. However, most countries in LAC do not collect or report FPS fraud statistics, raising the question as to the real magnitude of this issue across the region, particularly for fast-growing FPS with less sophisticated frameworks for managing operational risk. The survey also reveals low levels of preparedness to manage fraud risks, with most FPS lacking support for centralized fraud information sharing and fraud-detection capabilities.

FPS operators should rise to the challenge and implement appropriate centralized fraud-management solutions. The extent to which centralized tools are feasible and appropriate in a given country depends on several factors—from the FPS legal basis to technical capability and market structure—and the decision to implement such tools should be based on an open, transparent process. Mandated dispute-resolution frameworks, while broader in nature, help PSPs fulfill their responsibilities vis-à-vis fast payment users (who may have been victims of fraud) in a consistent manner and are an important component of consumer protection frameworks. These measures should be underpinned by robust payment service regulation—from multifactor authentication to outsourcing and third-party risk management, and zero liability for unauthorized transactions—as well as coordinated enforcement.

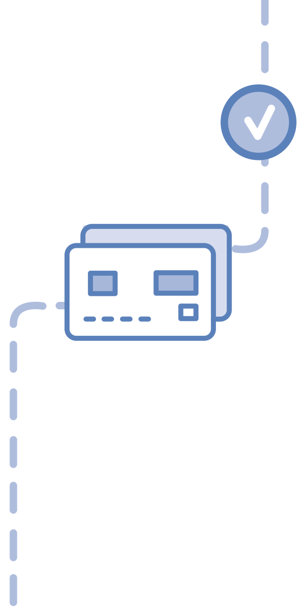
FPS operators should also implement multilayered cyber resilience frameworks based on international standards. This includes strong governance, proactive threat detection, secure integration practices, and continuous testing. Regulators should ensure that FPS are recognized as critical infrastructure and enforce mandatory incident-response protocols and minimum cybersecurity thresholds across all participants. In this context, reliance on open-source technologies warrants careful consideration of trade-offs, including resources required to ensure smooth implementation, maintenance, and ongoing security.

POLICY MESSAGE 5 Strategies to future-proof FPS and ensure integration with DPI are necessary to ensure continued relevance and increase impact.

There remains significant scope to enhance the design of FPS ecosystems in LAC to accommodate future innovations and facilitate greater integration with DPI, including digital ID systems and data-exchange frameworks.

Integration with digital ID is foundational to unlocking efficiencies in authentication, onboarding, and transaction flows across interoperable systems. Without a DPI vision, FPS in LAC risk missing key opportunities to enhance their impact and relevance within the broader digital transformation. Policy makers should ensure that FPS are designed to integrate with DPIs, both domestically and across borders. Central banks can lead this agenda by fostering open architectures, encouraging private-sector innovation, and establishing metrics to track how FPS contribute to financial inclusion, resilience, and digital transformation.

As countries design and operationalize open-finance frameworks, these efforts and FPS reforms converge in the context of payment-initiation services (PIS). PIS facilitate the seamless integration of digital payments in social and commerce interactions, enabling new solutions (like variable recurring payments and account sweeping), fostering competition, and enhancing user experience. FPS can play a key role in orchestrating PIS, including by setting technical standards—for example, API specifications—and participation requirements. Brazil's open-finance ecosystem effectively operates under a combination of central bank regulations and market-driven technical specifications, where (licensed) PIS providers have been integrated into the *Pix* ecosystem as scheme participants.



2 A 20-YEAR JOURNEY TOWARD FAST PAYMENTS IN LATIN AMERICA AND THE CARIBBEAN

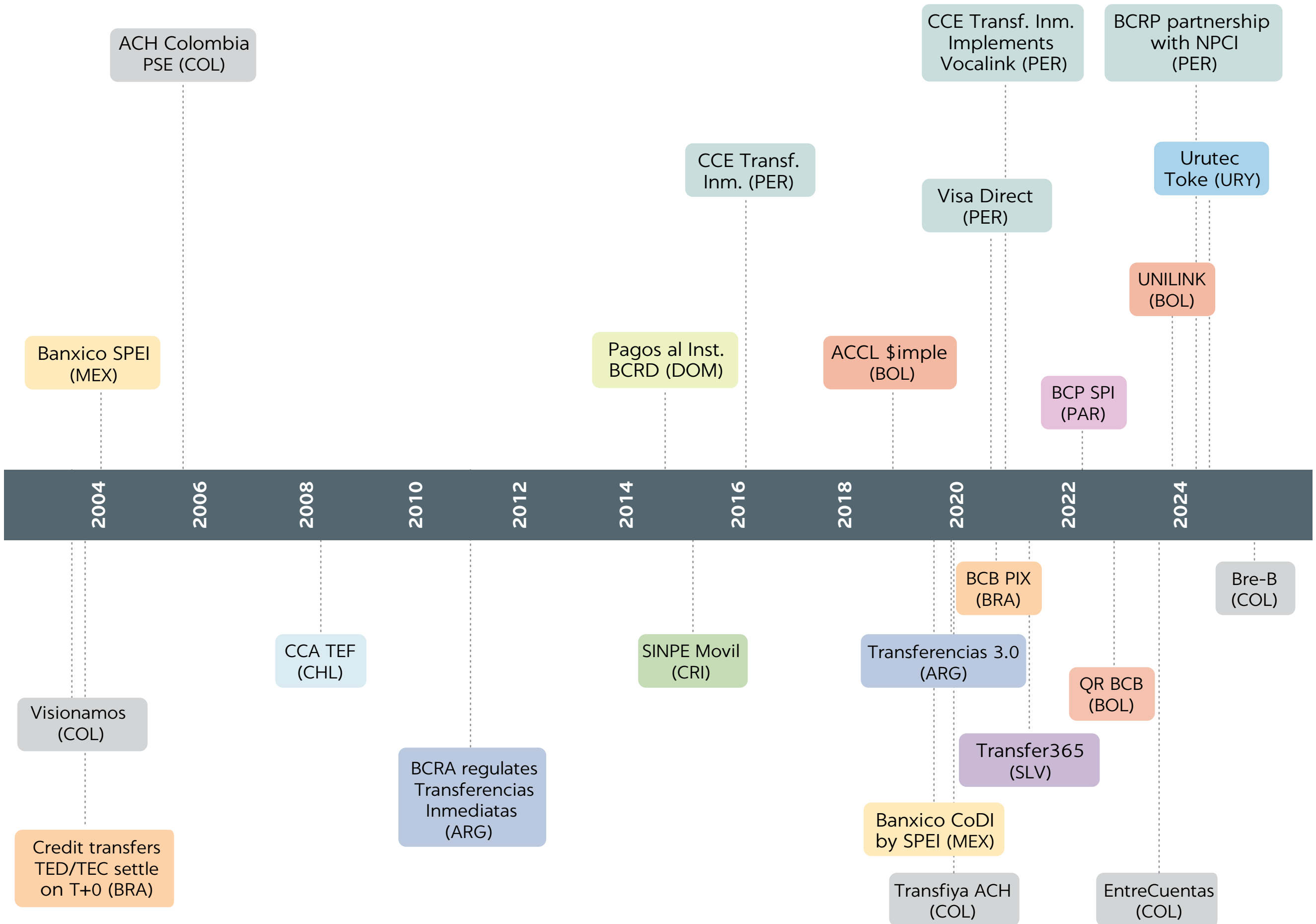
The transformative impact of fast payments in LAC has its roots in two decades of institutional and policy reforms and digital transformation. The exponential growth of fast payments in LAC, beginning in 2020 and catalyzed by a wave of FPS deployments and the COVID-19 pandemic, is the product of a range of factors, including expansions in digital connectivity, the innovation and growing market power of fintechs, and shifting consumer behaviors. Central banks have also been key players through their various and evolving roles as FPS catalysts, operators, overseers, and regulators. Seen through the lens of central bank involvement, the evolution of fast payments in the region provides insight into the importance of a sound governance framework[12] to ensure that FPS remain reflective of participant community and user needs and support broader public policy objectives. This section briefly retraces LAC's 20-year journey toward fast payments with a focus on the role of central banks, highlighting key considerations for the regional FPS agenda.

2.1 FAST PAYMENTS EMERGE WITH LIMITED CENTRAL BANK INVOLVEMENT (LATE 2000S–EARLY 2010s)

In the 2000s and early 2010s, the concept of fast payments began to gain traction, but typically under a different concept of "fast." In most LAC countries during this time, end-of-day crediting to final beneficiaries, or even T+1 crediting, was considered to be innovative and probably fast enough. In fact, time-critical transactions were only those of financial market participants. For the purposes of this section, these early arrangements to achieve a more rapid crediting to end beneficiaries will be referred to as "faster payment systems," to differentiate them from today's definition of "fast" or "instant" payment systems, which are characterized by the immediate availability of funds to the payee and 24/7 availability.[13]

Those faster payment arrangements were managed almost exclusively by private-sector entities. Banking consortia were early movers in this regard in LAC, mainly via the bankers' association, either as the direct operator of the payment arrangement or via an affiliate, subsidiary, or other closely linked entity. Those banking consortia were typically controlled by the largest commercial banks in each country, meaning that the views and interests of smaller/newer banks were rarely factored into the design and operating rules of the faster payment systems. Even less so the opinions and interests of nonbank financial institutions (such as financial cooperatives, microfinance institutions, and e-money issuers) that already provided some form of payment service(s) to their customers. Examples of these developments throughout LAC include Argentina, Chile, Colombia, and Peru, among others. In Brazil, there was already a "tradition," dating to the 1980s and early 1990s, to achieve rapid crediting to end beneficiaries due to the hyperinflation that the country experienced during those years. Some specialized payment-processing entities emerged as a result of this need that were not always associated to the large banking consortia.

FIGURE 1 **LAC's 20-Year Journey toward Fast Payments**



Source: Author's elaboration with data provided by central banks.

During this period, the institutional priorities of central banks were focused on their real-time gross settlement (RTGS) systems, with limited involvement in or formal powers over retail payment systems. During this period, payment systems departments in most central banks throughout the region had not been formally incorporated into the organizational structure. Most of the payment systems departments that did exist were focused almost exclusively on their national RTGS system and possibly other large-value payment systems and systemically important settlement systems. Most retail payment systems were not regulated or overseen by the central bank or other financial-sector regulators. Indeed, many central banks did not have the "formal powers" to even require data from most retail payment system arrangements. Nevertheless, some central banks began monitoring retail payment system developments on a regular basis through informal arrangements.[14]

Only a few central banks in the region (and elsewhere around the world) were involved in the operation of retail payment systems. Central banks that did operate retail payment systems were primarily operating check-clearing systems, mainly because many of these systems were still clearing and settling large-value items, which gave central banks a "legitimate" interest in their operation due to potential systemic risk considerations. A few central banks also operated traditional automated clearing houses (ACHs) for electronic funds transfers (for example, Banco Central de Costa Rica's first interbank transfer service via SINPE, launched in 1997, and Banco de la República of Colombia with ACH Cenit since 1999). Central banks operating ACHs were fundamentally concerned about achieving safe and sound clearing and settlement of interbank payment obligations within a reasonable time limit, meaning typically T+2 or T+1, and with a reasonable final price for end customers, including government entities. These central banks that decided to operate ACHs perceived at that time that the private sector was unable to achieve these objectives.

In summary, the typical scenario during this period was a *faster* payments arrangement operated and governed by a banking consortium, with little involvement from smaller banks and nonbank financial institutions and very limited regulatory and/oversight involvement from central banks. Furthermore, faster payment systems operated by central banks typically did not coexist with similar systems operated by the private sector.

Together with Costa Rica, Mexico is an exception to this early-stage general trend of private-led faster payment arrangements. In 2005, *Banco de México* launched its RTGS system, the Interbank Electronic Payments System (*Sistema de Pagos Electrónicos Interbancarios,* SPEI). Although SPEI was initially used mainly for transactions between banks, from its conceptual design it was not only conceived as a system for large-value payments but also intended for processing payments of federal government agencies, mainly the National Treasury. A few years later, *Banco de México* introduced a "real-time" payment service for end beneficiaries. Though "innovative" at that time, it was rudimentary compared to current standards. For example, at the very beginning, SPEI regulations granted up to one hour to the receiving party to credit the funds to the end beneficiary. This time limit was not always achieved in practice.[15] *Banco de México's* SPEI service for end beneficiaries was also an exception to the general trend because it operated alongside the service offered by CECOBAN (a banking consortia), which at that time was offering the *Transferencias Electrónicas de Fondos* service, consisting of deferred (T+1) credit transfers. Banco de México required banks to offer both services to their customers, disclosing the prices and other key conditions (that is, availability of funds) for each in internet banking and for in-person transactions.

Chile was also an exception to the general trend, moving early toward a deployment of truly fast payments. In Chile, *Transferencias en* Línea—which was designed in 2008 to achieve real-time crediting of funds to beneficiaries—was created by a private clearinghouse, the *Centro de Compensación Automatizado*, owned solely by three large banks. Nevertheless, the financial-sector regulators did play a substantial role in the materialization of this project, motivated primarily by somewhat technical concerns, such as reducing interbank settlement risk and, secondarily, improving product design and convenience for bank customers.

2.2 EARLY EFFORTS DISPLAY LIMITS AS CENTRAL BANKS BEGIN TO INSTIGATE CHANGE (MID-2010s)

Starting in the early to mid-2010s, central banks began to pay more regulatory/oversight attention to retail payment systems and eventually also to payment services. Examples include regulators in the European Union, the United States, and other jurisdictions that started issuing regulations, or at least basic operational standards, for privately operated retail payment systems, mainly card payment systems at that time, followed by other retail payment systems. Several reasons explain the increased involvement of central banks in retail payments, such as (i) the global trend to advance financial inclusion, which gained prominence in the early 2010s; (ii) the fact that core payments infrastructure like the RTGS system had reached maturity in most countries; and (iii) the development and expansion of payment system departments in many central banks, which could extend their purview beyond the systemically important components of the national payments system.

Several arrangements began to emerge with features similar to those of the current concept of real-time crediting to final beneficiaries. In Brazil, *Camara Interbancária de Pagamentos* was already offering (close to) real-time crediting by this time. In the Dominican Republic, in an effort similar to the one launched by *Banco de México* some years back, in 2014 the *Banco Central de la República Dominicana* extended the service of its RTGS system to create *Pagos al Instante,* providing close to real-time crediting of funds to end beneficiaries. Mexico's SPEI service for end beneficiaries had been upgraded, and real-time crediting of funds had already become a basic feature. Peru's privately operated ACH (owned by commercial banks) started developing its instant payment service also around the same time. In Costa Rica, *SINPE Móvil*—a mobile payment overlay built on top of SINPE—was launched in 2015.

Yet other features of a modern FPS were not present, such as 24/7 availability or the ability to use an alias to make and receive payments, among others. Other gaps/shortcomings of fast payments efforts around that time in most jurisdictions in the region included the following:

- *High costs for consumers.* Fast payments were expensive for end beneficiaries, due to, among other reasons, low economies of scale, as not all banks and other PSPs were participants in the systems/scheme members. Those services that did not rely on high prices to end customers had to be cross-subsidized, and some were eventually discontinued.

- *Slow pace of development and scale.* FPS (or the legacy faster payment systems described in the previous section) evolved only very slowly, largely as a result of low competition and the barriers imposed on smaller banks, nonbank financial institutions, and nonbank PSPs, either because they were unable to act as direct participants or as a result of the absence of a mechanism to influence in any meaningful way the decision-making of the arrangement. Hence, those FPS did not cater to major market developments and disruptions during those years and fell short of not only leveraging the fintech revolution to enhance the user experience but also including emerging e-money issuers serving the unbanked.
- *Competing interests of market infrastructure owners.* The dual role of larger banks in owning an FPS and/or an ACH and also being participants in card networks as card issuers and acquirers—and, in some cases, even being the owners of one or more of other key elements of the card value chain—from which they derived important revenues, is likely to have hindered or at least delayed the development of more efficient fast payment solutions for the country as a whole.

Governance arrangements did not materially differ from the earlier stage of "faster payment" development; however, the gradual involvement of central banks in the regulation/oversight of FPS and other retail payment systems began to instigate some change. Issued in 2012, the CPMI-IOSCO Principles for Financial Market Infrastructures (PFMI), originally intended for systemically important payment systems (and other financial market infrastructures), became an important guiding element also for the involvement of central banks in regulating and overseeing privately operated retail payment systems and their owners and management. In several jurisdictions around the world, concepts such as a retail payment system being of "system-wide importance" or "prominently important payment systems" were developed to designate those retail payment systems that would be subject to regulation/oversight and the principles (a subset of the PFMI) that would be applicable to them. While not all central banks in LAC adopted this approach, most central banks in the region did develop policies for significantly stronger regulation and oversight of retail payment systems and gave powers to their payment systems department to conduct these activities on a regular basis.

Several central banks nevertheless considered that these efforts would be insufficient to change the status quo and began analyzing the possibility of directly developing and operating an FPS. This trend became more noticeable in the latter part of the 2010s and in the early 2020s, as described in the next subsection.

2.3 A MAJOR SHIFT IN FPS GOVERNANCE (LATE 2010s–PRESENT)

In the late 2010s, in those countries in which an FPS had not yet been implemented, several central banks were already active as catalysts for such a system to be developed by the private sector. Central banks performed this role in addition to the regulatory/oversight roles over retail payments they had acquired a few years back.

Around the same time, and increasingly during and after the COVID-19 pandemic, some central banks in the region drastically changed their role in connection with fast payments. Many of the failures central banks had identified and tried to tackle via regulation and oversight had not been resolved satisfactorily. In particular, central banks found it especially difficult to overcome the dominance of vertically integrated market structures and fragmented payment ecosystems (for example, because of the limited participation of nonbank PSPs in FPS or the presence of two or more FPS catering to different market segments) that were hindering innovation and limiting the reach of digital financial services. In Brazil, the central bank (*Banco Central do Brasil*) had initiated a dialogue with market participants for an industry-led FPS development since 2014, guided by specific policy objectives, including increasing financial inclusion, reducing the use of cash, and developing interoperable mobile payment services. However, industry proposals struggled with implementation, inducing the central bank to take a leading role while continuing to engage with the industry through consultation in the process of FPS design and implementation. By 2022, in addition to Brazil, central banks in at least six other countries were operating their own FPS: Bolivia, Costa Rica, the Dominican Republic, El Salvador, Mexico, and Paraguay.

Some central banks opted for directly operating an FPS even if other fast payments options were already available. In most cases, the central banks operating FPS are the sole FPS operator in the country. However, in Bolivia, Colombia, and Peru, central banks operate or plan to operate an FPS alongside existing private-sector FPS. For example, in Colombia, the central bank (*Banco de la República of Colombia*), decided to undertake a role as FPS operator, among other roles, not only to put pressure on the other existing market arrangements to enhance service levels, quality, and price for end users but also to ensure interoperability between the various schemes. In parallel, the central bank will operate the centralized infrastructure enabling the interoperability between all FPSs operating in the country. The central bank of Bolivia (*Banco Central de Bolivia*) was motivated in part by the objective of strengthening the overall availability and continuity of fast payment services through an FPS operated by the public sector. More recently, the *Banco Central de Reserva del Perú* announced its partnership with the National Payments Corporation of India (NPCI) to develop an FPS similar to India's UPI. The motivations of the Peruvian central bank include, among other things, providing a low-cost, digital public good accessible to a wide range of PSPs and consumers in order to expand available use cases and promote digital financial inclusion.[16] Incidentally, the experience of Bolivia, Colombia, and Peru introduces a relatively new scenario, where the central bank simultaneously operates a (new) FPS and acts as the regulator of one or more existing, private FPSs, raising a potential conflict of interest (see Section 3.1).

In contrast, in Argentina, Chile, and Uruguay, the central banks did not opt for operating their own FPS. Nevertheless, for several years already, the central banks have been playing relevant roles for FPS development and enhancement through their actions as catalysts and regulators/overseers. Most of these central banks have worked intensively on, or have committed to, achieving interoperability of the various existing fast payments offers and the underlying instruments and channels. For example, Argentina's *Transferencias 3.0* can be understood as a set of common rules and standards that apply equally to banks and nonbank PSPs, as well as to all three scheme administrators in the country. More recently, the Argentine central bank extended the mandatory use of the interoperable QR code also to card-based transactions initiated by bank apps and mobile wallets. Some central banks have also intervened on elements that directly or indirectly affect end-user pricing. This experience suggests that, as FPS regulators, central banks play a critical role in defining key aspects of FPS scheme rules to achieve interoperability and an inclusive fast payment ecosystem.

3 THE FAST PAYMENTS OPPORTUNITY IN LATIN AMERICA AND THE CARIBBEAN

The emergence of FPS in LAC is addressing long-standing and structural challenges constraining the growth of digital financial service ecosystems in the region.[17] Recurring challenges include low competition, barriers to accessing payment infrastructure and user data, limited interoperability, high costs, and a misalignment between account/payment product design and the needs of excluded/underserved segments. FPS can provide a neutral, low-cost rail for both incumbents and new entrants and a pragmatic approach to interoperability through open-access policies, broad participation, and wide coverage of payment types and use cases. FPS can foster competition and slash digital payment costs, particularly at the point of sale (POS), where cards have long represented the dominant or sole electronic payment instrument and price out smaller merchant segments. Finally, FPS can contribute to financial inclusion by enabling the provision of convenient and affordable payment solutions, endowing users with the ability to better control their funds and generating data insights to access other financial services.

The analysis in this section is based on a survey of central banks in LAC jurisdictions with operational FPS or similar arrangements as of 2023.[18] The survey was conducted in early 2025 and received responses from central banks in 11 jurisdictions (see Table 1). These jurisdictions collectively represent 91.1 percent and 86.3 percent of 2024 LAC total GDP and population, respectively. The survey collected information on characteristics and design features of FPS (for example, participants, use cases, payment instruments, access channels, fees, and so on), as well as transactional data covering the period 2017–24. The survey also collected information on fraud.

3.1 THE GROWTH OF FAST PAYMENTS IN LAC, 2017–24

Fast payments in LAC have experienced remarkable growth. Fast payment transaction volumes have increased 130-fold over the past eight years, from 620 million in 2017 to 79.8 billion 2024 (see Figure 2). Similarly, the total value of fast payment transactions has increased 6.6-fold, from $1.4 trillion in 2017 to $9.5 trillion in 2024.

Early reformers like Chile, Mexico, and Argentina accounted for nearly all fast payment transactions prior to 2020 (see Figure 3). In 2017, fast payments were not widely available in most countries in LAC. Some countries—like Costa Rica and Peru—had already launched their FPS, but the average adult made fewer than one fast payment per year. In Mexico and Argentina, adults were making an average of 2.5–3 fast payments per year. Only in Chile were fast payments reaching scale, with an average of 19.3 fast payments per adults per year.

The key inflection point for fast payments in LAC began in 2020, with a period of multicountry FPS reforms coinciding with the COVID-19 pandemic. Between 2020 and 2023, seven countries—Argentina (*Transferencias 3.0*, 2020), Brazil

TABLE 1 **Fast payment systems included in LAC-11 analysis**

COUNTRY	FPS #	NAME OF THE FPS SYSTEM	LAUNCH DATE OF FPS	SCHEME OWNER/ SYSTEM OPERATOR[a]
Argentina		*Transferencias 3.0*	12/2020	Private sector
Bolivia	FPS 1	*Módulo de Liquidación Diferida—QR BCB Bolivia*	12/2022	Central bank
	FPS 2	*ACCL $imple*	01/2019	Private sector
	FPS 3	*UNILINK*	01/2024	Private sector
Brazil		*Pix*	11/2020	Central bank
Chile		*Centro de Compensación Automatizado—CCA*	05/2008	Private sector
Colombia	FPS 1	*Transfiya ACH Colombia*	02/2020	Private sector
	FPS 2	*Redeban—Entre Cuentas*	10/2023	Private sector
	FPS 3	*Visionamos*	02/2004	Private sector
Costa Rica		*SINPE*	05/2015	Central bank
Dominican Republic		*Pagos al Instante BCRD*	11/2014	Central bank
El Salvador		*Transfer365*	06/2021	Central bank
Mexico		*Sistema de Pagos Electrónicos Interbancarios*	08/2004	Central bank
Paraguay		*Sistema de Pagos Instantáneos—SPI*	05/2022	Central bank
Peru	FPS 1	*CCE Transferencias inmediatas*	12/2020	Private sector
	FPS 2	*Visa Direct*	10/2020	Private sector

a. The same entity can act as scheme owner and system operator.

(*Pix*, 2020), Colombia (*Transfiya ACH Colombia*, 2020/*Entre Cuentas* Redeban, 2023), El Salvador (*Transfer365*, 2021), Paraguay (*SPI*, 2022), Bolivia (*QR BCB*, 2022), and Peru (*Visa Direct*, 2020/*CCE*, 2021)—deployed FPS or fast-tracked FPS expansion. At the same time, the COVID-19 health crisis triggered an urgent need for safe, contactless transactions, accelerating both consumer demand—particularly for P2P payments—and policy action. Regional growth in fast payments per adult accelerated during 2020–24, with average annual growth of 145 percent.

As of 2024, Brazil, Argentina, and Costa Rica have emerged as top regional performers in terms of fast payment transactions per adult—the only three countries with more than 100 annual fast payment transactions per adult. Brazil's 2020 launch of *Pix* was a watershed moment for fast payments in Latin America, achieving exponential growth due to its open-infrastructure design and user experience, and further catalyzed by the COVID-19 pandemic. As of 2024, Brazilian adults make an average of 372 FPS transactions per year, accounting for 80 percent of all FPS transactions in LAC-11. Brazil's progress is remarkable even by global standards: while India continues to lead the world in overall FPS volumes, it lags behind Brazil on a per-capita basis with 167 FPS transactions per adult in 2024. Based on available data, it appears that only Thailand exceeds Brazil's per-capita volume of fast payments, with 399 in 2024. Brazil's achievement is even more notable given that Thailand's *PromptPay* was launched in 2017, India's *UPI* in 2016, while Brazil's *Pix* only began operations in 2020. Argentina's incremental reform program—kicked off in 2011 and culminated with launch of *Transferencias 3.0* in 2020—has achieved scale via an FPS operated by the private sector. Argentinians now make 203 fast payments per year, on average, up from 2.8 in 2017. Costa Rica's FPS—*SINPE Móvil*, operated by its central bank—was established in 2015 but gained rapid adoption beginning in 2020 with the onset of the COVID-19 pandemic; as of 2024, Costa Ricans make 156 fast payments per year, on average, up from 0.3 in 2017.

Bolivia, Mexico, Paraguay, and Peru have also seen strong and sustained growth in fast payments since 2020 as their ecosystems mature. Adults in these countries now make 30–60 fast payments per year, on average, up from fewer than one in 2017. Chile has also seen continued expansion in fast payments usage, albeit from a higher baseline and lower recent growth, reaching 67.6 fast payments per adult in 2024. Colombia stands out as having a combination of multiple and relatively well-established FPSs and a very modest scale-trajectory (see Figure 4). This is likely due to the persistent market power of closed-loop solutions and a high share of intra-PSP transactions as well as limited functionality of early FPS implementations. Despite sustained growth of their FPSs, the Dominican Republic and El Salvador still have fewer than 10 fast payments per adult per year, highlighting the importance of the ongoing FPS reforms in both countries. The rate of user adoption in the highest-performing countries is now more than 70 times that of the lowest-performing countries. This disparity should be seen through the lens of system design, underscoring the importance of FPS features that underpin fast payments' value proposition to customers (see Section 2.2).

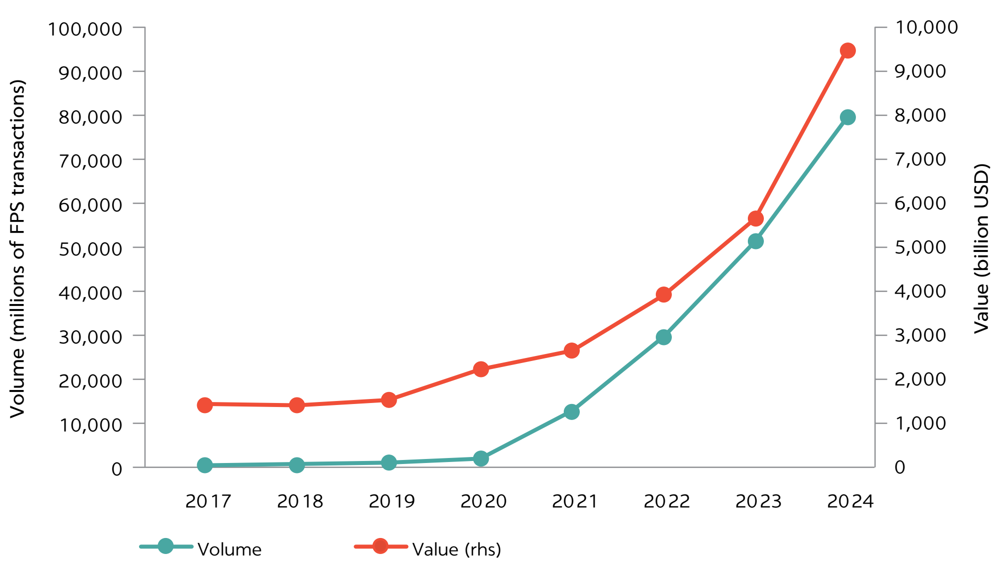
Growth in fast payments remains strong across the board, but the most recent data suggests that Bolivia, Colombia, Peru, and Paraguay remain on encouragingly strong growth paths. The average growth rate in fast payment transactions per adult between 2023 and 2024 was 100.5 percent across all 11 countries (see Figure 5). However, the 2023–24 growth in Bolivia, Colombia, Peru, and Paraguay—all above 130 percent—suggests particularly encouraging growth paths in the coming years, albeit from relatively lower baselines compared to top regional performers like Brazil, Argentina, and Costa Rica. More concerning are the countries that have both low baselines and lower growth: Mexico and, to a larger degree, the Dominican Republic lag behind their country peers in terms of fast payment transactions per adult, and each has a recent annual growth rate of 40–45 percent.

Several other LAC jurisdictions are at different stages of developing their FPS strategies and infrastructures. In South America, Uruguay has significantly accelerated FPS reforms in the last few years, achieving 24/7 operations in the private sector-operated clearinghouse and introducing a P2M use case in 2023 and 2024, respectively. Ecuador is characterized by fragmentary and partial solutions: in this context, the central bank has recently promoted interoperability through regulation. In Central America, Honduras, Guatemala and Nicaragua have nascent fast payment ecosystems, often characterized by interoperability challenges. In the Caribbean region, Aruba and St. Martin and Curacao have live FPS, whereas Barbados, Belize, Guyana, Trinidad and Tobago are at different stages of developing FPSs.

3.2 DESIGN FEATURES THAT UNDERPIN THE FPS VALUE PROPOSITION IN LAC

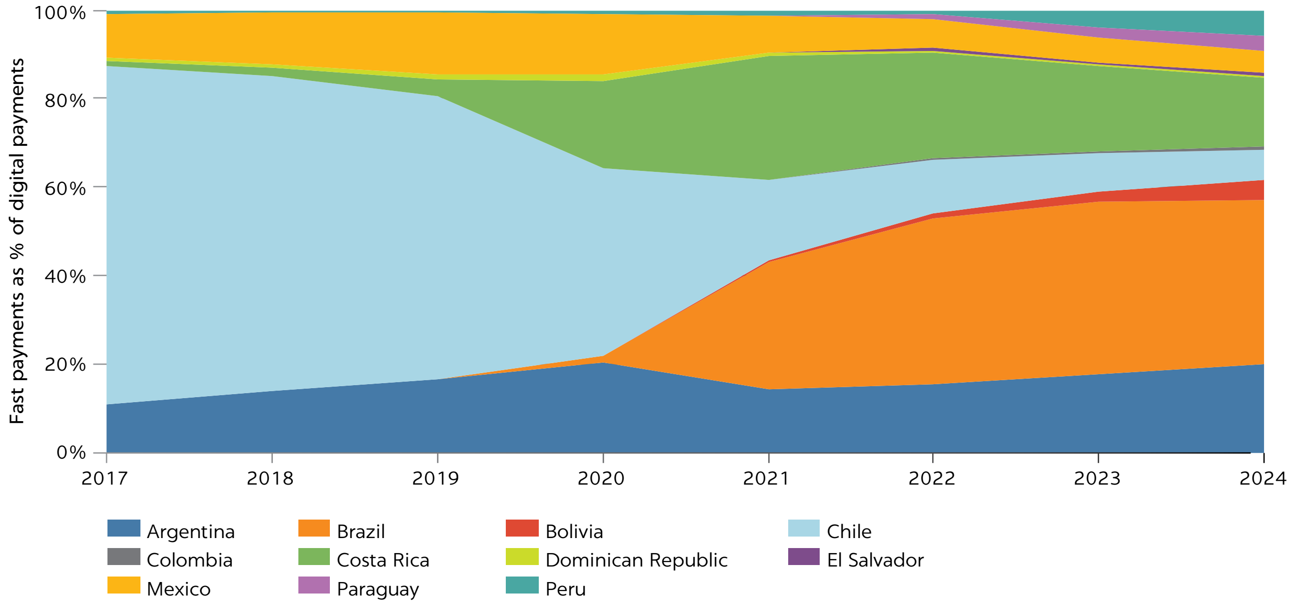
FPS models and design features vary widely across the LAC region. For the purposes of the analysis in this section, 10 key features were used to analyze and compare FPS design choices: 24/7 operation, speed of availability of funds, participant diversity, access models (direct and indirect participation), nonbank direct access, variety of access channels, supported payment instruments, alias functionality, range of use cases (domestic), and transaction limits. These key

FIGURE 2 **FPS transaction volumes and value have grown rapidly since 2020**



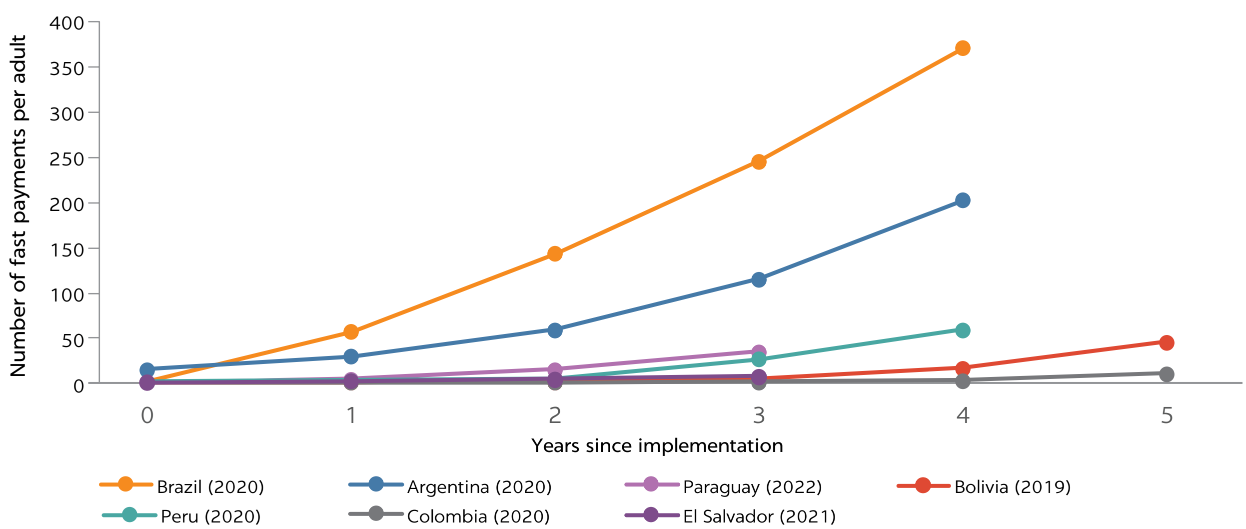
Source: Author's elaboration with data provided by central banks.
Note: Data includes only centrally cleared transactions, i.e. inter-PSP transactions."

FIGURE 3 **Chile and Mexico were first movers, but Brazil, Argentina, and Costa Rica now lead in terms of FPS transactions per adult (FPS volume share per adult, by country, 2017–24)**



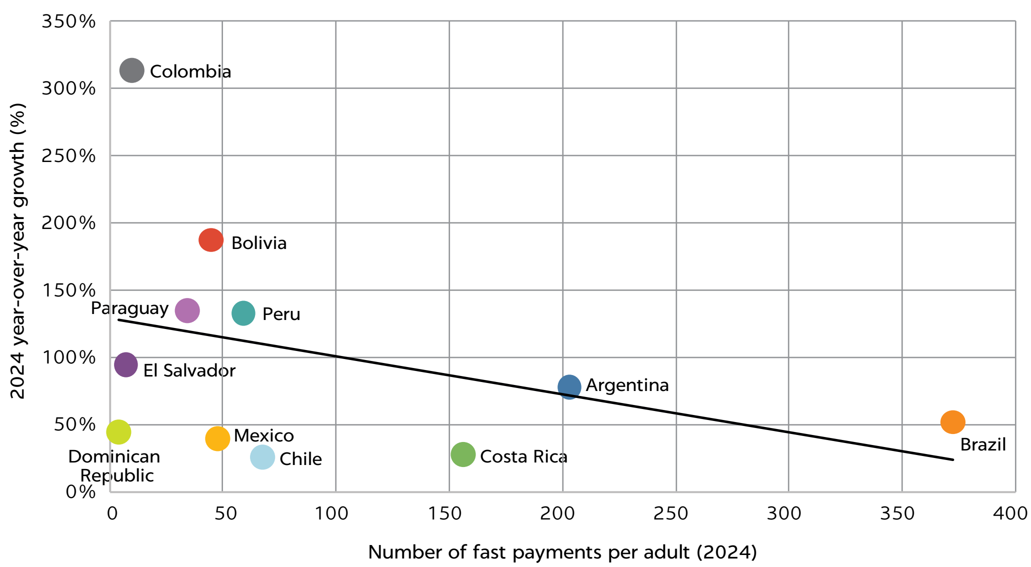
Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Each country's relative share per year is determined by first calcuating the FPS Volume per adult in each country, then summing the values, then calculating the relative share of each country. Thus the population of each country is weighted equally. Data includes only centrally cleared transactions, i.e. inter-PSP transactions."

FIGURE 4 **LAC-11 countries have followed diverse FPS-scale trajectories, with Brazil and Argentina growing most quickly**



Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Due to variations in launch months within calendar years and data availability, T+0 corresponds to the year prior to the launch year (noted in parentheses) for Colombia and Paraguay, and for the launch year for Argentina, Bolivia, Brazil, El Salvador, and Peru. Countries that launched FPS prior to 2018 are not included due to limited data. Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

FIGURE 5 **Colombia, Bolivia, Paraguay, and Peru are showing high rates of recent growth in fast payments, possibly closing the gap with Brazil, Argentina, and Costa Rica**



Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

TABLE 2 **Growth in fast payment transactions, 2017–2024**

	FPS TRANSACTIONS PER ADULT					2023-2024 GROWTH IN FPS TRANSACTIONS PER ADULT (%)
COUNTRY	2017	2019	2021	2023	2024	
Argentina	2.8	6.8	29	115	203	76
Bolivia	0	0.0	0.7	16	45	182
Brazil	0	0.0	57	247	373	51
Chile	19	26	36	54	68	25
Colombia	0	0.0	0.2	2.5	10	308
Costa Rica	0.3	1.6	56	123	156	27
Dominican Republic	0.2	0.5	1.4	2.8	4.0	43
El Salvador	0	0.0	0.0	3.7	7.2	93
Mexico	2.6	5.7	17	35	48	38
Paraguay	0	0.0	0.0	15	34	132
Peru	0.2	0.2	2.5	26	59	130
LAC-11 average	1.6	3.0	32	124	190	53

Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

features have been synthetized in a composite measure: the FPS Design Maturity Index (see Box 1 and Appendix A).

The FPS Design Maturity Index reveals that most countries still have significant scope to enhance the design of their FPS (see Figure 6).[19] Brazil scores highest, thanks to a broad range of use cases, direct- and indirect-participation options, extensive access channels, and unmatched alias functionality. Argentina, Peru, Bolivia, Chile, Costa Rica, Mexico and Paraguay demonstrate middle to high sophistication levels and are characterized by fewer payment instruments, limited alias functionality or more limited use-case breadth. The Dominican Republic and El Salvador show more basic setups lacking some key FPS features (24/7 operation and/or instant availability of funds).

Nonbank participation is a critical feature of modern FPSs: all countries enable nonbank access in some form, but direct access for licensed nonbanks is not universal. All countries with an operational FPS permit direct participation of at least some nonbank PSPs, including fintechs, telcos, and digital wallet operators. In seven countries—Argentina, Bolivia, Brazil, Colombia,[20] Costa Rica, Paraguay, and Peru—nonbanks now outnumber banks in FPS participation (including direct and indirect participants). This openness has spurred service diversity and broader outreach. However, some countries where nonbank PSPs play a particularly significant role, such as Argentina and Paraguay, still lack direct-participation models for some types of nonbank PSPs. In Argentina, the *Proveedores de Servicios de Pago* lack direct participation, as is also the case in Paraguay for *Entidades de Medios de Pago Electrónicos*. In both countries, these include some of the largest providers of digital payments, and their exclusion could constrain interoperability and limits competition.

Settlement models in Latin America show a mix of real-time and deferred approaches that reflect each country's financial infrastructure and risk tolerance. Brazil, the Dominican Republic, Paraguay, and one of Colombia's systems oper-

BOX 1 THE FPS DESIGN MATURITY INDEX

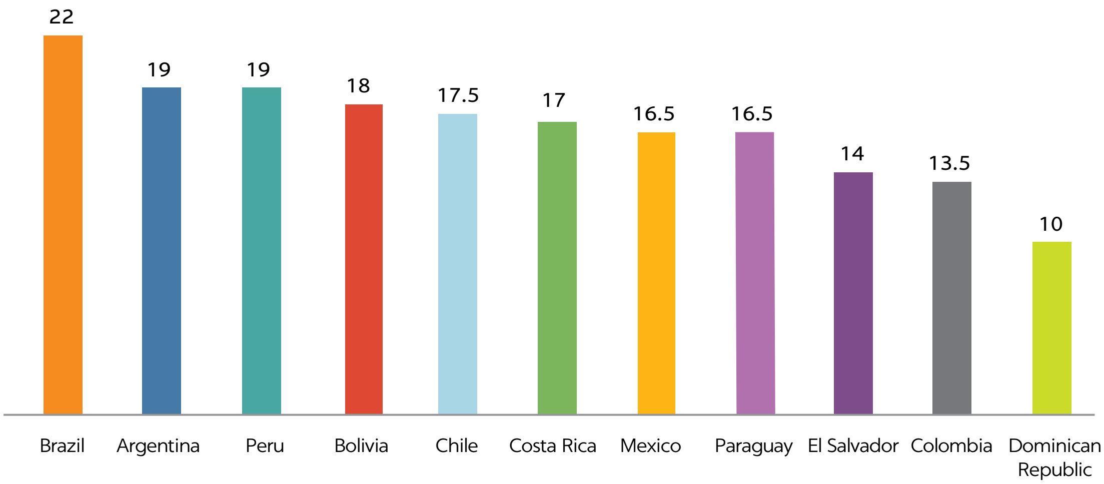
The FPS Design Maturity Index is a composite index calculated by aggregating the number of points achieved according to the following methodology:

- 24/7 operation: Yes = 3 points, no = 0 points.
- Speed of availability of funds: Instant availability = 3 points, otherwise = 0 points.
- Number of participant types (banks, nonbanks): Both = 1 point, only banks = 0 points.
- Participation scheme type (direct, indirect): Both = 1 point, only direct = 0 points.
- All types of licensed nonbanks can participate directly in the FPS: Yes = 2 points, no = 0 points.
- Number of access channels (mobile application, internet banking, QR codes, ATMs, agents, POS devices): More than four channels = 2 point, three or four channels = 1.5 points, fewer than three channels = 1 points.
- Number of payment instruments (credit transfer, direct debit, other): More than one = 2 point, only one = 1 points.
- Types of aliases supported (phone number, email address, national ID, corporate registration number, scheme-specific proxy identifier, other): More or equal to three = 3 points, two = 2 points, one or two = 1 points, zero = 0 points).
- Type of domestic use cases that has been technically enabled by the FPS operator and has gone live at the time of assessment (P2P, P2M, G2P, P2G, other): 1 point for each use case, with a maximum score of 5 points.
- Transaction limits specified at the FPS level (no limits, limits): No limits = 1 point, high limit (more than US$500 per day) = 0.5 points, low-value limits = 0 points.

The maximum score is 23. In the case of countries with multiple FPS, the most sophisticated FPS is included. The calculation of the score reflects the adherence of the system's instruments, rules and procedures to the criteria above, based on information provided by the participating central banks and other publicly available information.

Source: Author's elaboration.

FIGURE 6 **FPS design maturity index**



Source: Author's elaboration.
Note: In the case of countries with multiple FPS, the most sophisticated FPS is included.

ate under real-time gross settlement, ensuring immediate inter-PSP settlement. In contrast, Argentina, Chile, El Salvador, and several systems in Peru, Bolivia, and Colombia rely on deferred net settlement, prioritizing efficiency through batch processing over instantaneous settlement. Hybrid models are present in Costa Rica and Mexico, offering a balance between speed and liquidity optimization.

Access channels in LAC FPS ecosystems have evolved toward mobile-first environments, but quality and consistency vary significantly. Countries such as Brazil, Argentina, and Paraguay offer native integration with mobile apps, QR code scanning, and responsive APIs that facilitate real-time execution and simplified front-end design. These systems allow users to initiate payments from banking apps, digital wallets, or merchant interfaces with minimal friction. In Mexico, similar capabilities exist through SPEI's CoDi platform, although merchant and consumer uptake has lagged. In contrast, El Salvador and the Dominican Republic have yet to achieve seamless or standardized mobile integration across institutions. In these markets, access is often limited to specific PSPs or routed through online banking portals, reducing real-time usability. Costa Rica's *SINPE Móvil*, while widely adopted, is built as an overlay, rather than a native application, limiting its integration with merchant environments and broader digital ecosystems.

Aliases—used to simplify payment initiation and enhance interoperability—are gaining traction across most FPSs, though implementation status varies. In Brazil, Argentina, and Paraguay, aliases allow users to transact using phone numbers, email addresses, phrases selected by end users, or national IDs, instead of full account details. These systems have proven critical in scaling P2P usage and reducing onboarding friction for new users. In contrast, prior to Bre-B, Colombia supported aliases in some FPS platforms (for example, *Redeban* and *Transfiya*), but not universally or in an interoperable manner across the ecosystem. Costa Rica's *SINPE Móvil* also leverages mobile numbers as proxies but lacks multi-alias options. Mexico faces a similar situation with DiMo, an overlay service that runs on top of SPEI and allows to make interbank transfers by using mobile phone numbers as aliases. As aliases continue to shape user expectations, gaps in implementation increasingly represent a competitive and inclusion disadvantage.

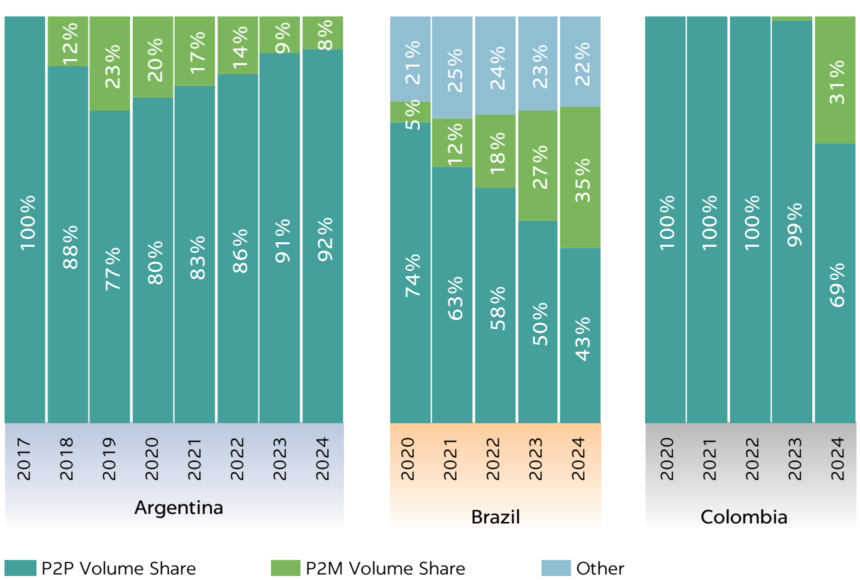
Use-case diversity is a key benchmark of FPS maturity, but adoption remains uneven across the region. As of 2024, only a subset of countries with operational FPSs have fully deployed P2M functionality, and a few others are still in the process of implementation. Argentina, Brazil, Chile, and Peru are currently offering live and full-scale P2M functionality through their FPS platforms. Paraguay has not yet deployed P2M use cases but is in the process of doing so. In Mexico, the CoDi platform was launched to promote merchant payments, but its uptake has been limited, and lacks integration at the POS terminals. Costa Rica, despite high mobile and wallet penetration through *SINPE Móvil*, remains limited to P2P. In Colombia, P2M is supported by only one FPS, but an effort to ensure P2M interoperability is under way.

A few countries—particularly Brazil and Argentina—have also begun incorporating public-sector payments, such as taxes and utility services, positioning FPS as a central infrastructure for broader government payments.

The evolution of P2P and P2M transaction shares across Argentina, Brazil, and Colombia illustrates varying levels of progress in use-case diversification—but also reveals that P2M has become consistently relevant at scale only in Brazil (see Figure 7). Between 2020 and 2024, Brazil stands out as the only country where P2M transactions have grown year after year, increasing from 5 percent to 35 percent of total FPS volume. In contrast, Argentina showed early promise, with P2M reaching 23 percent in 2019 following the introduction of *Transferencias 3.0*, but its share has since declined to just 8 percent by 2024—suggesting that growth has remained concentrated in P2P use. It should be noted though that these data may "conceal" the vast acceptance ecosystems of large technology firms (e.g., e-commerce and food/grocery delivery platforms) and high volumes of on-us transactions, which represent de-facto "parallel" systems and, depending on the country, may be more or less integrated with the domestic FPS. Colombia, after years of operating FPS systems without merchant functionality, saw a sudden jump in P2M usage in 2024—from 1 percent to 31 percent—indicating that merchant enablement is only now beginning to take hold. Taken together, the data underscores that while multiple countries have enabled P2M use cases, Brazil is currently the only LAC country where merchant payments via FPS have achieved consistent, scalable growth, positioning it as a reference for deeper P2M integration. Section 4.1 further examines the opportunities for use-case diversification in fast payments.

Transaction limits across FPS platforms remain significantly lower than traditional payment instruments, such as cards, often as a risk mitigation measure. Transaction limits can be used by policy makers and FPS operators as a risk mitigation measure, including to support fraud mitigation and AML/CFT compliance. While most LAC FPS systems have progressively raised ceilings since launch, they still impose more conservative thresholds than credit or debit cards, which often allow virtually unlimited spending within account or credit limits. Brazil's *Pix,* for instance, has default nighttime P2P caps of R$1,000 (approximately $200), with higher thresholds allowed for verified users during business hours. Argentina's *Transferencias 3.0* launched with moderate caps for P2P transactions that can be adjusted based on user profile and transaction context. Peru's CCE *Transferencias Inmediatas* permits FPS transfers up to S/. 30,000 (approximately $8,000), one of the highest in the region, while Costa Rica's *SINPE Móvil* still limits most users to $200–4,000, depending on institutional rules. Transaction limits established at the FPS-level can discourage adoption and broad-based use of fast payments if set too low; in most cases, PSPs are in a better position to adjust clients' transaction limits based on risk assessments. Indeed, as fraud controls, user authentication, and liquidity management

FIGURE 7 **P2P remains the dominant FPS use case in most LAC-11 countries**



Source: Author's elaboration with data provided by central banks.
Note: The figure includes countries that reported FPS Volume disaggregated by use case.

improve, many regulators and operators are considering tiered or dynamic limit models to close the gap and expand FPS utility in high-value scenarios.

As mentioned earlier, pricing is a critical element of the FPS value proposition in LAC, where cost has traditionally been perceived as a high barrier to owning and using transaction accounts. In general, end-user pricing strategies for fast payments in LAC have prioritized affordability and user uptake, particularly for P2P payments. In the majority of countries with mature systems—such as Brazil (*Pix*), Argentina (*Transferencias 3.0*), and Paraguay (SPI)—P2P fast payment transactions are entirely free for end users. Costa Rica's *SINPE Móvil* allows free transfers up to a capped limit, and Bolivia's three coexisting systems report a zero-average fee for P2P, despite allowing commissions up to Bs 10 (roughly $1.44). These zero-fee policies are often mandated through regulatory guidance or institutional incentives, reflecting a deliberate strategy to drive mass adoption and support inclusion, particularly among low-income and first-time users. In Peru, fast payments have acted as vehicle for undercutting long-standing pricing structures in traditional ACH transfers.

On other hand, merchant payment pricing across the region is uneven, with some markets following uncongenial ad valorem models and others lacking the flexibility and incentives needed to expand P2M use cases. FPS transactions do not expose PSPs to merchant credit risk and benefit from scale and automation, resulting in declining marginal costs per transaction. Furthermore, ad valorem pricing can act as a "regressive tax" by placing a heavier burden on smaller merchants and low-value transactions, particularly those with limited bargaining power and those who must operate on razor-thin margins. In Argentina the central bank via regulation exempted low-value payments (up to 1,000 units of purchasing power (for ARG-denominated transactions, and $/€1,000 for USD/EUR-denominated transactions); after that, merchant fees must be set within a range (0.6 percent-0.8 percent of the transaction value). At the same time, preventing PSPs from earning revenues may discourage market participation, in the absence of other incentives, especially when PSPs can earn revenues through other networks. The experience of Mexico, which removed fees for CoDi, the QR-enabled interoperable fast payments scheme, was characterized by low private sector engagement.

FPS pricing in LAC should be calibrated to reflect costs, promote inclusion, and at the same time allow reasonable revenues to guarantee resiliency and innovation. Where ad valorem pricing can disadvantage small merchants and low-value transactions, international experience shows clear alternatives, including fixed-fee or hybrid models (see Box 3). Regulators can promote tiered structures that combine zero or capped fees for small-value payments, fixed fees for mid- and high-value transactions, and clear disclosure of charges. Countries with flat-fee regimes can further advance inclusion by exempting low-value payments, while those with ad valorem models should evaluate whether fees reflect true marginal costs and consider introducing caps or transitioning to hybrid approaches. As FPSs continue to expand, aligning pricing frameworks with principles of efficiency and inclusion will be essential to protect small actors, broaden adoption, and spur innovation in digital payments.

Even the most mature FPSs in LAC have room to improve and can learn from global FPS experiences. The maturity of FPS in LAC still lags behind several other countries that have built a comprehensive ecosystem of use cases to reflect the central role these systems now play in their economies. A clear example is India's UPI, which offers design innovations largely absent in LAC but with strong potential to enhance inclusion and usage. These include options to make and accept transactions in low-connectivity scenarios, tailored use cases for large volume payments like mass transportation and government payments, integration of Digital ID, simplified onboarding for micro and small merchants, and integration with credit lines and cards.

3.3 FAST PAYMENT SYSTEMS AS A CATALYST FOR DIGITAL PAYMENTS

FPS have become the principal driver of digital payment growth in LAC-11. Overall usage of digital payments per adult in LAC-11 has more than quadrupled since 2017. The rapid growth of digital payments across LAC-11 reflects a confluence of long-term reform and short-term disruption, most notably the rollout of FPS and the COVID-19 pandemic. As discussed in Section 2.1, seven countries deployed FPS infrastructure between 2020 and 2023. The COVID-19 pandemic helped to catalyze the growth of these new FPS but also boosted the growth of FPS launched during the 2010s. In Costa Rica, for example, the pandemic significantly boosted the uptake of *SINPE Móvil,* which had been launched in 2015 but reached scale only during the crisis. Between 2020 and 2024, fast payments per adult grew at an annual average rate of 145 percent, accounting for 63 percent of the total

BOX 2 REGIONAL AND INTERNATIONAL EXPERIENCE ON FPS PRICING TO END USERS

The marginal cost of processing an electronic payment does not meaningfully increase with the value transferred, so percentage-based charges amount to an arbitrary "tax" on higher-value payments. Ad valorem fees can deter usage. For example, businesses or individuals may avoid using an instant transfer for large payments if a high-percentage fee applies, sticking with cash or slower methods. Fixed fees, by contrast, promote fairness and transparency, and when set at a low level (or waived entirely), they encourage broad adoption of the FPS.

Thailand: PromptPay: Thailand's PromptPay, launched as part of a national digital payments initiative, also implemented a tiered flat-fee structure that effectively makes most routine transfers free or extremely cheap. Under PromptPay's standard tariff (set by authorities in agreement with banks), transfers up to a threshold are free, and above that only a few baht per transaction are charged. For example, transfers not exceeding B 5,000 (about $150) incur no fee; transfers from B 5,001 to B 30,000 cost just B 2; those up to B 100,000 cost B 5; and even the largest allowed transfers cost only B 10 (about $0.30).

Nigeria: NIBSS Instant Payments (NIP): Nigeria has one of Africa's most established FPS in Africa, NIP. From inception, NIP's pricing has been based on flat fees per transaction, not on a percentage of the transfer value. NIBSS (which is coowned by the central bank and commercial banks) charges participant banks a few naira per transaction. Banks in turn typically charge customers a fixed fee as well. In mid-2023, NIBSS took a further step to cut the switching fee for NIP by 25 percent, from N5.00 to N3.75 (approximately $0.005) per transaction.

Sweden: Swish: Sweden's widely adopted fast payment system operates on a fixed-fee model that prioritizes affordability and simplicity. For individuals, Swish is entirely free of charge. Users can send and receive payments instantly via a mobile phone without incurring any fees. For businesses and registered organizations, Swish applies a nominal flat fee per received payment, typically around SKr 2 (roughly $0.20), although the exact fee may vary slightly by bank. Importantly, organizations are not permitted to pass this fee on to consumers, ensuring that end-user pricing remains stable.

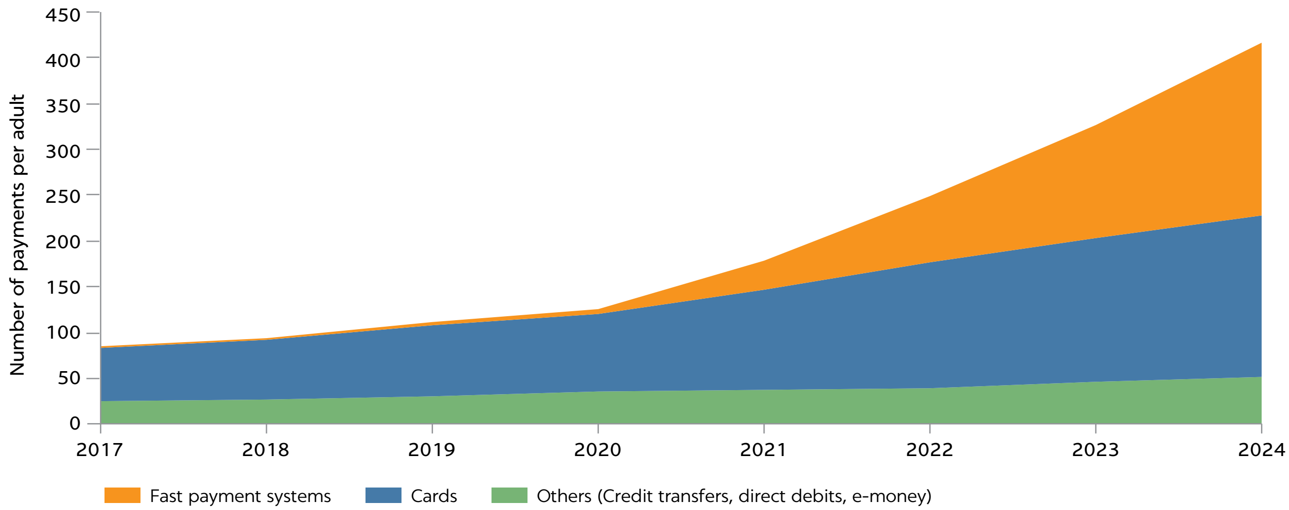
Source: Author's elaboration based on public information.

growth in digital payments. Fast payments now account for nearly 45 percent of all (centrally cleared) digital payments in LAC-11—up from just 2 percent in 2017.[21]

In a few LAC-11 countries, FPS have become the leading digital payment rail by volume, overtaking traditional card rails. In Bolivia, Argentina, Peru, Brazil, and Paraguay, FPS now account for close to or more than 40 percent of all digital transactions—70.0 percent, 56.4 percent, 48.9 percent, 47.7 percent, and 44.4 percent, respectively. Costa Rica has also shown strong FPS penetration in the digital payment market, with a 34.2 percent share. In contrast, other countries remain dominated by other forms of digital payments (principally cards). In Mexico, cards still lead with 67.3 percent, but FPS has risen to 32.0 percent. Colombia and Chile remain more heavily card-dominated, with cards making up 61.5 percent and 82.4 percent of transaction volumes, respectively, and FPS trailing at 15.6 percent and 17.6 percent, respectively. A more detailed analysis[22] reveals that Brazil and Argentina have had the strongest acceleration in the FPS share of digital payments since the FPS launch. Peru, Paraguay, and Bolivia also demonstrate solid momentum, while Costa Rica, Mexico, and El Salvador present more gradual growth trajectories. In contrast, the Dominican Republic and Chile register minimal change. These differences underscore varying levels of FPS integration into retail payment ecosystems.

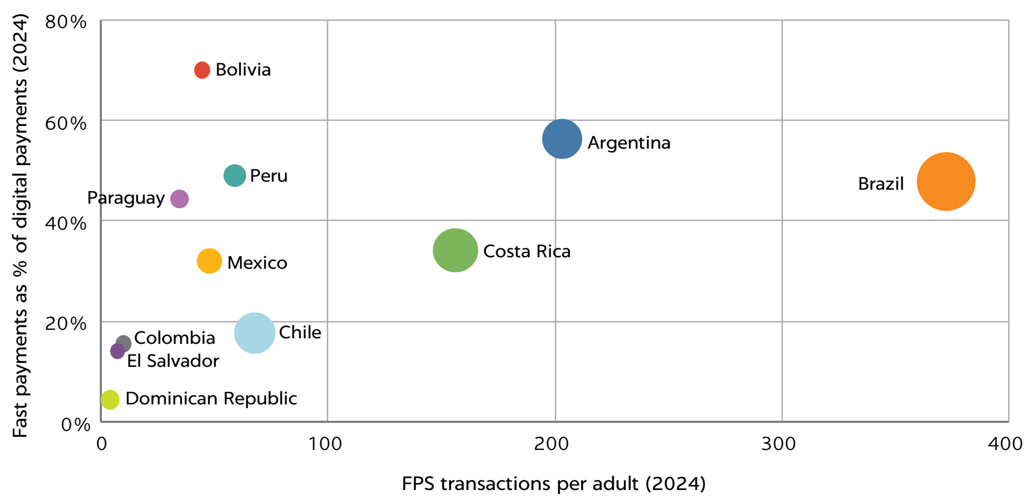
When accounting for the development of the digital payment ecosystem, some countries show greater FPS traction than others. When assessing the development of the digital payment ecosystem, the Competitive Dominance Index[23] provides a composite view of FPS traction. This index captures both the depth of adoption (usage intensity) and the relative importance of FPS compared to other digital rails. For instance, while Bolivia shows a high FPS share, accounting for 70 percent of total digital payment volumes (see Table 3), it ranks low on the 2024 index (31.3), suggest-

FIGURE 8 **Fast payments are driving the acceleration of digital payments growth in LAC-11, now representing approximately 45 percent of centrally cleared digital payments volume**



Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Notes: "Others" include only centrally cleared transactions. "Cards" include payments made with debit, credit, and prepaid cards. Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

FIGURE 9 **Fast payments now represent more than 45 percent of all digital payments in Argentina, Bolivia, Brazil, Paraguay, and Peru**



Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: The size of the bubble represents the total number of digital payments per adult in each country. Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

ing that its FPS dominance stems more from limited competition than widespread usage. In contrast, Brazil (177.8) and Argentina (114.4) lead the region, reflecting strong FPS penetration in highly digitalized markets**.**

FPS growth at this stage has complemented—rather than cannibalized—existing digital payment[24] rails, with recent growth in card payment volumes exceeding prepandemic trends. In many LAC-11 economies, card payments, after a drop in 2020 due to mobility restrictions, which hindered in-person transactions, have continued to grow at or above prepandemic rates, even alongside dramatic FPS expansion. Card payment volumes have grown 23.5 percent annually on average during 2021–24, exceeding the average annual rate of 19.0 percent during 2017–19 (see Table 4. The acceleration in card growth has been particularly pronounced in Costa Rica, Mexico, and Peru. Brazil and Bolivia were the only countries in which growth in card payment volumes slowed during 2021–24 relative to 2017–19, but in both cases annual card growth remained above 13 percent. It appears that, at this stage of FPS development in most LAC-11 countries, FPS have helped expand the overall digital ecosystem, bringing new users into formal finance and encouraging multirail usage depending on value, channel, or use case. Indeed, empirical evidence from Brazil has also shown that the introduction of *Pix* has led to greater use of payment products across a range of instruments.

Relative to card payments and other digital payment instruments, FPS are being primarily leveraged for lower-value transactions in most LAC-11 countries. Across LAC-11, FPS on average represent 45 percent of all (centrally cleared) digital payment transaction volumes but just 34 percent of all digital payment transaction values. This suggests stronger adoption of FPS for small-ticket P2P transactions and low-value P2M and limited use for higher-value use cases such as bill payments and business-to-business payments, which remain dominated by credit transfers and card rails in most countries. Indeed, the average ticket size of FPS transactions is less than 60 percent of that of non-FPS transactions in Argentina, Brazil, Bolivia, Colombia, Costa Rica, and Peru. For example, in Costa Rica, the average ticket size for an FPS transaction is $28, equivalent to just 11 percent of the average value of a non-FPS digital payment transaction ($245) (see Table 5).

TABLE 3 Competitive Dominance Index

COUNTRY	FPS TRANSACTIONS PER ADULT	SHARE OF FPS TRANSACTIONS IN DP (%)	INDEX VALUE
Brazil	372.5	47.7	177.8
Argentina	203	56.4	114.4
Costa Rica	156	34.2	53.3
Bolivia	44.7	70.0	31.3
Peru	59.1	48.9	28.9
Paraguay	34.4	44.4	15.3
Mexico	47.6	32.0	15.3
Chile	67.6	17.6	11.9
Colombia	10	15.6	1.6
El Salvador	7.2	14.1	1.0
Dominican Republic	4	4.5	0.2

Source: Author's elaboration with data provided by central banks; United Nations Population Division (adults defined as age 15+).
Note: Data includes only centrally cleared transactions, i.e. inter-PSP transactions.

TABLE 4 Card payment volumes have accelerated along with FPS in most LAC-11 countries

COUNTRY	2017–19 (%)	2021–24 (%)
Argentina	16.6	21.0
Bolivia	25.1	13.2
Brazil	20.4	15.8
Chile	19.8	19.4
Colombia	18.3	21.8
Costa Rica	12.8	23.2
Dominican Republic	9.3	18.2
El Salvador	n/a	31.6
Mexico	14.7	25.5
Paraguay	n/a	35.7
Peru	22.5	33.2
Average LAC-11 (unweighted)	17.9	23.5

Note: Compounded annual growth rate.

TABLE 5 Average size of digital payments in US dollars (2024)

COUNTRY	AVERAGE DP VALUE PER PAYMENT	AVERAGE FPS VALUE PER PAYMENT	AVERAGE NON-FPS VALUE PER PAYMENT	AVERAGE FPS / AVERAGE DP VALUE PER PAYMENT
Argentina	706	312	1,215	26%
Brazil	124	80	164	49%
Bolivia	95	59	179	33%
Chile	268	1,405	25	5,704%
Colombia	177	27	204	13%
Costa Rica	171	28	245	11%
Dominican Republic	214	2,128	123	1,726%
El Salvador	221	838	120	701%
Mexico	52	79	39	202%
Paraguay	42	62	26	242%
Peru	63	46	79	58%

Source: Author's elaboration with data provided by central banks.

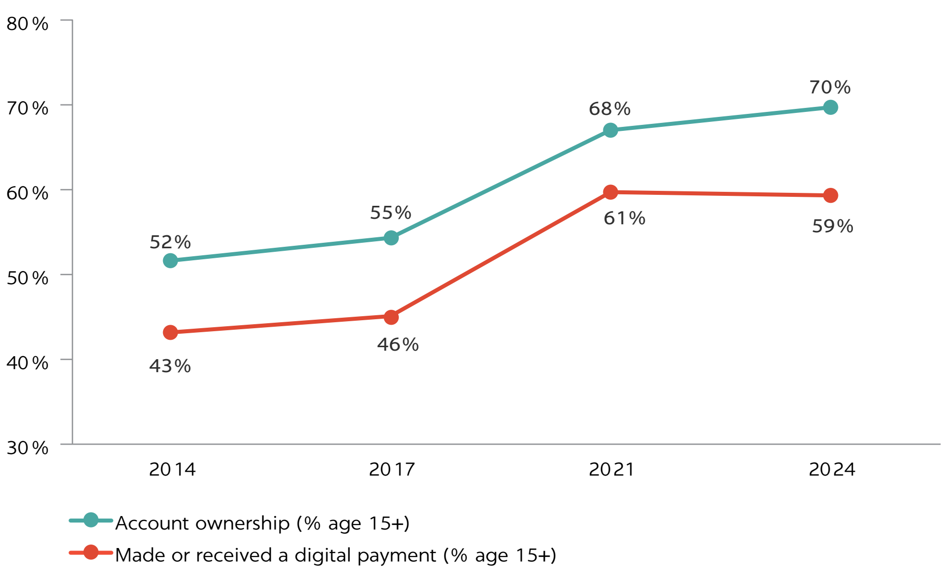
FPS in some LAC-11 markets are relevant for higher-value transactions due to design gaps for retail use, yet this also underscores their potential for business and large-value payments. In several countries, including Paraguay, Mexico, Chile, El Salvador, and the Dominican Republic, the average ticket size for FPS transactions exceeds that of non-FPS transactions (see Table 5). This outcome reflects structural considerations: either high or absent transaction limits, combined with the lack of retail-oriented design features such as limited use cases and user-friendly experiences for retail users. At the same time, this pattern highlights the potential of FPS to serve business payments and other higher-value use cases, where speed and efficiency can deliver significant benefits.

3.4 ARE FAST PAYMENTS BROADENING OR DEEPENING FINANCIAL INCLUSION?

The growth of fast payments requires basic levels of financial access—for example, account ownership—but can also serve to deepen digital financial inclusion and/or broaden financial access. Financial-sector policy makers have long distinguished between financial access and usage. Financial access is the ownership of a transaction account (with a bank or other licensed provider), while usage refers to whether the account is utilized to make payments or save. Those who have an account and use it regularly are financially included. Leveraging digital technologies such as digital wallets can generate *digital* financial inclusion. Making or receiving a fast payment requires access to an account; thus, for those with financial access, the convenience and affordability of fast payments can significantly increase account usage. Beyond payments, data generated from the use of fast payments can be leveraged by financial institutions to offer customized financial products. Recent research suggests that after an FPS is launched, the population borrowing from and saving in a financial institution rises by 3.9 and 3.0 percentage points, respectively.[25] In that sense, it is also possible that fast payments are likely to scale more quickly in markets with broad levels of ex-ante financial access (such as Brazil) compared to those with low levels of account penetration (for example, El Salvador). In theory, by increasing the utility of accounts and digital payments, fast payments can also pull unbanked adults into the formal financial sector, increasing financial access.

Account ownership and the use of digital payments in LAC has increased significantly over the past decade, but growth has slowed in the post-pandemic period. Account ownership in LAC[26] has risen significantly over the past decade, from 52 percent of adults (ages 15 and older) in 2014 to 70 percent in 2024 (see Figure 10). The use of digital payments has risen in tandem, from 43 percent of adults in 2014 to 59 percent in 2024. However, the growth rate of both indicators slowed notably from 2021 to 2024. This may reflect a trend correction following the large increases in account ownership and digital payment behavior during

FIGURE 10 **Account ownership and usage of digital payments has increased significantly since 2017, with slower progress since 2021**



Source: Global Findex Database (World Bank).

the pandemic: increases in financial inclusion after the pandemic may have been netted out by some share of the population reverting to informal financial behaviors (for example, someone who opened an account to receive an emergency G2P payment during the pandemic but did not subsequently use the account).

Fast payments appear to be deepening digital financial inclusion. The evidence on deepening digital financial inclusion is clear: digital payments per accountholder have increased 280.1 percent between 2017 and 2024, from 154.4 to 587.0 payments per accountholder per year, on average—with 60.7 percent of this growth attributable to fast payments. The increased use of digital payments via FPS also appears to be widespread across consumer segments: in Brazil and Costa Rica, more than 75 percent of adults use *Pix* and SINPE, respectively.[27] As discussed above, the data also shows that FPS growth complemented—rather than cannibalized—existing digital payment instruments, helping to expand the overall digital ecosystem and reduce reliance on cash.

The evidence for the impact of FPS on expanding financial access is more mixed. Many of the LAC countries that launched or reformed FPSs around 2020 with strong subsequent growth in fast payments during 2020–24 have also seen strong growth in account ownership between 2017 and 2024 (Findex data-collection periods). For example, account ownership grew by 33 percentage points in Argentina and 12–17 percentage points in Brazil, El Salvador, Mexico, Paraguay, and Peru during that period. For some countries—Argentina, El Salvador, and Paraguay—the growth in account ownership was spread across both data-collection periods: 2017–21 and 2021–24. For others, like Brazil, Mexico, and Peru, there was minimal or even negative growth during 2021–24. This may be because the initial burst of FPS-driven account opening was concentrated during 2020–21, at the height of the pandemic. In Costa Rica and Bolivia, there was little growth in financial access between 2017 and 2024, despite strong growth in fast payments.

Recent empirical research from Brazil does suggest that mature FPS ecosystems can drive account opening. The 2024 study finds that a 1 percent increase in the number of active users of *Pix* in a municipality leads to an increase of 0.80 percent in the number of people opening bank accounts for the first time. The study also finds complementarity effects across other dimensions, suggesting that *Pix* drove increases in the use of a range of payment instruments (not only fast payments), as well as access to credit and client growth in both traditional and digital banks. These findings suggest that more mature and inclusive FPS ecosystems—that encompass a wide range of use cases and promote interoperability across providers—do have the potential not only to deepen digital financial inclusion but also to expand financial access.

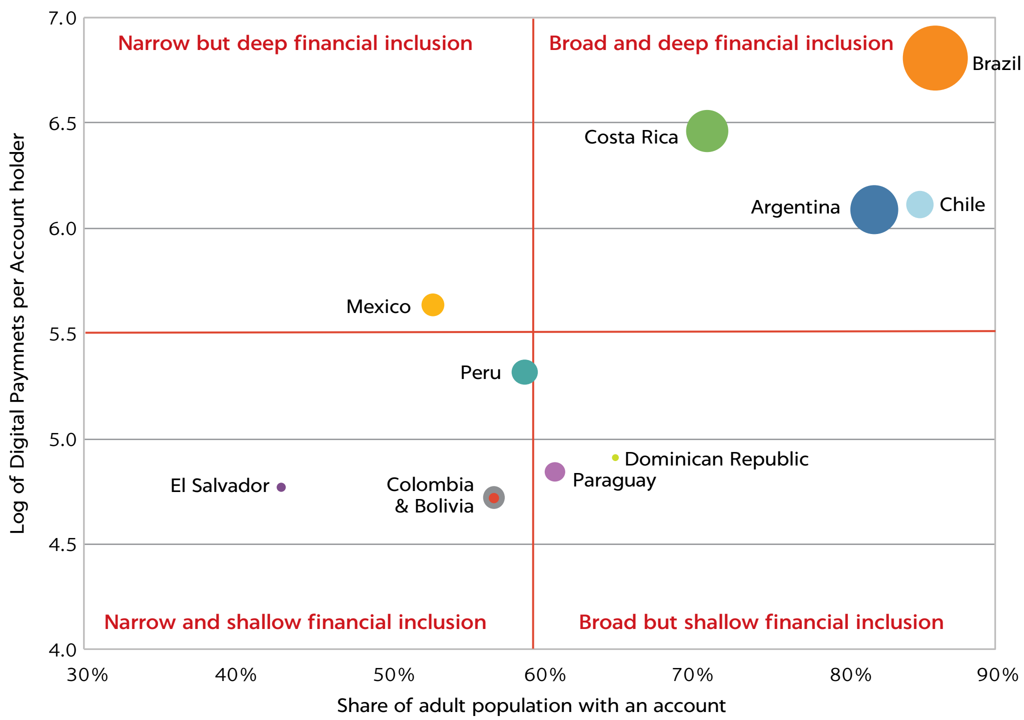
There remain significant opportunities to leverage FPS reforms to drive digital financial inclusion and financial access in Bolivia, Colombia, the Dominican Republic, El Salvador, Mexico, Paraguay and Peru. As of 2024, levels of financial access and digital financial inclusion are strongly correlated, but the residual variation also indicates notable divergence across LAC country experiences. A two-dimensional framework highlights that, while there is a broad correlation between financial access (as measured by account ownership) and digital payments usage (as measured by the average number of digital payment transactions per accountholder), there is signification variation across countries. By crossing these two dimensions, countries are classified into the following four quadrants:

- *Broad access and deep financial inclusion.* Argentina, Brazil, Chile, and Costa Rica have both broad levels of financial access (over 70 percent account ownership) and intense digital payment usage (more than 400 digital payments per accountholder per year, on average). This suggests inclusive and mature digital financial service ecosystems (often anchored in FPS).
- *Broad access but shallow financial inclusion.* Paraguay and the Dominican Republic have moderate levels of financial access (over 60 percent account ownership) but relatively shallow digital payment usage (fewer than 150 digital payments per accountholder per year on average). This suggests opportunities to further leverage FPS to drive digital payment usage.
- *Narrow access but deep financial inclusion.* Mexico has somewhat intense digital payments usage (281 digital payments per accountholder per year, on average) but concentrated among a relatively narrow population in terms of financial access (53 percent account ownership). Indeed, Mexico shows that digital and fast payments can develop and transform financial behaviors, but only among a narrow segment of the population. This suggests a need to prioritize addressing core enablers of financial access as well as ensure that FPS models are designed to meet the needs of underserved populations.
- *Narrow access and shallow financial inclusion.* Bolivia, Colombia, and El Salvador have both narrow levels of

financial access (40–60 percent account ownership) and shallow digital payments usage (fewer than 120 digital payments per accountholder per year, on average). This suggests opportunities to address both core enablers of financial access as well as further leverage FPS to drive digital payment usage.

The analysis shows a differentiation between systems that are truly inclusive and mature versus those where digital payment activity remains fragmented or concentrated in specific user groups. It is notable that the four countries classified as having broad access and deep digital financial inclusion—Argentina, Brazil, Chile, and Costa Rica—are also those with the largest number of *fast* payments per adult (as indicated by the size of the bubble in Figure 11). Opportunities to leverage FPS to drive digital payment usage may be most relevant in Bolivia, Colombia, the Dominican Republic, El Salvador, and Paraguay. The analysis also shows that complementary reforms to drive financial access—for example, legal and regulatory frameworks that enable competitive and diversified financial sectors, the development of agent networks, robust consumer protections, etc.—are particularly urgent in several countries including Bolivia, Colombia, El Salvador, and Mexico.

FIGURE 11 Digital payments can help drive financial inclusion progress but broader reforms are also needed



Source: Author's elaboration with data from central banks and the Global Findex database (World Bank).
Note: The size of the bubble represents the total number of FPS payments per adult in each country.

4 FAST PAYMENTS CHALLENGES IN LATIN AMERICA AND THE CARIBBEAN: GOVERNANCE AND INTEROPERABILITY

Governance arrangements are a critical determinant of FPS scale and impact in LAC, whether the FPS is publicly or privately owned. FPS ownership models vary across the region. Neither public nor private ownership alone determines FPS implementation outcomes; on the contrary, regardless of the ownership model, governance arrangements are a critical component of any organization and have a bearing on sound decision-making, accountability, and the pursuance of public policy goals. Governance, as per the PFMI, is the set of relationships between owners, boards of directors (or equivalent), management, and other relevant parties in a payment or other settlement system, including participants, authorities, and other stakeholders.[28] While no one governance approach works for every country/FPS, this section argues that certain elements of the governance framework require careful consideration if FPS are to scale and generate meaningful impact on digital transformation and inclusion. The section also outlines how markets with multiple FPS—a recurrent feature of the LAC FPS journey (see Section 1)—can face more complex governance challenges.

Interoperability is another key challenge for fast payments that is closely intertwined with governance arrangements. Interoperability refers to the ability of different payment systems, platforms, and service providers to connect, exchange, and use information seamlessly across institutional and technical boundaries. At its core, interoperability ensures that users can initiate and receive payments regardless of the specific provider, wallet, or network they are using. This ability to transact fluidly across systems enhances user experience, expands choice, and promotes inclusion. True interoperability spans multiple layers—technical, operational, legal, and business. This involves harmonized standards for APIs, settlement, alias management, and user interfaces. Without such alignment, financial ecosystems remain fragmented, limiting the scale and impact of payment innovations. Sound governance arrangements support the consideration of public interests, including broad interoperability, and provide a transparent and inclusive environment for complex technical and business negotiations. Conversely, where governance arrangements fail to recognize and mitigate conflicts of interest, or stakeholders are not involved in major decisions, interoperability challenges are more likely to arise.

This section identifies the main issues for FPS governance and interoperability in LAC and discusses strategies to address them. Section 3.1 describes key trends in LAC FPS governance and extrapolates observations for adapting governance frameworks to the changing fast payment landscape. Section 3.2 discusses interoperability challenges stemming in particular from multiple FPS schemes and identifies different approaches to overcoming these challenges to achieve ecosystem-level interoperability. Section 3.2 also discusses opportunities for interoperability between FPS and digital ID.

4.1 ADAPTING GOVERNANCE FRAMEWORKS TO NEW MARKET REALITIES

Governance is a well-understood concept that has been comprehensively covered by international standards and

guidance (see Box 4); therefore, this section focuses on specific issues that have emerged in the LAC FPS evolution thus far. FPS evolution in LAC highlights the following three key trends:

i. ***Compared to other regions, LAC hosts more markets with multiple FPSs and a combination of public and private fast payment initiatives.*** Bolivia, Colombia, and Peru each has three or more FPSs and had at least one privately operated FPS prior to the central banks implementing/deciding to implement their own FPS. These central banks have invoked market failures, competition, interoperability, financial inclusion, and resilience.[29] Through Bre-B, Colombia's interoperable fast payment ecosystem, the central bank has outlined the key elements of a governance framework for a multi-FSP market that rests on regulatory-driven harmonization and central bank provision of critical ecosystem functions (settlement in central bank money, centralized alias directory), as well as a public system that will compete with private networks and interconnect with them following the same standards and obligations (see below).[30]

ii. ***More central banks in the region have become FPS operators.*** Of 16 FPS in 11 jurisdictions covered in the World Bank survey, half are operated by central banks. The forthcoming launch of *Drixi,* the Colombian central bank's own FPS, and the collaboration between the central bank of Peru and NPCI, will likely tip the scale against privately operated FPS. Only five years ago, prior to the launches by the central bank FPS of Brazil, El Salvador, Bolivia, and Paraguay, privately operated FPS dominated the regional landscape. Interestingly, there are no examples in LAC of joint public-private ownership models as seen in other regions—for example, in Jordan, Malaysia, and Türkiye.

iii. ***Central banks that do not operate an FPS require proactive tools to steer private initiatives toward, and/or induce when warranted, public policy objectives.*** Such tools may include regulation, stakeholder convening, and oversight. Nevertheless, enforcement can be challenging in practice. Argentina provides a unique example of three private infrastructures (COELSA, Prisma, and Banelco) operating under a public mandate and harmonized scheme rules, coupled with public-private collaboration on technical aspects through the *Comisión Interbancaria para los Medios de Pago de la República Argentina*.

From these trends, it emerges that fast payments lie at the heart of a complex interplay of cooperation and competition in LAC retail payment markets[31]—where governance can play a decisive role. Retail payments efficiency and other important public policy objectives like financial inclusion are largely influenced by the degree of cooperation and competition in a given market. For decades, LAC central banks have endeavored to achieve a better cooperation-competition nexus, following very different patterns of involvement in retail payment markets. The general rule of "cooperation in the upstream market and competition in the downstream market" remains broadly valid for FPSs and should (continue to) guide central bank action. The experience of Brazil with *Pix* could be interpreted as illustrating the merit in public-service provision of bypassing the complexity and fragmentation of traditional retail payments infrastructure that held off market development. By contrast, public-service provision might be more difficult to justify without the benefits of consolidation and might need to put a stronger emphasis on enabling cross-network interoperability (see Section 3.2).

FPS can significantly expand central bank operational responsibilities; moreover, as FPS operators, central banks will continuously need to ensure that their FPSs are up to date with market trends and innovations. Decision-making on issues like this at a central bank is quite different from that of a profit-seeking private operator. Reliance on forums with wide stakeholder representation, such as the *Pix* Forum in Brazil, can be used to help central banks make better decisions in this regard (see Box 5).

Central banks that operate FPS also need to continuously reassess the rationale and form of public-sector intervention. Some central banks that operate an FPS have had achieving lower prices for end users as one of their objectives for engaging in this role. If this involves some form of subsidization, at some point these central banks will have to ask themselves whether maintaining this policy over the medium term and beyond will not deter the private sector from developing other fast payments solutions—some that could be superior to what is currently offered (on a subsidized basis) by the central bank.

When the central bank acts as owner/operator and is also the regulator and overseer of retail payment systems and services, it needs to consider how best to address any possible conflicts of interest. This issue is not new—insofar as central banks often operate retail payment systems like cheque clearing systems and automated clearinghouses, and also oversee them—butmay be exacerbated in the event of the coexistence of an FPS operated by the central bank with FPS operated by the private sector, and in markets where traditionally the central bank has con-

BOX 3 INTERNATIONAL STANDARDS AND GUIDANCE ON GOVERNANCE WITH RELEVANCE TO FPS

A leading general reference is the G20/OECD Principles of Corporate Governance, which aim to provide *"shareholders, board members and executives, the workforce and relevant stakeholders, as well as financial intermediaries and service providers with the right information and incentives to perform their roles and help to ensure accountability within a framework of checks and balances."*

There is also extensive guidance for financial market infrastructures (FMIs), of which FPSs are a subset. The PFMI set out the international standards for FMIs. Principle 2 states: "An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders."

The G20 Global Partnership for Financial Inclusion has made a recent contribution in the paper "Policy Recommendations for Advancing Financial inclusion and Productivity Gains through Digital Public Infrastructure (DPI)." Its focus is on DPI—that is, interoperable, open, and inclusive systems to provide essential, society-wide, public, and private services. Digital payment systems (especially FPSs) are one of three main types of DPIs. The following policy recommendations in the guidelines are relevant to governance of FPS:

- *Policy recommendation 2:* Develop well-designed DPIs and the broader enabling environment through a widely accepted set of good practices.
- *Policy recommendation 3:* Encourage appropriate risk-based regulation, supervision, and oversight arrangements for financial-sector use of DPIs.
- *Policy recommendation 4:* Promote sound internal governance arrangements.

Focusing more specifically on retail payment systems, the World Bank published "Governance of Retail Payment Systems: Keeping Pace with Changing Markets" in 2021. It expands on the PFMI in the specific area of retail payment systems, noting their increasing economic significance, diverse stakeholder communities, and complex policy trade-offs. The paper draws on examples from around the world to provide specific guidance on key governance issues and concludes with 11 themes for consideration for stakeholders of such systems, including

- Designing for the public interest;
- The roles of public authorities, particularly the central bank;
- Stakeholder involvement in governance;
- Transparency and management of perceived conflicts of interest; and
- The need for ongoing review and evolution of governance as market circumstances change.

Source: A Practitioner's Guide to Governance of FPS, Project FASTT Focus Note, World Bank, July 2025, *https://fastpayments.worldbank.org/sites/default/files/2025-07/FPS_Governance%20Note_Final.pdf*.

fined its operational role to systemically important payment systems and other financial market infrastructures. For FPS, the essence of this conflict lies in the potential lack of objectivity or conflicting interests within the institution, which in the extreme may lead the central bank, in its role as regulator/overseer, to set standards that may put private FPS at a disadvantage or hold them to higher standards. The PFMI recognize this conflict and address it through the functional independence of the operational and oversight functions. The central bank must ensure that it applies regulatory and oversight standards consistently to all FPS. Central banks may need to review the internal organization of payment functions to achieve clear separation of operator and oversight functions.[32]

The growth of fast payments emphasizes the urgent need to expand the central bank oversight toolbox. This might require increasing oversight resources and updating oversight frameworks and methodologies. A more prominent role as operator does not downplay the significance of central bank oversight. In some countries, volumes of transactions, the role the FPS plays within the economy, and a lack of substitutability may warrant the application of the PFMI or a subset thereof.

Regarding the governance arrangements of private FPS, in some cases a positive evolution has been observed, mainly due to the growing involvement of the central bank as regulator and overseer. As mentioned earlier, the

BOX 4 ‘*PIX* FORUM’

In Brazil, a working group was created to collaborate with *Banco Central do Brasil* (BCB) on the development of *Pix*. This dialogue platform contributed significantly to the design of the system. Therefore, BCB decided not to dismantle it after publication of the general framework and converted it into a permanent advisory committee (coordinated by BCB) with a consultative function. The committee is called the *Pix* Forum.

The forum’s purpose is to support BCB in the establishment of the rulebook for the system, and it maintains the original constitution and engagement rules. (That is, BCB poses technical consultations to the forum, which provides feedback for the central bank to analyze, informing development decisions and presenting technical proposals.) The forum gathers four times per year; general meetings involve about 300 participants and dedicated working groups on specific topics.

The members of the *Pix* Forum are *Pix* participants, national associations representing end users, providers and potential providers of IT services (individually or through representative associations of national scope), and clearing houses, as well as providers of clearing/settlement services that offer liquidity-provision mechanisms within the scope of *Pix*. Thematic working groups may be set up to address specific issues, such as business, standardization, and technical requirements; IP messages; and security.

Source: A Fast Payments Championing Handbook for Central Banks, Project FASTT Focus Note, World Bank, June 2024.

PFMI have been a guide for central banks also for overseeing retail payment systems. Principle 2 on governance requires a financial market infrastructure to have objectives that explicitly support public interest considerations, among other features. Hence, in several countries the regulator/overseer has made it clear, including via specific regulatory provisions, that privately operated FPS can no longer be run simply as a profit-maximizing venture and/or one that caters solely to the interests of a small group of large shareholding banks. This kind of central bank influence cannot yet be regarded as the general case in LAC, though. More often, central banks play a pivotal role in making it a reality for nonbank PSPs to act as direct participants in an FPS. These efforts might be moot in the absence of modern payment service regulation and authorization/licensing and oversight frameworks for nonbank PSPs. In some countries, systems controlled by a consortium of large banks may still be reluctant to allow these nonbank PSPs—and even smaller banks—as direct participants, often with the argument of preserving the safety of the FPS arrangement.

International experience offers different models of private scheme governance and mechanisms to ensure adequate consideration of public interests. Poland’s KIR and South Africa’s BankservAfrica are bank-owned operators that have a mechanism for smaller participants to be collectively represented in shareholding and on the board alongside large banks that appoint their own directors. At KIR, this role is performed by the banking association; at BankservAfrica, a special corporate vehicle is owned collectively by smaller participants, who have the right to appoint a director. In South Africa, the board itself appoints a minority of independent directors to sit alongside owner-appointed directors, bringing different perspectives and skills to the board. In India, the Reserve Bank of India appoints its own director to the board of bank-owned NPCI.

4.2 ACHIEVING ECOSYSTEM-LEVEL INTEROPERABILITY

Some countries made notable progress in fostering interoperability through their FPS, demonstrating that inclusive design and nonbank participation can significantly enhance reach and system utility. Brazil’s *Pix* and Costa Rica’s SINPE, among others, offer examples of systems that allow nonbank participants, such as e-money issuers, fintechs, and other PSPs, to directly access and operate within the national infrastructure. This inclusive model has expanded system reach, enhanced service diversity, and increased usage across various demographic segments. By enabling direct access to the payment infrastructure, these systems reduce dependence on traditional banks, lower transaction costs, and create more opportunities for innovation in digital payment offerings.

In other markets, the coexistence of two or more schemes highlights the necessity of interoperability frameworks. An increasing number of countries now host multiple FPS platforms—sometimes simultaneously developed by central banks, private banks, and fintech consortia. These coexisting platforms often operate in isolation, leading to parallel systems with different rules, standards, and technical specifications. This fragmentation can result in poor user experience and inefficiencies and pose increased costs for integration, and it is especially problematic for large-volume users such as governments, utilities, and digital merchants, who must support redundant systems. Without harmonized interoperability frameworks, these schemes risk duplicating infrastructure and locking users into specific channels. Full ecosystem integration requires enabling transactions across these FPS schemes to enable users and merchants to move funds freely, regardless of the origin platform. If these issues are left unaddressed, the benefits of FPS modernization may be undercut by a fractured digital payment landscape. Card networks' real-time payment capabilities, such as instant push-to-card transfers, can expand consumer options and may be instrumental for digital wallet interoperability (for example, Yape-Plin interoperability in Peru).[33] However, they are not fully integrated within cross-scheme interoperability frameworks.

As FPS expand into merchant environments, integration with POS systems has emerged as a major use case. Real-time payments at the POS promise lower costs and faster settlement for merchants, but their effectiveness depends on seamless coexistence with card-based systems. In most markets, FPS and card payments are processed through separate hardware, QR codes, and authentication flows. This duality creates friction for both consumers and merchants, who must toggle between systems or manage multiple devices. Interoperability between FPS and card schemes at the POS level can significantly enhance user experience by enabling real-time payments through existing acceptance infrastructure. For this to happen, systems must share QR standards and support tokenized credentials.

The growing adoption of QR codes as a versatile acceptance method requires common standards and amplifies the urgency for interoperability to avoid inefficiencies. QR code payments are becoming increasingly popular across LAC due to their low-cost implementation and smartphone ubiquity. Yet many FPS, banks, and digital wallets deploy their own QR formats, which are not readable across platforms. This lack of standardization prevents merchants from using a single code for all customers and forces users to check whether their app supports a given QR. It also increases reconciliation complexity for acquirers. National or regional QR standards—based on EMVCo or similar—are essential to foster interoperability. These should support both dynamic and static QR formats and embed metadata that allows routing across networks. Governments should mandate these standards and promote their adoption across schemes to ensure consistency, reduce merchants' burden, and foster seamless acceptance.

However, format standardization alone is not enough; initiation channels like QR codes and NFC must enable seamless access to multiple networks through a single point of interaction. While harmonizing QR code formats is a valuable first step toward interoperability, true ecosystem efficiency demands more than standardized design. In LAC, most schemes have adopted QR codes and, increasingly, NFC as low-cost, user-friendly payment-initiation methods. However, these are often tied to proprietary networks, locking both merchants and consumers into specific platforms. As a result, a merchant must display multiple QR codes or install different interfaces to serve various customer segments, while consumers must navigate fragmented acceptance environments. The future of payment initiation should be network-agnostic, allowing a single QR or NFC touchpoint to dynamically route transactions across FPS, card networks, or other schemes, regardless of the origin.

The introduction and expansion of FPS are expected to further reshape market structure while incumbents seek to retain market share. As FPS continue to gain traction, their disruptive potential will continue to trigger strategic responses from traditional players who see their market position challenged. Many incumbents are developing proprietary or consortium-led alternatives—often with overlapping functionalities—to retain their market position and customer relationship. LAC markets may continue to see a multiplication of platforms with fast payment capabilities, each vying for dominance. While such diversity can foster competition and innovation, it also increases inefficiencies and creates inconsistent user experiences. Without policy intervention to guide these systems toward technical and operational interoperability, the region may find itself with an abundance of real-time payment options that are functionally siloed.

In this context, it is imperative for central banks to prioritize the development of interoperability frameworks in consultation with the private sector. Regulators and market participants in LAC face a variety of strategic pathways to achieve interoperability, depending on their market structure, stakeholder landscape, and policy priorities. While some countries may benefit from consolidating existing systems under a unified infrastructure, others will need to support coexistence. The decision to pursue a specific model depends on the degree of fragmentation, overlap in use cases, and institutional and governance factors.

There are three main approaches to interoperability: single-system, multitenant, and cross-network.[34] A single-system approach relies on centralization, where most participants operate within one core platform using unified standards. A multitenant model allows distinct systems to coexist while offering users a single access point to various payment networks. Cross-network interoperability focuses on enabling inter-network clearing and settlement. These approaches are not necessarily mutually exclusive but can be deployed sequentially or in combination. For example, multitenant access and cross-network approaches can be integrated to provide full interoperability. A structured decision framework can guide authorities through the trade-offs and implementation complexities of these models (see Table 6).

TABLE 6 **Interoperability models**

MODEL	IMPLEMENTATION CONSIDERATIONS
Single-system, via mandatory participation or reachability (receive-only) requirements *Example:* Brazil, Costa Rica, Mexico	• This model requires a clear legal basis for mandatory participation in a given system. • The designated system must have scalable capacity, be flexible enough to accommodate multiple use cases/services based on market needs, and have a governance framework in line with international standards. • This model allows for minimal market disruption.
Cross-network, via an "interoperability facilitation layer" that allows transaction routing, alias resolution, and cross-network settlement. *Example:* Argentina, Colombia	• This model is suitable for markets characterized by a combination of multiple networks and a limited degree of cross-membership. • Systems are broadly compatible (for example, in terms of message format, access criteria, and technical design features). • The central bank or independent entity is willing to own and operate the interoperability facilitation layer.
Multitenant. Users can access different instruments (for example, instant credit transfers, cards, e-money) from the same point of interaction.	• This model is suitable for contexts characterized by a combination of multiple networks and a significant degree of cross-membership. • Networks have misaligned message formats, access criteria, and technical design features that hinder cross-network interoperability. • This model allows for competition at the point of interaction but does not alone enable cross-network transfers.

FIGURE 12 **Interoperability models**

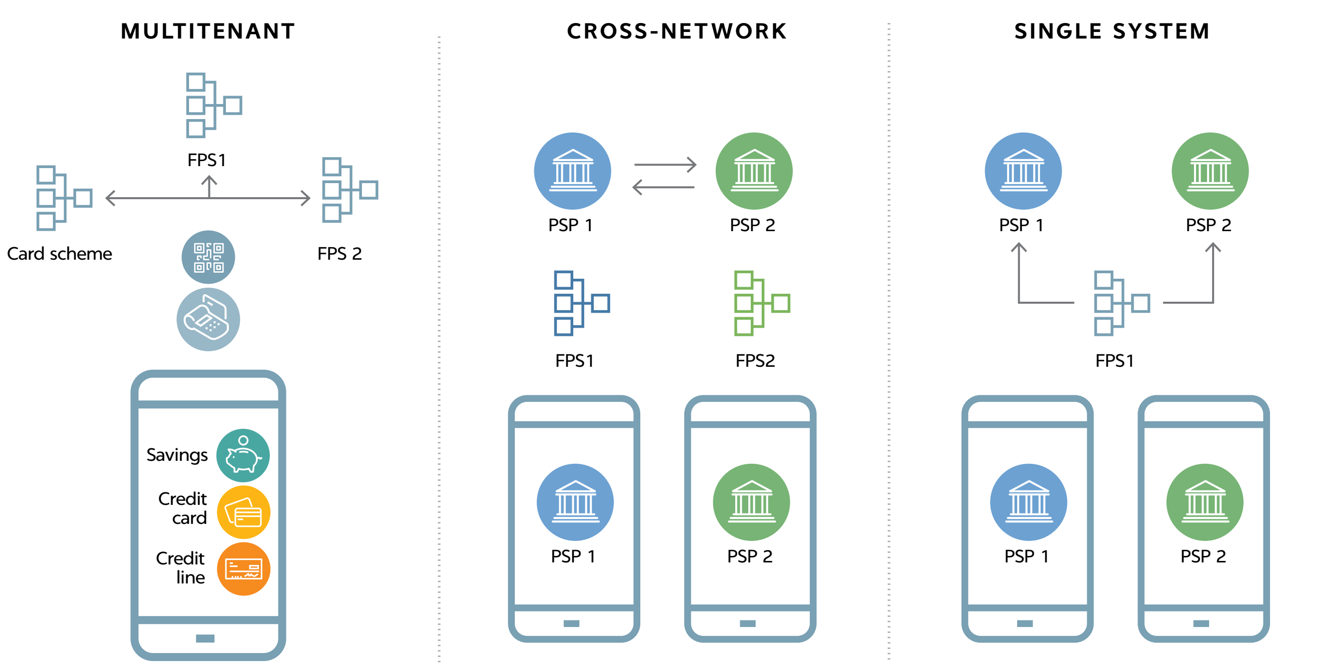
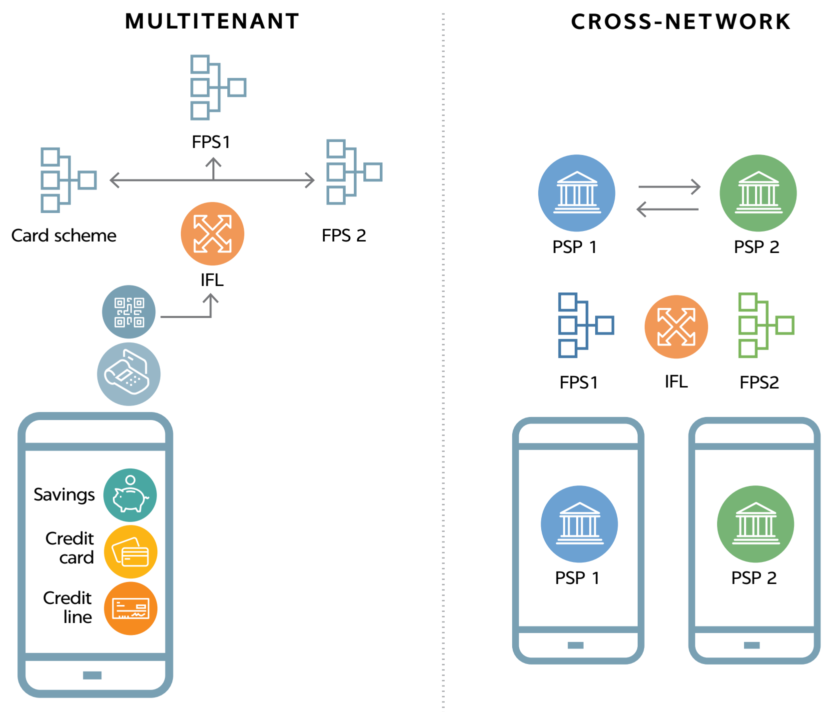


FIGURE 13 **Role of Interoperability facilitation layers in multitenant and cross-network models**



Multitenant QR infrastructure offers a practical and scalable path to interoperability in LAC's fragmented retail payments landscape. The most immediately viable option for enabling ecosystem-level interoperability in LAC may be a multitenant model that allows multiple payment schemes to coexist and interoperate through a shared access point. Singapore's SGQR+ offers a compelling example (see Box 6). Instead of treating QR codes as static identifiers tied to specific platforms, SGQR+ reframes them as dynamic, scheme-neutral access points, allowing merchants to display a single code while customers use any wallet, card, or app. This model minimizes onboarding friction, simplifies integration, and improves acceptance coverage, goals directly relevant to the LAC context.

Building ecosystem-level interoperability requires a holistic policy and infrastructure agenda that goes beyond technical integration. As part of this multistakeholder agenda:

i. Stakeholders should consider what governance structures are best placed to support the design and implementation of interoperability frameworks. For example, Colombia's Fast Payments Interoperability Committee is a standing consultative group prescribed by central bank regulations that helps in the development of technical standards, protocols, and procedures.

ii. Regulators should adopt a functional approach to payment service regulation, ensuring that risk-proportionate rules apply consistently across PSPs.

iii. Central bank overseers and system operators should promote fair and open access frameworks to payments infrastructure, enabling participation for a wide range of providers that meet the relevant risk-based requirements.

iv. Policy makers should promote alignment of risk-management standards, including authentication standards and fraud-management and incident-response protocols, among others.

v. All stakeholders have a role in user education to get the full benefit from interoperability, through targeted communication campaigns, clear labeling, intuitive user interfaces, and multilingual support, among others.

vi. To maximize the benefits of interoperable systems for their economies, governments should leverage FPS in public-sector use cases, such as social benefit disbursements, tax collection, fines, tolls, and public transportation.

vii. Finally, aligning domestic regulation with global standards such as ISO 20022 can also facilitate cross-border interoperability and foster regional financial integration.

The interoperability paradigm extends to the interaction between FPS and digital ID initiatives. Governments and civil registries are increasingly investing in the digitization

BOX 5 SGQR+ AS A MODEL FOR MULTITENANT INTEROPERABILITY

SGQR+ in Singapore demonstrates how a multitenant architecture can unify fragmented retail payment ecosystems. Rather than serving as a static format, the QR label functions as a dynamic gateway, embedding multiple payment payloads and routing transactions across schemes.

Key features include the following:

- *Unified merchant access:* A single QR label supports multiple wallets, FPS, and card-based payments, reducing onboarding and integration burdens.
- *Switch-based routing:* A central switch (for example, Liquid Group) dynamically routes transactions to the correct acquirer or issuer based on scheme and wallet logic.
- *Merchantcentric design:* Merchants interact with one acquirer and receive consolidated settlement, reporting, and support, regardless of the payment method used by the customer.
- *Scheme-level interoperability:* Commercial agreements and interoperability are managed at the scheme level, eliminating the need for bilateral integrations.
- *Embedded competition:* The model encourages competition among PSPs and wallets, while offering merchants and consumers seamless experiences at the POS.

of foundational ID systems, introducing verifiable credentials, digital ID cards, and e-KYC registries. However, these efforts are often developed in silos, with limited coordination between ID authorities and financial-sector policy makers. As a result, critical opportunities to use digital ID as a catalyst for financial access, particularly through FPS, as well as for building trust in digital payments through increased security, remain untapped. Without considering how digital ID can interface with account opening, authentication, and payment verification, LAC countries risk designing ID systems that are technically robust but financially disconnected.

Digital ID also has the potential to enhance interoperability and usability across multiple financial accounts and platforms. In many cases, LAC consumers may face fragmented access to payments, having to switch between apps, reauthenticate with each provider, and manage disconnected credentials to complete everyday transactions. By linking digital ID systems to payments infrastructure, users could authorize access to multiple accounts through a single interface, regardless of the institution. This would lower complexity, support new services like delegated bill payments, and expand merchant acceptance of digital payments. In short, coordinated digital ID and FPS strategies can unlock the next generation of inclusive finance in the region—making digital services more accessible, trusted, and relevant for all.

Despite an intense policy debate, there is limited research or experience on co-existence and interoperability of FPSs and retail central bank digital currencies (CBDCs).[35] This debate is centered on the question of how FPSs and retail CBDCs compare and interact with each other, and the timing and sequencing of reforms. LAC hosts two out of three live CBDCs in the world—Bahamas, Jamaica and Nigeria. Unlike Nigeria, Bahamas and Jamaica do not have an FPS. Based on the 2024 BIS Survey on CBCDs and crypto, 21 percent of central banks of emerging markets and developing economies (EMDEs) are piloting retail CBDCs.[36] In the LAC region, there were early "retail CBDC-like" experiments in Uruguay and Ecuador. More recently, the Eastern Caribbean Central Bank launched a pilot, which encountered technical issues; at the time of writing this report, the central bank has closed the pilot. The central bank of Peru also conducted a pilot with a telecommunication company to explore CBDC as a tool to expand access and usage of digital payments.[37] Like FPSs, these initiatives are often driven by the aim of enhancing financial inclusion, and of improving the safety and efficiency of domestic payments. Not only do FPSs and retail CBDCs share the same motivations, but they also share similar features, e.g., the ability to support instant and low-cost transfers for end users. Some central banks hence question the value of retail CBDCs if an FPS is already in place, and many see a case for building an FPS first.[38] As jurisdictions continue to explore and implement FPSs and retail CBDC systems, the compatibility and interoperability between both is likely to warrant further attention. This field of research remains relatively new and limited (see Box 7).

BOX 6 EXPLORING DIGITAL ID AND FPS INTEROPERABILITY

The World Bank is actively exploring new concepts and mechanisms to enhance interoperability between digital ID systems and FPS. This work aims to address persistent barriers around account access, fragmented user authentication, and the lack of secure, unified interactions across financial service providers. At the heart of this exploration are two emerging concepts: the Trusted Access and Credentialing Hub (TACH) and the Payments Identity Credential (PIC).

TACH acts as a back-end trust infrastructure that connects FPS, national ID systems, and financial institutions to validate ID attributes, manage credential issuance, and support real-time authentication. PIC, in turn, is a user-held digital credential that bundles key attributes—including ID, KYC status, and account metadata—enabling individuals to authenticate and authorize transactions across providers with minimal friction. Together, these components offer a scalable framework to link digital ID with payments in a consent-driven, privacy-preserving manner.

This approach is currently being refined through analytical work and early country engagements. It offers a path toward faster, more inclusive onboarding, improved confirmation of payee, seamless access to multiple accounts, and new services for underserved populations.

Source: Digital ID Meets Fast Payments: Enabling Trusted, Inclusive Fast Payments through Digital Identity, forthcoming.

BOX 7 OUTCOMES OF WORLD BANK INVESTIGATION OF INTEROPERABILITY BETWEEN CENTRAL BANK DIGITAL CURRENCY SYSTEMS AND FPSS

The interoperability between CBDC systems and other payment systems is essential to avoid fragmentation in the national payment system. For the CBDC to be used in a jurisdiction it should have the rails to be exchanged with existing payment instruments; otherwise, it would have limited practical value. Interoperability with other domestic payment infrastructures is a key challenge in CBDC design. CBDC interoperability with payment systems such as the RTGS system or an FPS and exchangeability with other forms of money (e.g., commercial bank money, e-money, and cash) are essential for a smooth end-to-end payment flow. Positioning the CBDC system correctly within an NPS is crucial for its successful implementation.

Three high-level scenarios for the interoperability of CBDC systems with other domestic payment systems were identified, as follows:

1. Interoperability between a wholesale CBDC (wCBDC) system and an RTGS system. This would be used mainly to buy and sell CBDC to PSPs.
2. Interoperability between retail payment systems and wCBDC, where the retail payment systems settle the net results in the wCBDC.

- Interoperability between FPS and retail CBDC systems, where users connected to the FPS through their PSPs would be able to transfer value to rCBDC users, with real-time settlement at the beneficiary account/wallet.

The experimentation proof of concepts focused on the second and third scenarios. The team experimented with a distributed ledger technology (DLT)-based CBDC system and the Mojaloop Foundation's open-source software, Mojaloop to simulate an FPS environment. The experimentation produced the following lessons learned:

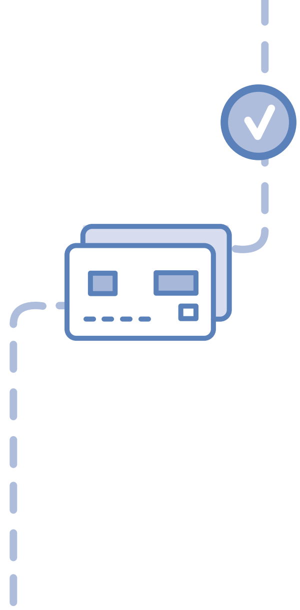
- Interoperability between FPS and CBDC systems may require using common components such as address resolution services.

continued

BOX 7, ***continued***

- The use of a bridge component to avail links among different payment systems could be very useful in isolating the logic of the transfer and the message format from individual systems, and shifting these functionalities to a dedicated module.
- Differing technical standards for payment message standards, API designs, etc., can lead to complexities in the services of the interlinking bridge.
- The open-source real-time payment system (Mojaloop) provided an effective way to simulate traditional retail payment systems. However, it can involve a steep learning curve to understand the infrastructure and run the set-up.
- If the CBDC system leverages programmability, it might enable interesting features on locking the funds and triggering settlement of successful funds transfer in traditional systems. While this approach has benefits in reducing counterparty risk, it could also introduce complexity and security tradeoffs.
- Smart contract-based CBDC designs can interoperate with traditional external systems through bridging oracle services, and by communicating messages and actions across different systems.
- While the interoperability bridge is technically feasible, it may introduce certain trust assumptions and require trusted third parties to operate the bridge connecting PSPs and users in two different payment systems. The central bank could best fit this position.

Source: World Bank. 2024. Interoperability Between Central Bank Digital Currency Systems and Fast Payment Systems: A Technical Perspective. Technology & Innovation Lab, *https://openknowledge.worldbank.org/server/api/core/bitstreams/a6f91b4c-32ee-4962-b51f-e164fb046f6c/content*



5 LEVERAGING FAST PAYMENTS TO SUPPORT INNOVATION AND DIGITAL FINANCIAL INCLUSION

Fast payments have the potential to drive innovation and accelerate digital financial inclusion. In LAC, this potential is still somewhat hindered by limited use cases and access channels. Furthermore, if risks are not properly managed, consumer trust may be undermined. This section discusses strategies to leverage fast payments to support greater innovation and digital financial inclusion while addressing key risks, such as fraud, and ensuring resilience. Section 4.1 focuses on expanding still-limited diversity of payment use cases, covering P2M payments, large-volume recurrent payments, and the integration of fast payments with open finance. Section 4.2 emphasizes access channels and initiation mechanisms aligned with users' needs and capabilities. Section 4.3 discusses strategies to protect FPS from fraud and ensure operational resilience.

5.1 EXPANDING USE CASES

Most FPSs in the region remain dominated by a single use case. P2P transactions are the most widely implemented use case across FPS in LAC-11. P2P transactions have been prioritized due to their lower complexity, market needs, and broad appeal. All 11 countries surveyed (see Section 2) support P2P transactions, reflecting the foundational role of this use case in driving early adoption. But, as of 2024, only a few countries (Argentina, Brazil, Peru, and Colombia) have deployed dedicated P2M functionality." Limited adoption of use cases beyond P2P in many countries signals a missed opportunity for broader ecosystem impact and risks cementing FPS as underpinning niche products, rather than foundational public infrastructure. For example, support for USSD and offline payment capabilities and integration with credit lines remain limited at the time of writing this report.

P2M payment use cases remain underdeveloped; only six FPS support them. P2M payments are critical for expanding the utility of fast payments for everyday transactions and can also help increase competition in the retail payments market. FPS in Argentina, Bolivia, Brazil, Chile, Colombia,[39] and Peru support P2M payments.

Use cases for G2P payments and person-to-government (P2G) payments are increasingly supported. In particular, G2P transfers are supported in seven countries, but with limited capabilities, mainly focused on disbursements such as vendor payments and salaries, with no significant integration of social-protection cash transfers and their usage, while only four countries support P2G payments, limiting the potential of FPS to streamline tax and bill collection.

Brazil's FPS offers the broadest set of use cases, while Argentina, Bolivia, and Chile support the four core use cases (P2P, P2M, G2P, and P2G). Brazil leads on use cases by supporting all four core use cases and business-to-business and government-to-government payments.[40] In contrast, Paraguay and the Dominican Republic show the narrowest coverage; their FPS focuses exclusively on P2P transactions and lacks integration for merchant or government payments. Argentina, Bolivia, and Chile each supports the four key use cases. Mexico and El Salvador provide limited coverage beyond P2P and G2P, while Costa Rica offers a slightly more expanded mix. In Colombia and Peru, both characterized by multiple FPS, the entry of new schemes encouraged use-case innovation.

While the survey focused on domestic use cases, it is important to note that, unlike FPS in other regions, LAC FPS do not currently support cross-border payments. LAC trades much less than other regions/countries with similar characteristics, particularly at the intraregional level (accounting for only 14 percent of its total goods trade), due to poor infrastructure, low quality of human capital, and inadequate governance.[41] World Bank data points to opportunities to reduce remittance costs—5.79 percent on average, almost double the United Nations Sustainable Development Targets and G20 goal of 3 percent—which could be extrapolated to payments to micro, small, and medium-sized enterprises.[42] Yet most countries have not yet considered FPS interlinking or engaged in a formal exercise to assess technical standardization and regulatory alignment requirements. They differ significantly in system design, messaging standards, alias-management models, and service levels; these differences can hinder interlinking/integration initiatives. Market structures dominated by incumbents and/or large platforms with presence across the region can also deter ambitious efforts to develop alternative arrangements. Nevertheless, there are nascent efforts to explore the feasibility of subregional platforms with fast payment capabilities (for example, CARICOM) and ongoing deliberations on improving long-standing multilateral initiatives (for example, Central America's and the Dominican Republic's Sistema de Interconexión de Pagos), while regional banks have made arrangements with *Pix* participants to enable *Pix* users to buy goods and services abroad with *Pix*. Person-to-Merchant Payments

P2M can drive the mainstreaming and maturity of FPS. Although P2P payments have been instrumental in bootstrapping FPS adoption, they represent only a fraction of the potential for scaling FPS. In most jurisdictions, the next logical step is expanding into P2M payments. Fast P2M payments can help reduce cash dependence at the POS, introduce competition in digital acceptance—traditionally dominated by card networks—and unlock FPS benefits for businesses, especially small merchants. Successful expansion into P2M requires a customized approach, recognizing that micro, small, medium, and large merchants have distinct needs, from QR-based acceptance to ERP-integrated systems.

FPS in LAC present a unique opportunity to streamline the digital payments acceptance ecosystem and lower costs for merchants. Based on the World Bank Enterprise Survey, in LAC the average proportion of sales made electronically by customers of businesses of all sizes is 69.4 percent, ranging from 77.8 percent for large businesses to 61.1 percent for small businesses. While below global average, the cost to receive the main type of electronic payment in LAC is 1.7 percent (of the value of the transaction), which is higher than South Asia, Europe and Central Asia, and North America.[43] Unlike traditional card schemes, which depend on multiple intermediaries, including issuers, acquirers and card networks, FPS enable direct account-to-account payments with fewer layers and lower costs. FPS enable merchants to receive payments instantly simply by displaying a QR code, without the need for a formal acquiring relationship. This streamlined model not only reduces fees and settlement times but also lowers barriers to entry for micro and small merchants, who are often excluded from the digital economy.

Some FPS implementations support P2M use cases by design, while others have adopted a gradual approach. Brazil's *Pix* and Colombia's Bre-B exemplify FPS designed with built-in P2M capabilities. *Pix*'s rollout included payment initiation through aliases, static and dynamic QR codes, and, eventually, third-party payment-initiation service providers. As a result, P2M transactions grew from 5.3 percent in 2020 to 34.9 percent of total transactions by 2024. Colombia's Bre-B, launching in September 2025, brings P2P and P2M transactions under an interoperable framework, overcoming fragmentation created by "specialized" schemes. On the other hand, Paraguay is pursuing a phased approach to use-case expansion. The Central Bank of Paraguay initially leveraged large card acquirers to support SPI P2M via QR codes, coupled with standardized QR formats to ensure interoperability. In a subsequent phase, the central bank envisages opening participation to fintechs for integrating merchants and developing a standalone QR code for SPI.

Aggregators and gateways can play a crucial role in enabling P2M payments through FPS in LAC. In countries like India and Thailand, account-servicing PSPs have integrated FPS such as UPI and PromptPay into merchant checkout flows, allowing consumers to pay instantly using digital wallets and QR codes. In contrast, many LAC countries rely more heavily on card-based acceptance infrastructure, such as POS terminals. By embedding FPS capabilities into aggregator APIs and gateway platforms, LAC can support

BOX 8 THE STRATEGIC IMPORTANCE OF THE P2M USE CASE FOR SMALL MERCHANTS: EVIDENCE FROM INDIA AND MALAYSIA

The P2M use case has emerged as a cornerstone of inclusive fast payment ecosystems, particularly for micro and small merchants. In India, UPI data from May 2025 reveals that 63 percent of all transactions were P2M, with a striking 86 percent of those valued under Re 500 ($5.78),[44] underscoring the relevance of low-ticket payments in everyday commerce. This volume reflects widespread merchant adoption and customer trust in QR-based, real-time payments, especially among informal vendors and street-level businesses.

Similarly, Malaysia's DuitNow QR system, launched in December 2018, demonstrates rapid P2M growth. By the end of 2024, the number of registered QR acceptance points had reached 2.6 million, and DuitNow QR transactions more than doubled in 2024, increasing from 360 million in 2023 to 870 million in 2024, with values growing to RM 31.1 billion ($7.3 billion). This success is driven by simplified onboarding, zero-fee policies for small merchants, and nationwide QR interoperability.

Together, these experiences highlight the P2M use case as a critical enabler of digital inclusion and merchant formalization. Low-cost, user-friendly, and interoperable, fast payment systems have the potential to unlock a wide base of merchants that traditional acquiring models fail to reach—particularly in underserved or cash-heavy economies.

Source: Author's elaboration based on public data.

real-time, low-cost P2M payments at scale, particularly benefiting micro and small merchants while promoting financial inclusion, reducing costs, and fostering competition.

FPS operators in LAC must carefully consider the design of merchant acceptance models, striking a balance between inclusivity and viability. Some markets may benefit from enabling direct merchant participation via lightweight QR code solutions and simplified onboarding, especially for micro-merchant and small-merchant segments, where acquirer networks are weak or prohibitively costly. In other contexts, working through existing acquiring infrastructure may be more practical, leveraging established functions and processes to drive scale. Ultimately, the choice between a fully "delayered" model or one that includes intermediaries should be guided by local market realities, digital readiness, and pricing dynamics. Ensuring that transaction costs remain low and predictable, regardless of the model, will be key to maintaining the financial inclusion benefits of FPS while supporting the long-term sustainability of merchant-facing services.

Different business sizes demand different FPS adoption strategies. Micro and small merchants benefit from alias-based and static QR payments, minimizing setup costs and technical requirements. Larger businesses require features such as dynamic QR codes, reconciliation tools, and system integration. For example, Brazil's early P2M growth was led by micro and small merchants using *Pix* Keys, while dynamic QR usage surged later among large retailers. Policy makers must ensure that payment-initiation tools suit each merchant profile to accelerate adoption.

Scaling P2M usage of FPS in LAC also requires simplifying user experience. One of the most promising approaches is the use of payment aliases (simple, memorable identifiers such as phone numbers or one-time codes) that replace cumbersome account details (see Box 9). While aliases are widely used in P2P contexts, their adoption for merchant payments remains limited. In particular, large retailers often lack workflows that support real-time alias-based payment flows. Enabling alias acceptance at the POS in these environments can dramatically expand FPS usage, especially when paired with SMS/USSD channels for underserved populations.

Merchant engagement and onboarding frameworks are essential to scale P2M payments. Governments and regulators must simplify merchant onboarding and include merchants in FPS governance. Brazil's *Pix* Forum includes merchants as stakeholders, shaping future product features and policies. Revising licensing, data requirements, and onboarding processes can reduce barriers for small merchants. Awareness campaigns and capacity building can

BOX 9 WORLD BANK EXPLORATION OF ADVANCED ALIAS-BASED P2M USE CASES

To support broader FPS adoption across merchant ecosystems, the World Bank is exploring next-generation use cases leveraging alias functionality. The following two innovations are under consideration:

- One-time-payment alias (OTP alias): A time-bound, transaction-specific code generated by the retailer and linked to the FPS directory. Customers—particularly those using feature phones—can input this alias via SMS or USSD to initiate payments. The FPS validates the alias, processes the transaction, and notifies both the retailer and the customer in real time, ensuring secure and low-friction checkout.
- Request-to-charge (RtC): A workflow where the merchant scans a customer's QR or receives an alias, then issues a real-time payment request through the FPS network. The user confirms the payment through their PSP interface (SMS, USSD, or app). This model improves accuracy, facilitates integration with ERP systems, and enables automated reconciliation.

Together, these use cases aim to foster inclusivity by reducing infrastructure requirements, enhancing user experience, and ensuring secure, real-time payments across both smartphones and basic mobile devices.

Source: Enabling Fast Payments at Large Retailers, FASTT, forthcoming.

help micro merchants understand the benefits of FPS and integrate into the formal economy.

P2M payments are a critical factor for shaping adoption and striking a balance between affordability and sustainability. FPS pricing policies have generally prioritized affordability and user uptake. In most countries—including Argentina, Bolivia, Brazil, Colombia, Paraguay, and Peru—P2P transactions are free for end users, although limits may apply, such as to the number or value of transactions. Zero-fee policies are often mandated through regulation or embedded in fast payment scheme rules, reflecting a deliberate strategy to support financial inclusion through affordability. However, in the absence of use-case, and pricing, diversification, PSPs may lack incentives for high-quality user interfaces and innovation. A careful balance is needed to incentivize innovation and sustainability while promoting adoption among underserved merchant segments. For example, Brazil prohibits charges for individuals but allows PSPs to charge businesses, keeping costs low by fostering competition. Argentina has capped merchant fees linked to business size. Regardless of the approach (see Box 10), pricing frameworks should be sensitive to context.

As FPS increase their share of P2M payments in LAC, governments face the urgent task of adapting fiscal frameworks. Unlike traditional card-based systems, FPS operate through simplified, real-time, account-to-account rails, offering low-cost acceptance channels such as static QR codes that are particularly attractive to small and informal merchants. This transformation has challenged legacy tax structures that were designed around traditional payment instruments and leveraged the multilayered card architecture for collection and reporting. As policy makers explore new approaches to taxation in a digital payment environment, there is a need to carefully weigh fiscal objectives against the inclusionary promise of FPS. Box 11 examines the risks and opportunities associated with extending tax withholding requirements to FPS transactions and to the FPS merchant ecosystem in LAC.

Large-Volume Recurrent Payments

Fast payment infrastructure offers a fit-for-purpose channel for integrating recurring high-frequency flows, such as government payments (for example, social-protection payments, taxes), bill payments, and public transportation payments. By tapping into these large-volume use cases, FPS operators can foster digital financial inclusion, diversify FPS volumes, and reinforce the public-utility nature of the network.

FPS remain underutilized as a digitalization strategy to enhance the efficiency and reach of government payments. FPS should be recognized as a core building block for modern G2P payment architecture in LAC, offering immediacy and transparency and enabling beneficiary choice (see Box 13). By supporting real-time, 24/7 disbursements, FPS allow governments to reach beneficiaries

BOX 10 POLICY APPROACHES TO FAST PAYMENT PRICING

End-user pricing for FPS varies widely across jurisdictions, influenced by public policy priorities, digital payment maturity, and competitive market dynamics. At one end of the spectrum, zero-fee models—such as UPI in India and CoDi in Mexico—treat FPS as public infrastructure to drive financial inclusion. Conversely, countries like the United States follow free pricing, allowing competition to shape costs. Hybrid models, such as Brazil's *Pix*, offer free P2P transactions whereas P2M fees are freely set through bilateral contracts between merchants and PSPs, promoting consumer uptake while preserving provider incentives, and relying on competitive pressure to keep merchant costs low. Tiered-pricing structures, like those in Nigeria and Costa Rica, set prices based on transaction value to balance affordability with long-term sustainability.

Zero-fee regimes carry risks: without revenue diversification—especially where cross-selling is restricted—specialized providers may face viability constraints. Innovative responses include bundling FPS with other paid services, offering value-added products, or digital onboarding strategies to lower operating costs.

Central banks play pivotal roles, both as regulators and FPS operators. Bank Negara Malaysia initially mandated zero-ringgit fees but later removed them to foster market-driven sustainability, with voluntary free models retained for micro merchants. In Europe, the regulator mandates price parity with standard credit transfers, promoting fairness.

Ultimately, pricing policy must be tailored, based on evidence, and reassessed regularly, especially in underserved areas where the wrong fee structure could limit access to essential payment services.

Source: Author's elaboration based on public information.

BOX 11 EMERGING ISSUES IN TAXATION OF FAST PAYMENTS

As FPS continue expanding their role in merchant transactions across LAC, tax authorities are reevaluating how these payments should be treated under existing fiscal frameworks. The rapid adoption of FPS for P2M transactions has outpaced the evolution of taxation policy, raising concerns about "tax asymmetry" between card-based and FPS-based payments. However, applying legacy tax models—such as value- added-tax withholding obligations—directly to FPS without recognizing their operational differences risks undermining financial inclusion and reinforcing informality among micro and small enterprises.

Withholding (also known as "split payments") is a tax-collection mechanism whereby a portion of the payment corresponding to the tax owed by the merchant is held (collected) by the financial institution and remitted to the government. As a result, the merchant settlement will be for the amount net of the withholding. Argentina, Colombia, and Costa Rica are examples of LAC countries that have applied or apply withholding/split payments; however, outside LAC, this model is uncommon.

When extended to FPS transactions, withholding can have unintended consequences. In general, withholding can act as a disincentive for the use of digital payments by increasing perceived costs for small merchants and consumers, ultimately pushing economic activity back into the informal, cash-based sector. Evidence shows that attempts to apply blanket withholding measures on banking and digital transactions have reduced formal financial engagement, increased cash in circulation, and discouraged deposit growth.[45] In this context, while extending the same requirements to FPS may appear to streamline compliance and avoid arbitrage, to the extent that FPSs are geared toward small-ticket transactions and merchant segments that are not served by traditional acceptance models, such extensions could significantly change the policy trade-offs between tax compliance, formalization, and digital payments.

Data sharing between financial service providers and tax authorities introduces further complexity. If not carefully designed, efforts to leverage FPS transaction data for tax compliance may erode confidence in dig-

continued

BOX 11, ***continued***

ital financial services, particularly among underserved or vulnerable populations.

These risks highlight the critical importance of conducting a robust cost-benefit analysis before introducing or expanding tax obligations linked to FPS. Such analysis must go beyond revenue projections to include the administrative costs for tax authorities, the burden on small merchants, and the potential impact on digital payment adoption and financial inclusion. Without a clear understanding of these trade-offs, tax measures may not only fall short of their fiscal objectives but also reverse progress toward more inclusive, digitally enabled economies. The best use of government resources might be to lower the compliance burden for micro and small enterprises and to provide clear incentives for the adoption of electronic payment acceptance. Available data suggests that small firms often incur compliance burdens equivalent to 15 percent or more of their turnover and lengthy registration procedures.

In this context, the development of fast payment P2M use cases offers a powerful tool to onboard merchants and progressively support their formalization as transaction volumes and values increase. One promising approach is the use of transitional merchant categories, such as India's P2PM designation for low-volume sellers, which offer a temporary regulatory space with lighter compliance requirements. These models enable informal or emerging businesses to benefit from digital payments while avoiding the immediate obligations of full formalization. As businesses grow, they can transition into the formal tax net through predefined thresholds and reporting requirements. This staged integration helps preserve the financial inclusion gains enabled by FPS while supporting long-term revenue-mobilization goals.

Source: Author's elaboration.

instantly, even in emergencies or outside business hours, crucial for timely support in the face of economic shocks or natural disasters. Unlike traditional batch-based transfers, FPS also allow for real-time confirmation, improving auditability and trust. When paired with open-choice models, they empower recipients to select their preferred financial service provider, promoting competition and improving service quality. This use case is especially relevant for LAC, where fragmented delivery channels and delays often undermine the impact of social programs.

Integrating FPS into G2P schemes across LAC would require deliberate partnerships across government entities. In many LAC countries, government payments have been digitized to varying degrees, but integration with FPS remains limited. In Mexico, the focus has been largely on digitizing salary and vendor disbursements through SPEI, with limited reach into broader social-protection or subsidy schemes. Costa Rica presents a somewhat more expansive approach, with greater use of digital channels for multiple government payment types, which are disbursed via SINPE. However, across the region, central banks have yet to consistently position themselves as active champions of digitalizing government payment flows through FPS. This is delaying the adoption of real-time rails in areas such as social transfers. When embedded in a broader DPI, alongside digital ID systems, FPS can support advanced G2P delivery models. A more coordinated strategy, linking treasury departments, social-protection management information systems, e-government platforms, and FPS operators, will be essential to designing interoperable, user-oriented G2P delivery mechanisms anchored in real-time payments.

Further developing FPS use cases can help ensure that strategies for digitalizing government payments are effective in fostering digital financial inclusion. Where FPS enable interoperability, they allow recipients to access their transfers through any participating financial institution, digital wallet, or access point, reducing fragmentation and promoting user choice. However, ensuring that G2P transfers translate into financial empowerment and not just digital disbursement requires systems to provide functionality that supports real-world use, especially P2M payments, cash-out options, and effective complaint-handling mechanisms. Drawing on G2Px diagnostics, Box 13 summarizes key payment-design considerations that FPS-enabled G2P mechanisms should incorporate.

BOX 12 PROMOTING BENEFICIARIES' CHOICE THROUGH FPS OVERLAY SERVICE

FPS are well suited to promote beneficiary choice in social-protection payments, given their architecture of multiple interconnected participants and their support for alias-based transactions. Aliases, such as mobile numbers or national IDs, simplify the user experience and allow beneficiaries to receive payments through their preferred PSP without needing to share complex account details. However, for this choice to be meaningful, beneficiaries must have the ability to actively express their preference and link their alias to the program of their choice. An overlay service—managed and operated by the FPS operator—can serve this purpose by acting as a neutral layer that registers program metadata, enables alias-to-program linking, and ensures that PSPs access only data relevant to their enrolled programs. This creates an opportunity to leverage existing alias directories to support inclusive, interoperable, and usercentric ecosystems for social-protection payments.

The approach consists of onboarding social-program agencies into the overlay service and uploading program metadata into a shared registry managed by the FPS operator. Participating PSPs and digital access points (wallets, apps, and banking interfaces) can retrieve this information and display it to eligible users, who can then select the program(s) they wish to enroll in and link their alias accordingly. Once a choice is made, the alias and selected program are registered in the overlay service, and access is granted to the relevant program agency for validation and eligibility checks. Updates in alias status (for example, cancellation, suspension, or change) are reported back to the overlay service, which in turn triggers actions such as unlinking from programs or prompting beneficiaries to reexpress their choice. This design ensures transparency, maintains data integrity, and empowers beneficiaries to exercise meaningful control over how and through whom they receive their benefits.

BOX 13 KEY PAYMENT DESIGN CONSIDERATIONS FOR FPS-ENABLED G2P MECHANISMS

Based on country experiences and diagnostic work under the World Bank's G2Px initiative, it is possible to draw relevant lessons from the design of FPS to support G2P payments.

Interoperability is a critical requirement. Beneficiaries must be able to receive G2P payments into any account or digital wallet of their choice, allowing flexibility across types of financial service providers. Systems that enable this choice reinforce user agency and promote account usage.

Digital payments must also be supported by inclusive, low-friction access channels. Options like USSD, SMS, and agent-based services are critical for rural or digitally excluded populations. Integration with mobile phones, especially feature phones, was identified as a key enabler of access in various country cases. These offline channels must be user-friendly, allowing intuitive engagement with G2P programs without requiring high levels of digital literacy or constant connectivity.

A strong emphasis must also be placed on the user experience, particularly for women, elderly individuals, and people with disabilities. Systems must ensure that onboarding, payment receipt, and recourse mechanisms are adapted to diverse user needs. Further, proactive support, whether through help desks, local agents, or clear informational materials, greatly improves outcomes.

Transaction costs and payment certainty are crucial concerns. Beneficiaries must not bear undue costs to access their funds. The G2Px review found that cash-out fees, long travel distances to access points, or unclear deductions could erode the value of transfers. Furthermore, clear and timely user communication, especially real-time notifications of incoming payments, supports transparency and builds trust in digital channels.

Source: Author's elaboration.

Bill payments are a high-volume, recurring use case that can significantly boost the adoption and utility of FPS across LAC. Bill payments—such as utilities, telecommunications, and education fees—are part of users' everyday financial lives. Enabling real-time settlement of bills can reduce payment friction, enhance user control, and improve reconciliation for service providers. When embedded within FPS-enabled channels such as mobile apps, QR codes, or request-to-pay overlays, bill payments can become a key on-ramp for everyday digital payment usage (see Box 14). This is particularly relevant in LAC, where recurring payments and bill payments remain cash-based. Brazil's *Pix* Automatico supports preauthorized recurring payments and integrates with payment-initiation service providers' apps, enabling seamless debits while preserving payer control. Such overlays require ad hoc rule books, retry mechanisms, and fraud-protection protocols but are essential for the mainstreaming of FPS beyond single-use payments.

RTP is particularly well suited for the billing sector and large-volume payments, offering a transformative overlay that enhances the functionality and user experience of FPS. It allows a payee to send a structured payment request to a payer, who can then authorize the transaction in real time through their preferred channel, offering flexibility, control, and transparency to both parties (see Box 15). For individuals, this means greater clarity in payment obligations and the ability to manage funds more effectively. For businesses and governments, request to pay reduces payment errors, supports reconciliation, and encourages timely payments without requiring traditional invoicing or collections infrastructure. It can streamline utility payments, school fees, rent, and subscription services by converting passive invoices into immediate user-authorized transactions. Moreover, it enables efficient collections and real-time settlement in high-volume sectors, such as telecommunications, energy, and government services. In LAC, where informal payment practices and fragmented billing mechanisms still prevail, request to pay

BOX 14 INTEGRATING BILL PAYMENTS AND REQUEST TO PAY WITH FPS: LESSONS FOR LAC FROM THE INTERNATIONAL EXPERIENCE

Several countries have made significant strides in integrating bill payments into their fast payment ecosystems, often through request-to-pay overlays that improve transparency, control, and efficiency for both users and billers.

In Australia, the PayTo service enables real-time payment authorizations directly from a customer's bank account for recurring or one-off payments. Billers, including utilities and merchants, can initiate payment requests through secure digital channels, with consumers approving transactions via their banking app. This model enhances convenience while embedding consumer control and is likely to replace direct debit over time.

India provides a robust example through its integration of bill payments into the UPI framework. Platforms such as Bharat BillPay allow users to receive payment requests via mobile channels (QR codes or links), which they can fulfill instantly through UPI. This model is increasingly used by the government, telecom, and utility providers and shows how bill-pay ecosystems can scale nationally when supported by real-time, interoperable payment infrastructure.

In Jordan, the national aggregator eFAWATEER enables bill payment to multiple service providers, though it has not yet integrated with the country's FPS, Cliq. Instead, the gateway is linked with SANAD, a unified digital services portal used for accessing various public services. This demonstrates the potential to embed bill payments within broader e-government platforms while aligning them with FPS infrastructure over time.

For LAC, these models offer compelling insights. Leveraging FPS to support bill payments based on request-to-pay overlays can reduce cash reliance, simplify reconciliation, and increase the efficiency of collections for both public and private sectors. Integration with existing bill aggregators, agent networks, and government service portals—combined with trust mechanisms like preverification and alias-based payments—can help unlock FPS for daily high-volume use cases. A forthcoming technical note will explore these opportunities in detail.

Source: Author's elaboration.

BOX 15 TYPES OF REQUEST TO PAY AND USE CASES

Request-to-pay (RTP) services can take multiple forms, each suited to different payment needs:

- One-off RTP enables a payee to send a single payment request for a specific transaction. For example, an electrician completes a job and sends the client a one-time request, which the client approves to initiate a fast payment.
- Recurring RTP allows for scheduled payment requests over a defined period, such as monthly telecom bills or rent. Users can choose to approve each payment individually or authorize them all at once.
- Bulk RTP is designed for high-volume senders—like streaming services or utilities—that issue payment requests to many users at once. Each recipient still authorizes their individual payment, preserving control and transparency.

These modalities expand FPS functionality, offering flexible tools for individuals, businesses, and public services to manage real-time collections.

Source: Author's elaboration.

can bridge operational gaps while fostering digital financial habits, especially when linked to alias-based initiation and interoperable FPS frameworks.[46] Successful implementation will depend on inclusive design, strong consumer protection, and coordinated stakeholder engagement across banks, fintechs, merchants, and public agencies.

Embedding FPS within systems to collect transit fares can also cultivate everyday usage and raise digital payment literacy among a broader segment of the population. FPS can serve as an effective means to load value onto digital payment instruments for access to public transportation and can be integrated into open-loop ecosystems through QR and NFC capabilities. In Argentina, a recent reform of the public transit payment system (*Sistema Único de Boleto Electrónico*) opened the door to the use of a wide range of means of payment across the country's public transit infrastructure, in line with the principles of interoperability, innovation, and competition.[47] China and India are regarded as pioneers in the use of QR codes in public transportation (see Box 16). Nonetheless, the replicability of these experiences depends on FPS design maturity, including rapid payment authorization, high availability, and scalability. Furthermore, central banks, transport authorities, and transit operators should collaborate with FPS operators to design interoperable solutions tailored to local transit ecosystems. To enable FPS as the main transactional rail in public transportation, specific functionalities, such as offline payments, secure low-value transaction support, and instant authorization, must be developed and embedded; additionally, system

BOX 16 QR CODE PAYMENTS IN PUBLIC TRANSPORTATION: LESSONS FROM CHINA AND INDIA

The Shanghai Metro provides a compelling case of QR code integration into public transportation, showcasing how fast, convenient, and contactless fare collection can scale in high-density urban systems. Passengers generate QR codes via mobile wallets such as Alipay or UnionPay and scan them at turnstiles, eliminating the need for physical tickets or cash. This approach reduces friction and leverages China's broad adoption of mobile payments.

India's transport systems are also advancing fare solutions based on QR codes. In Kolkata, QR codes were introduced on select "Tech Zone" route buses, allowing passengers to scan static UPI QR codes for payment using their preferred app. Similarly, the Bangalore Metropolitan Transport Corporation implemented static UPI QR codes in buses, facilitating real-time fare payments without requiring proprietary apps or cards. These implementations highlight the effectiveness of low-cost, interoperable QR payment options in driving adoption across urban mobility networks.

Source: Author's elaboration.

reliability, user-friendly interfaces, and integration with technologies to collect transit fares are needed.

Open Finance

Open finance offers transformative potential for LAC by enabling individuals and businesses to access more customized and competitive financial services. By allowing authorized third parties to access consumer information held by financial institutions securely through standardized APIs, open finance can enhance customer empowerment and experience, affect competition in the financial sector, spur data-driven innovation, and improve financial inclusion.[48] In a region marked by low competition in the financial sector, high costs, and low trust in financial institutions,[49] open finance has the potential to create the conditions for a more contestable, transparent, and cost-effective financial services ecosystem. Its benefits extend not only to consumers but also to micro, small, and medium-sized enterprises and governments, by contributing to the lower cost of financing and enabling targeted financial support, respectively.

In the last few years, a growing number of LAC countries have accelerated policy reforms and adopted regulatory frameworks for open finance. Brazil has implemented a comprehensive four-phase open-finance road map that encompasses financial institution data (service channels, products, and services), customer data (including KYC and transactional data), and a wide range of services—from payment initiation to forwarding loan proposals and other services related to foreign exchange, investment, and insurance, among others. Chile enacted the Fintech Law in January 2023, establishing the open-finance system under the purview of the financial services regulator and has been working intensively to articulate a regulatory framework, with the support of the Open Finance System Forum. Mexico, despite a head start through its 2018 Fintech Law and secondary measures on open and aggregated data sharing, has experienced delays in operationalizing a framework for access to and use of transaction data, though recent events signal renewed momentum. Colombia had made initial strides with a voluntary open-finance model and later pivoted toward a financial-inclusion-driven, mandatory model. Other countries (for example, Peru, Uruguay) are at different stages of undertaking stakeholder consultations and developing regulatory proposals.

Payment-initiation capabilities are a natural convergence point between open finance and FPS. Through open-finance-enabled APIs, third-party providers such as fintechs, merchant platforms, or billing agents can initiate FPS transactions on behalf of users, streamlining digital commerce and bill payments. This can also enable new services like real-time request-to-pay flows and account-sweeping functionalities. Embedding payment initiation into FPS infrastructure can catalyze usage beyond P2P transfers and increase competition and user convenience, especially in e-commerce and physical merchant acceptance environments. Few countries (for example, Brazil, Chile,) have formalized and regulated PIS, paving the way for their integration within domestic FPS (for example, as a new type of participant). In fact, FPS can provide both a technical platform and a governance framework to orchestrate PIS, including by setting technical standards—for example, API specifications—and participation requirements. Brazil provides a clear example of synergy between open finance and FPS. A *Pix* transaction initiated via a payment-initiation service provider must comply with two sets of rules: (i) *Pix* rules, including QR codes, aliases, antifraud database access, scheme technical guidelines, transaction limits, and product specifications; and (ii) open-finance rules covering consent, authentication, confirmation, dispute resolution, and UX-specific requirements, among others.

The transaction data generated by FPS also becomes a critical asset within an open-finance ecosystem, offering insights into user behavior, cash-flow patterns, and payment preferences. When users consent to share their FPS-generated data, financial service providers can leverage it to offer more tailored products, such as dynamic credit lines for small merchants, automated savings tools, or liquidity support for gig workers. For this to be realized, LAC regulators must ensure that FPS operators and financial institutions adopt interoperable standards for data access while safeguarding user privacy. Combining the speed of FPS with the richness of transaction data can thus create a feedback loop of innovation and inclusion in the region. In several countries, concerns persist around data privacy and financial consumer protection, as well as cybersecurity; these concerns need to be addressed as a precondition for sound data-sharing frameworks.

The experience of Brazil suggests that a robust and interoperable FPS is an important factor, though not the only factor, in the adoption and scale-up of open finance. Payment initiation cannot thrive unless it is supported by instant, reliable, and user-friendly payment infrastructure. As LAC countries develop their open-finance strategies, the integration between open finance and FPS will be critical. Lessons from more mature markets, such as the United Kingdom, also highlight the importance of aligning technical performance, user experience, and governance mechanisms between these two pillars of digital finance. Other

BOX 17 OPEN BANKING AND FPS INTEGRATION CHALLENGES IN THE UNITED KINGDOM

The United Kingdom's Open Banking ecosystem, built around mandatory API-based data sharing among major banks, has spurred competition and innovation in financial services. However, its integration with the country's Faster Payment System has faced significant obstacles. Key challenges included fragmented payment-initiation experiences, inconsistent API performance across banks, and a lack of a unified payment-confirmation mechanism. These limitations have hampered the scalability of payments enabled by Open Banking, particularly in merchant and billing use cases. The lack of a standardized, frictionless user journey has restricted Open Banking's broader role as a competitive alternative to card networks. The United Kingdom's experience offers valuable lessons for LAC: regulatory mandates must be paired with coordinated technical implementation and usercentric design to unlock the full potential of FPS and Open Finance convergence.

Source: Author's elaboration based on *The Future Development of Open Banking in the UK* (February 2023).

indispensable elements of sound open finance ecosystems include robust consumer protection, data protection, and privacy framework to build consumer trust, generate positive customer experiences and outcomes, and foster adoption while minimizing potential harm.[50]

5.2 DIVERSIFYING ACCESS CHANNELS AND INITIATION MECHANISMS

The country review of access channels across FPS in LAC reveals notable patterns in channel deployment, though with some limitations. All FPS in the region offer mobile applications and internet banking as standard access channels. These channels are foundational yet tend to favor users with smartphones and reliable internet access. A recent study by Credicorp covering the countries Peru, Bolivia, Ecuador, Mexico, and Colombia highlights that barriers such as low digital literacy, limited trust in digital platforms, and infrastructure gaps, especially in rural and low-income areas, continue to hinder uptake. The study suggests that, while mobile penetration is high, access does not automatically translate into effective use, reinforcing the need for policies and services that are both inclusive and context-sensitive.[51] In this context, the fact that ATMs, agents, and POS channels remain generally underutilized, with only five, four, and four FPS systems supporting them, respectively, requires further attention from operators and policy makers. Brazil's *Pix* stands alone in offering a comprehensive mix of access channels, reflecting its commitment to scale, inclusion, and user convenience. In contrast, Mexico, Colombia, and Chile show relatively limited diversification beyond core digital channels, which may constrain broader adoption. El Salvador and the Dominican Republic show very limited support for access-channel diversification.

Despite growing smartphone penetration, large segments of the population in LAC, particularly in rural areas and among low-income users, continue to rely on basic mobile phones and limited data connectivity. Based on Findex 2025, 18 percent of adults report using mainly a basic text phone, and 10 percent do not own a smartphone due to cost. In this context, USSD emerges as a relevant access channel for extending the reach of FPS in LAC, particularly for low-income users. USSD enables real-time transactions through simple menu-based interfaces that do not require mobile data or apps, offering an inclusive and resilient tool to democratize digital payments. Solutions like Costa Rica's *SINPE Móvil* leverage SMS for FPS access. As several countries in Africa and South Asia have demonstrated (see Box 18), USSD can successfully support P2P, bill payments, and merchant collections, even in low-connectivity environments. For LAC, adopting USSD as a standard component of FPS access could significantly reduce exclusion, bridge the digital divide, and accelerate usage among those currently underserved by traditional digital channels.

Agent networks represent a critical access channel for expanding the reach and usability of FPS in LAC. With widespread physical presence and trust among underserved populations, agents can facilitate real-time transactions such as cash-in, cash-out, bill payments, and P2M transfers, even in low-connectivity or offline environments. Leveraging technologies like USSD and over-the-counter interfaces, agent-enabled FPS access can bridge digital gaps and promote financial inclusion across the region. In LAC,

BOX 18 EXPANDING FPS ACCESS VIA USSD FUNCTIONALITY

Nigeria's NIP, Africa's largest FPS, is fully accessible via USSD codes (for example, *737#, *966#), enabling users to perform P2P, P2M, and business transfers in real time without internet access. This channel extends financial inclusion by allowing users with basic feature phones to engage in digital payments.

Similarly, in Ghana, G-Money offers users the ability to dial *422# to send money, redeem vouchers, buy airtime, and pay bills via an FPS-linked mobile wallet, all through USSD. These experiences illustrate how USSD can effectively serve as a low-tech, high-impact channel for extending FPS access across underserved populations, providing a practical and replicable approach for LAC.

NIBSS, in collaboration with banks and mobile network operators, launched mCASH, a USSD-based merchant payment channel designed for micro and small enterprises. Merchants receive unique codes allowing customers to dial, for example, 402MerchantCode*Amount#, authenticate, and make instant payments, with both parties receiving immediate SMS confirmation. This solution enables real-time settlement without relying on costly POS terminals or internet connectivity, making it ideal for informal, low-capacity merchants. By enabling fast, reliable P2M transactions via basic phone technology, mCASH demonstrates a viable model for LAC regions where digital infrastructure and merchant digital readiness remain constrained.

only FPS in Costa Rica, Paraguay, and Peru support agent access channels. This feature is more commonly found in other geographies. For example, Pakistan has integrated their FPS, RAAST, with agent networks through over-the-counter banking services, while Nigeria's NIP ecosystem allows agents and small merchants to initiate and receive real-time payments using USSD and QR codes.

Multi-issuer wallets in LAC represent a growing ecosystem of digital payment tools, yet their integration with FPS remains limited and underleveraged. These wallets, often operated by fintechs, banks, or telecommunications and device providers, enable users to store and transact with funds across multiple financial institutions. While they are increasingly popular and accessible, most are not directly linked to FPS infrastructure, meaning that real-time interoperability across institutions remains constrained. In contrast, markets like Brazil and India have begun linking FPS rails with multi-issuer wallets, enabling seamless instant payments through platforms like Google Pay, Apple Pay, or native super apps.

QR code deployment in FPS across LAC reflects both potential and persistent fragmentation, with 10 of 16 systems supporting QR-based access yet facing challenges in scale and interoperability. Brazil's *Pix* exemplifies successful QR integration through multiple standardized modalities and wide ecosystem uptake. In contrast, Mexico's experience with CoDi illustrates key barriers: CoDi has struggled with merchant onboarding, limited user awareness, and fragmented acceptance infrastructure, leading to underwhelming adoption rates. Similarly, several other FPS in the region either lack QR functionality altogether, such as in Chile, Costa Rica, and the Dominican Republic, or have not integrated QR codes into interoperable merchant ecosystems. These gaps suggest that enabling QR access alone is insufficient; without shared standards, ecosystem coordination, and demand-side incentives, QR-based FPS usage is unlikely to scale meaningfully.

Many LAC countries have taken important steps by adopting global QR code standards, such as EMVCo, to facilitate broader adoption and technical alignment. However, standardizing the format of QR codes alone does not guarantee full interoperability. In practice, shared technical specifications must be paired with integration across multiple schemes, real-time transaction-clearing mechanisms, and coordinated governance to enable seamless payments across wallets, banks, and merchants. Without these layers, QR deployments risk becoming siloed, limiting network effects and merchant utility. The region's experience underscores the need to go beyond format harmonization and toward the creation of shared switching infrastructures and overlay services that ensure functional interoperability across platforms.

A growing number of countries are demonstrating how a single QR code can serve as a powerful access point to

multiple payment schemes, reducing fragmentation and enabling seamless consumer experiences. This model is particularly relevant for LAC, where QR-based payments are gaining ground but often remain siloed by issuer, wallet, or scheme. By using a unified, typically EMVCo-compliant QR format and linking it to a centralized directory or routing logic, users can scan one code and pay through their preferred app, while merchants receive funds via their chosen provider. For LAC, enabling FPS transactions through existing QR-based access points will require a strategic shift toward shared infrastructure, so that fast payments can be embedded into familiar merchant and government interfaces.

As FPS evolve across LAC, so must the access channels through which users interact with these systems. Expanding beyond QR codes, integrating NFC and offline payment capabilities into FPS architecture offers a powerful opportunity to broaden use cases, enhance user convenience, and improve resilience in low-connectivity environments (see Box 20). NFC allows users to initiate fast payments by simply tapping a card, phone, or wearable against a payment terminal, streamlining P2M transactions and enabling high-speed use cases like public transportation (see Section 4.1). Moreover, offline NFC payments can complete transactions even when devices are temporarily disconnected, with funds later synchronized through the FPS in near real time. This supports inclusive design by allowing underserved users to transact without constant internet access.

BOX 19 SINGAPORE'S UNIFIED QR: LINKING MULTIPLE SCHEMES THROUGH A SINGLE CODE

Singapore's SGQR initiative exemplifies the use of a single QR code to unify multiple payment schemes under one interface. Developed by the Monetary Authority of Singapore and the Payments Council, SGQR merges more than 27 payment options, ranging from bank apps to e-wallets, into one scannable code. While all participating providers adopted the EMVCo standard, the real breakthrough came from establishing centralized governance, directory services, and scheme-agnostic merchant registration. This allows any customer to pay any SGQR-registered merchant using their preferred payment provider, and it ensures that merchants need to display only one code. Importantly, Singapore's experience also highlights that technical standardization alone is insufficient: interoperability requires coordinated settlement processes, shared merchant registries, and scheme-neutral routing protocols to deliver a truly inclusive and seamless QR ecosystem.

BOX 20 EXPANDING ACCESS: NFC AND OFFLINE INNOVATION IN BRAZIL AND INDIA

Brazil: *Pix* Tap-to-Pay via NFC

Brazil recently launched *Pix por Aproximação,* an NFC-enabled method to initiate *Pix* payments. Developed by the *Banco Central do Brasil,* this system allows payment terminals to transmit *Pix* requests directly to users' Android phones via NFC, replacing the need for scanning QR codes. The experience mirrors contactless card payments; users simply tap their phone at the terminal to authorize a *Pix* transaction through their preferred app. The system is open, interoperable, and EMVCo-aligned and uses a new uniform resource identifier scheme embedded in the NFC payload. This approach enhances merchant integration, reduces transaction friction, and extends *Pix* usability to proximity contexts such as transit and retail environments.

India: UPI Lite for Offline Payments

India has addressed connectivity limitations through UPI Lite, a feature that enables offline FPS payments directly from locally stored wallets on users' devices. With a per-transaction cap of Re 500 (and daily cap of Re 2,000), UPI Lite allows users to make real-time payments without any internet connection, with balances preloaded from their bank account and later synchronized when the device reconnects. This model supports both P2P and P2M payments and is especially valuable in rural areas or environments with unreliable data access. With UPI Lite X, NFC functionality is further leveraged to enable contactless offline payments at POS devices, similar to Brazil's *Pix* NFC development. These innovations show how combining offline and NFC capabilities within FPS can expand real-time payment access, even in low-connectivity settings.

5.3 SECURING THE FUTURE OF FAST PAYMENTS

Fraud Mitigation

Fraud in digital finance is becoming increasingly sophisticated and cross-border in nature. Organized crime networks leverage advanced digital technologies to perpetrate fraudulent activities such as romance scams, impersonation schemes, and deceptive advertising. Utilizing AI, deepfake technologies, automated bots, and specialized fraud-as-a-service platforms, criminals rapidly create mule accounts, mask their locations, and exploit crypto assets to launder illicit funds. This evolution underscores the necessity for regulators and financial institutions to adopt robust and coordinated fraud-prevention strategies.

Payment fraud has manifested through diverse, evolving attack vectors. According to Visa's *2025 Global eCommerce Payments & Fraud Report,*[52] refund and policy abuse is the most common fraud attack reported by Latin American merchants, followed by first-party misuse, phishing, card testing, and real-time payment fraud. As FPS expand across LAC, so does their appeal to fraudsters. Emerging LAC FPS ecosystems have also experienced abuse of payment links and QR codes, the creation of synthetic identities, and misuse of refund and request-to-pay functionalities.[53] While individual losses may be small, the reputational damage to FPS operators, PSPs, and regulators can be substantial, particularly in jurisdictions where trust in digital finance remains fragile.

Data on fast payment fraud is not broadly available or comparable across jurisdictions. Only three of 11 central banks surveyed reported fraud data. Fraud volume and value patterns differ significantly across countries. Data availability (or the lack thereof) might indicate several issues—from low awareness of central banks/regulators or lack of sense of urgency to a misalignment with supervisory reporting, as well as coordination issues with other relevant authorities (for example, banking supervisors and consumer protection authorities) and regulatory gaps (see also below). These issues should be more thoroughly investigated and addressed on a timely basis with a view to making comprehensive fraud data available to central banks for monitoring and risk-planning purposes.

Countries' preparedness to manage fraud risks also varies considerably. The World Bank questionnaire covered (i) regulatory requirements addressed to PSPs; (ii) information-sharing arrangements; (iii) technology solutions at the FPS level; and (iv) standardized reporting and resolution. A summary of the key findings is provided below.

i. With few exceptions, PSPs across the region are not universally subject to comprehensive antifraud requirements. The most comprehensive requirements addressed to PSPs typically stem from FPS rules or regulations on electronic funds transfers. Some central banks rely on broader frameworks (for example, cybersecurity), whereas others report having no specific requirements.

ii. Most countries do not have fraud-information-sharing arrangements for fast payments—with some notable exceptions. The central bank of Brazil has developed an information-sharing platform for fraud related to *Pix* transactions and makes available to participants a dedicated API to consult fraud information on a 24/7 basis. In Mexico, SPEI rules require participants to put in place collaboration agreements to handle and resolve cases of unauthorized fraud. The central bank of Argentina requires FPS operators to collect information and share it with participants for use in their fraud-management systems.

iii. Besides Brazil's fraud-information-sharing platform, FPS operators have not implemented centralized fraud detection, risk scoring, or fund-tracking capabilities.

iv. As mentioned above, standardized fraud-reporting and resolution requirements, where they exist, are more likely to be covered in FPS rules.

Despite limited data availability, it is evident that there is room for improving fraud data and fraud-management frameworks across the region. Limited data, sparse mitigation efforts, and a lack of coordination across stakeholders may enable fraud schemes to grow faster and evolve. Fraud management requires a multipronged approach that leverages and exploits synergies between technology, scheme rules, regulation, and financial awareness. In particular, central banks could consider the following:

i. *Leveraging technology to improve fraud management.* Regulators and scheme managers should promote the adoption of advanced fraud-prevention tools, such as machine learning, device fingerprinting, and behavioral analytics. These advanced tools should build on and complement basic requirements (imposed through regulation and/or scheme rules) on multifactor authentication, minimum fraud-detection capabilities, transaction holds, and the like. Efforts by the *Banco Central do Brasil* to integrate these mandates into the *Pix* rule book offer a promising reference point for the rest of the region.

Furthermore, digital ID integration with FPS can enhance user protection and access. For example, embedding digital ID within FPS flows, particularly during onboarding and authentication, can reduce impersonation and enhance risk profiling.

ii. *Mandating dispute-resolution and compensation frameworks.*[54] Brazil's Special Reimbursement Mechanism (*Mecanismo Especial de Devolução*) allows for fund recovery in cases of fraud, contingent on evidence and fund availability. Recent upgrades mandate in-app request capabilities, and future iterations aim to track funds across institutions. These tools protect users while disincentivizing malicious activity and represent global best practices. Regulatory clarity on liability sharing and damage compensation, particularly for authorized push payment fraud, is critical to increase user trust and PSP incentives to invest in secure user experiences.

iii. *Implementing appropriate centralized fraud-management solutions.* These include analytics platforms powered by AI and machine learning for anomaly detection and real-time scoring, sectoral fraud repositories that consolidate information on high-risk actors, and multilateral information-sharing schemes that enable structured exchange of fraud intelligence. Coordinated fraud-response centers can drive joint action across institutions, including rapid freezes and traceability. The extent to which centralized tools are feasible and appropriate in each country context depends on several factors—from the FPS legal basis to technical capability and market structure—and the decision to implement such tools should be based on an open, transparent process. Implementation models range from voluntary, nonbinding tools—such as shared risk-analytics platforms, as seen in India's NPCI or Europe's EBA Clearing—to the compulsory use of centralized facilities, such as fraud-scoring systems managed by the FPS operator or industry or government body.

iv. *Forging alliances within and beyond the financial sector.* The international experience shows that effective responses to fraud risks require partnerships across different domains (for example, payments, AML/CFT, cybersecurity) within the financial sector and with other sectors—for example, with mobile network operators (to address SIM-swap fraud), digital platforms (to tackle social engineering), law enforcement, and consumer protection agencies. In Brazil, the *Pix* Forum's security working group coordinates across stakeholders to refine standards, share threat intelligence, and recommend system upgrades.

v. *Accompanying FPS rollout with education campaigns.* Users need to be informed about fraud risks, safe digital behaviors, and available protections. Central banks and PSPs should collaborate on awareness efforts, using accessible language and relatable scenarios. Fraud literacy increases resilience and reduces the likelihood of successful scams, reinforcing trust in the broader ecosystem.

Operational Resilience

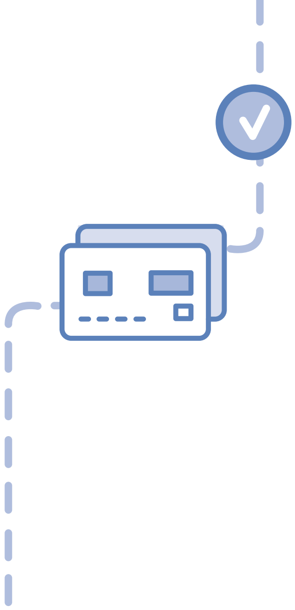
Public trust in FPS depends not only on speed and efficiency but also on their resilience in the face of cyber threats. FPS are as vulnerable to cyber threats as traditional payment systems and other market infrastructures. In fact, the instant, 24/7 nature of FPS makes them especially susceptible to cyberattacks such as distributed denial-of-service attacks, ransomware, and data breaches. Core risks include disruption of critical services, compromise of alias directories, mobile channel fraud (for example, QR code tampering), and reputational damage resulting from data loss or unauthorized transactions. To manage these risks, FPS operators must implement cyber resilience frameworks based on international standards. This includes strong governance, proactive threat detection, secure integration practices, and continuous testing. Regulators should ensure that FPS are recognized as critical infrastructures and enforce mandatory incident-response protocols and minimum cybersecurity thresholds across all participants.

FPS resilience rests both on the strength of the central infrastructure and on the operational reliability of participating institutions. Ensuring continuous availability is not the responsibility of the FPS operator alone; it also depends on the preparedness and robustness of participating institutions. In Mexico, for example, a majority of SPEI 2023 incidents were attributed not to issues within participating institutions, such as configuration errors or delays in contingency activation. These incidents underscore the importance of shared accountability for resilience across the ecosystem. In Paraguay, the central bank publicly held private financial institutions responsible for recent service interruptions in FPS transfers, warning of possible sanctions due to breaches in operational timelines.

Scalability is a critical dimension of FPS operational risk management. Brazil's *Pix*, India's UPI, and Thailand's PromptPay are examples of systems that withstood increasing volumes of operations and complexity. India's UPI ecosystem now includes 673 participants, while Brazil's *Pix* has expanded to 905 institutions, of which 833 are nonbanks. In Thailand in 2024 alone, PromptPay processed over 24 billion transactions worth nearly 272 percent of Thailand's GDP. Mexico's SPEI illustrates that fast payment infrastructure is a long game, where scalability is increased over time through persistent institutional commitment. Launched in 2004 and extended to 24/7 in 2016, SPEI has grown from just over 229 million transactions in 2017 to more than 4.7 billion in 2024. This demonstrates that scaling a national FPS is not a one-time achievement but an ongoing strategic commitment that evolves with the ecosystem, requiring a continuous upgrade in operational competencies and institutional coordination. Infrastructure capacity must evolve alongside liquidity management, real-time risk monitoring, governance, and participant onboarding.

The governance models underpinning FPS that have demonstrated remarkable scalability reveal two viable paths. India's UPI and Thailand's PromptPay are operated by NPCI and NITMX, respectively. Both are private entities under regulatory oversight, allowing them to innovate rapidly and respond flexibly to market needs. In contrast, Brazil's *Pix* and Mexico's SPEI are directly operated by their central banks, reflecting an approach to infrastructure provision led by the public sector. Both models come with different institutional requirements. Private operators benefit from agility and market orientation but require robust governance frameworks to ensure inclusiveness, security, and public trust. Public operators may move more deliberately but can embed public policy goals more directly into system design. The common denominator across both approaches is the need for high institutional capacity, political will, and sustained investment to support complex ecosystems at scale.

Looking ahead, open-source technologies offer a promising path for developing flexible, cost-effective FPS, especially in resource-constrained environments, but require operators and overseers to assess pros and cons. By enabling access to source code and avoiding vendor lock-in, open-source solutions allow FPS operators to tailor platforms to local requirements and promote transparency through community-based development. Systems like Mojaloop demonstrate the feasibility of modular open-source FPS that support alias resolution, clearing, and fraud management while being extensible to diverse financial service providers. However, the use of open-source software introduces operational and cybersecurity risks that must be managed proactively. Operators need substantial in-house technical capacity or external integrator support to ensure proper implementation, maintenance, and ongoing security. While open-source models can reduce licensing costs, they may require higher long-term investments in customization, support, and risk mitigation. Regulators and operators should carefully assess institutional maturity, total cost of ownership, and the availability of robust support communities before adopting open-source FPS frameworks.



APPENDIX A

FPS DESIGN MATURITY INDEX

The FPS Design Maturity Index is a composite index calculated by aggregating the number of points achieved according to the following methodology:

COUNTRY	24/7 OPERATION	INSTANT AVAILABILITY OF FUNDS	NUMBER OF PARTICIPANT TYPES (BANKS, NON-BANKS)	PARTICIPATION SCHEME TYPE (DIRECT/INDIRECT)	ALL TYPES OF LICENSED NON-BANKS CAN PARTICIPATE DIRECTLY IN THE FPS	NUMBER OF ACCESS CHANNELS	NUMBER OF PAYMENT INSTRUMENTS	TYPES OF ALIASES SUPPORTED	TYPE OF USE CASES	TRANSACTION LIMITS SPECIFIED	TOTAL
Brazil	3	3	1	1	2	2	1	3	5	1	22
Argentina	3	3	1	1	0	2	2	1	5	1	19
Peru	3	3	1	1	2	2	1	3	3	0	19
Bolivia	3	3	1	0	2	2	2	0	4	1	18
Chile	3	3	1	1	2	1	2	0	4	0.5	17.5
Costa Rica	3	3	1	0	2	2	1	1	3	1	17
Mexico	3	3	1	1	2	1.5	1	1	2	1	16.5
Paraguay	3	3	1	1	0	1.5	2	3	1	1	16.5
El Salvador	0	0	1	0	2	1	2	2	5	1	14
Colombia	3	3	1	0	2	1.5	1	1	1	0	13.5
Dominican Republic	0	3	1	0	2	1	1	0	1	1	10

- 24/7 operation: Yes = 3 points, no = 0 points.
- Speed of availability of funds: Instant availability (less than eight seconds) = 3 points, otherwise = 0 points.
- Number of participant types (banks, nonbanks): Both = 1 point, only banks = 0 points.
- Participation scheme type (direct, indirect): Both = 1 point, only direct = 0 points.
- All types of licensed nonbanks can participate directly in the FPS: Yes = 2 points, no = 0 points.
- Number of access channels (mobile application, internet banking, QR codes, ATMs, agents, POS devices): More than four channels = 2 point, three or four channels = 1.5 points, fewer than three channels = 1 points.
- Number of payment instruments (credit transfer, direct debit, other): More than one = 2 point, only one = 1 points.
- Types of aliases supported (phone number, email address, national ID, corporate registration number, scheme-specific proxy identifier, other): More or equal to three = 3 points, two = 2 points, one =1 points, zero = 0 points).
- Type of use cases (P2P, P2M, G2P, P2G, other): 1 point for each use case, with a maximum score of 5 points.
- Transaction limits specified (no limits, limits): No limits = 1 point, high limit (more than US$500 per day) = 0.5 points, limits = 0 points.

The maximum score is 23. In the case of countries with multiple FPS, the most sophisticated FPS is included. The calculation of the score reflects the adherence of the system's instruments, rules and procedures to the criteria above, based on information provided by the participating central banks and other publicly available information.

ENDNOTES

1. See "Competition in Retail Banking Services in Latin America," World Bank, September 2020. https://documents1.worldbank.org/curated/en/804881599637618906/pdf/Competition-in-Retail-Banking-Services-in-Latin-America.pdf
2. See "Payment technology complementarities and their consequences on the banking sector: evidence from Brazil's *Pix**", BIS, December 2024. https://www.bis.org/publ/bppdf/bispap152_c.pdf
3. DPI is defined by the World Bank as shared digital resources that are designed for the public benefit and can be reused across sectors to avoid reinventing the wheel for each new digital service. Source: https://documents1.worldbank.org/curated/en/099031025172027713/pdf/P505739-84c5073b-9d40-4b83-a211-98b2263e87dd.pdf
4. https://openknowledge.worldbank.org/server/api/core/bitstreams/bb08d389-cfbf-4417-9415-b9f65ef5c1f4/content
5. The information for Colombia pre-dates the launch of Bre-B, Colombia's interoperable fast payment ecosystem. Accordingly, the analysis reflects the operations of Colombia's privately operated FPSs prior to the launch of Bre-B. Nevertheless, this report includes several references to Bre-B as a relevant central bank initiative to foster interoperability. Bre-B debuted on October 6, 2025, with the entry into operation of the central bank-operated centralized settlement infrastructure.
6. This work builds on the World Bank FASTT (Frictionless, Affordable, Safe, Timely Transactions) toolkit. See https://fastpayments.worldbank.org/
7. Excluding Brazil, each accountholder in LAC made 106.3 fast payments per year in 2024, compared to 6.1 in 2017.
8. It should be noted that high inflation and other macroeconomic pressures may drive users to adopt fast payments, as the need to transact quickly becomes critical to avoid loss of value in rapidly depreciating currencies. Additionally, the inconvenience and security risks of carrying large quantities of banknotes may further incentivize the shift toward digital payments. In the case of Argentina, it remains unclear to what extent the ongoing high inflation process has directly influenced the adoption of digital payments, including fast payments.
9. See "Fast payments and banking: Costa Rica's SINPE Móvil", BIS, December 2024. https://www.bis.org/publ/bppdf/bispap152_d_rh.pdf; "*Pix* is now the most used payment method in Brazil", BCB, March 2025. https://www.bcb.gov.br/en/pressdetail/2588/nota
10. Global Findex data is referenced throughout the report to facilitate cross-country comparisons of financial inclusion indicators. Financial sector authorities and national statistical agencies often collect and publish their own financial inclusion data, which may differ from Global Findex in methodology and results.
11. In many countries without a P2M functionality, fast payments may still be used for merchant payments even though merchants and their customers lack a full-fledged ecosystem or appropriate access channels, impairing user experience and potentially causing growth to stagnate. (For example, in some markets, customers initiate payments via manual bank transfers using account numbers, with no QR codes or integration at the POS.) The international experience shows that this state may not be sustainable over time, and more advanced fast payment markets have developed dedicated P2M functionality.
12. In this context, governance refers to the "relationships between owners, board of directors (or equivalent), management, and other relevant parties in a payment or other settlement system, including participants, authorities, and other stakeholders." Governance provides "the processes through which an organization sets its objectives, determines the means for achieving those objectives, and monitors performance against those objectives." Adapted from the Principles for Financial Market Infrastructures (PFMI) of the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions.
13. Fast payments are payments where the transmission of the payment message and the availability of final funds to the payee occur in real time or near real time and as near to 24/7 as possible.
14. For example, they would hold regular periodical informal meetings with the operators and, in some cases, participate as observers in board meetings.
15. According to the first World Bank Global Payment Systems Survey (GPSS), which was published in 2009, only very few central banks, such as those of Czechia and Saudi Arabia, were at the time offering a service similar to SPEI of *Banco de México*.
16. See "NPCI International and the Central Reserve Bank of Peru Partner to Develop UPI-Like Real-Time Payments System in Peru", NPCI International, June 2024. https://www.npci.org.in/PDF/npci/press-releases/2024/NIPL-Press-Release-NPCI-International-and-the-Central-Reserve-Bank-of-Peru-Partner-to-Develop-UPI-Like-Real-Time-Payments-System-in-Peru.pdf
17. See "Competition in Retail Banking Services in Latin America," World Bank, September 2020. https://documents1.worldbank.org/curated/en/804881599637618906/pdf/Competition-in-Retail-Banking-Services-in-Latin-America.pdf
18. The survey includes the Dominican Republic's *Pagos al Instante* and El Salvador's *Transfer365*. While *Pagos al Instante* and *Transfer365* meet the criteria for fast payments (enabling transmission of the payment message and availability of final funds to the payee in real time or near real time and operating as near to 24/7 as possible), they are not fully aligned with state-of-the-art FPS (see World Bank FASTT tracker, https://fastpayments.worldbank.org/global-tracker#block-homenav). In particular, *Pagos al Instante* operates 14 hours during weekdays and 16 hours during weekends and holidays. Regarding *Transfer365*, per its rule book, it operates 21

hours every day, while participants are granted up to three minutes to credit the payee. Despite these limitations, these efforts are noteworthy for the purposes of analyzing regional trends and are on a trajectory to become or evolve into full-fledged FPS.

19. Note that in countries with more than one FPS, the FPS with the highest volume in 2024 is used.
20. In Colombia, Visionamos is the FPS for the cooperative and solidarity sector and currently counts 165 participants. On the other hand, a majority of participants in Transfiya ACH Colombia and Redeban are banks.
21. To provide a like-to-like comparison between FPS and non-FPS digital payments, only centrally cleared transactions were considered for this indicator.
22. Taking into account not only FPS volume share of total digital payments but also the FPS share of the average digital payment value.
23. The Competitive Dominance Index (CDI) is calculated by multiplying fast payments per adult by fast payments as a share of total digital payments. This multiplication captures two complementary dimensions: the intensity of use (how frequently the average adult makes FPS transactions) and the relative dominance of FPS within the overall digital payments landscape. The resulting indicator highlights where FPS are not only widely adopted at the individual level but also central to the functioning of the broader payments ecosystem, allowing for a more complete picture of their competitive position across the national digital payments ecosystem and across countries.
24. For the purposes of this section, digital payments include FPS transactions, inter-PSP electronic fund transfers (traditional credit transfers and direct debits), card transactions (debit, credit, and prepaid), and e-money transfers between user accounts at different issuers. Intra-PSP transactions were excluded to enable the analysis of the impact of FPS on digital payments by comparing data at system level. The focus of this analysis is on trends.
25. See Arauzo, J., Franco, C. (2024), Fast payment systems and financial inclusion. Box extracted from chapter "Fast payments: design and adoption". BIS Quarterly Review March 2024. https://www.bis.org/publ/qtrpdf/r_qt2403z.htm
26. Including high-income economies like Chile and Uruguay.
27. See "Fast payments and banking: Costa Rica's SINPE Móvil", BIS, December 2024. https://www.bis.org/publ/bppdf/bispap152_d_rh.pdf; "*Pix* is now the most used payment method in Brazil", BCB, March 2025. https://www.bcb.gov.br/en/pressdetail/2588/nota
28. According to the PFMI, governance "provides the processes through which an organization sets its objectives, determines the means for achieving those objectives, and monitors performance against those objectives."
29. For example, in 2022 *Banco de la República* (Colombia) established the Payments System Forum (*Foro Sistema de Pagos*) to overcome misaligned incentives and interoperability challenges that hindered the development of fast payments through public-private collaboration. See "Banco de la República creó el Foro Sistema de Pagos", *Banco de la República de Colombia*, September 2022. https://www.banrep.gov.co/es/banco-republica-creo-foro-sistema-pagos. The *Banco Central de Reserva del Perú*, in its announcement of the agreement with NPCI to implement a UPI-like FPS, emphasizes financial inclusion and cash reduction. See "BCRP y Corporación Nacional de Pagos de la India firman acuerdo para implementar una plataforma de pagos minoristas en Perú", *Banco Central de Reserva del Perú*, June 2024. https://www.bcrp.gob.pe/docs/Transparencia/Notas-Informativas/2024/nota-informativa-2024-06-04.pdf.
30. See "Characteristics of the New Bre-B Instant Payments System," Box 4 in "Report of the Board of Directors to the Congress of Colombia", *Banco de la República de Colombia*, February 2025. https://repositorio.banrep.gov.co/server/api/core/bitstreams/d54366b5-4f33-465f-9b75-fbaefd8a1ec9/content.
31. These issues predate FPS and were first documented in "Balancing Cooperation and Competition in Retail Payment Systems", Financial Infrastructure Series, Payment Systems Policy and Research Policy Brief 47501, World Bank, November 2008. http://documents.worldbank.org/curated/en/180751468053710688.
32. See PFMI 3.2.7.
33. See "*Implementación e impacto de la Estrategia de Interoperabilidad de los Pagos Minoristas en el Perú"*, *Banco Central de Reserva del Perú*, April 2024. https://www.bcrp.gob.pe/docs/Sistema-Pagos/articulos/estrategia-de-interoperabilidad-2024.pdf.
34. See "Interoperability in Retail Digital Payments", World Bank, forthcoming.
35. A CBDC has commonly been defined as a liability of (or a claim on) the central bank, denominated in the national unit of account that is different from balances in traditional reserve or settlement accounts. Two broad categories of CBDCs are generally distinguished: wholesale and retail. Wholesale CBDCs are specifically tailored for use by financial institutions and other eligible participants for the settlement of interbank transfers and other related large-value wholesale transactions and post-trade financial processes. Retail CBDCs are designed for access and use by individuals and businesses and can be used for a diversity of use cases.
36. See Illes et al., 2025, "Advancing in tandem - results of the 2024 BIS survey on central bank digital currencies and crypto", BIS Papers No 159, August 2025, https://www.bis.org/publ/bppdf/bispap159.htm
37. See Vega et al., 2025. "Design and implementation of Peru's retail central bank digital currency pilot," Journal of Payments Strategy & Systems, Henry Stewart Publications, vol. 19(2), pages 154-169, June.
38. See Aurazo et al., 2024, "Central bank digital currencies and fast payment systems: rivals or partners?", BIS Papers No. 151, December, https://www.bis.org/publ/bppdf/bispap151.pdf
39. P2M are supported by only one of Colombia's three FPS: Redeban Entre-Cuentas.

40. Use-case expansion must be realistic about systemic boundaries, as not all payment needs align with FPS design. Business-to-business payments, for instance, often require batch processing, authorization hierarchies, and high-value settlement features better suited to traditional transfer systems.
41. See Dimitris Drakopoulos, Yibin Mu, Dmitry Vasilyev, and Mauricio Villafuerte, "Cross-Border Payments Integration in Latin America and the Caribbean", IMF Working Papers WP/24/119, June 2024. https://doi.org/10.5089/9798400279584.001.
42. See "Remittance Prices Worldwide Quarterly", World Bank, December 2024. https://remittanceprices.worldbank.org/sites/default/files/rpw_main_report_and_annex_q424_13.pdf.
43. Source: World Bank Enterprise Surveys, www.enterprisesurveys.org.
44. Using the exchange rate of June 18, 2025, 1 Indian rupee equals $0.012.
45. See https://pjss.bzu.edu.pk/index.php/pjss/article/view/1498
46. According to Findex 2025, in LAC only 25 percent of adults made a utility payment using an account with a bank or financial institution.
47. See Decree 698/2024 (https://www.boletinoficial.gob.ar/detalleAviso/primera/311794/20240806).
48. See "Key Considerations for Open Finance", CGAP, BIS, IMF, UNSGSA, and World Bank, 2024. https://www.cgap.org/research/key-considerations-for-openfinance.
49. Based on Findex 2025, 57 percent and 11 percent of unbanked adults in LAC cite high costs and lack of trust, respectively, as a reason not to have a transaction account. LAC ranks first and second globally on cost and trust motivations, respectively.
50. See "Key Considerations for Open Finance", CGAP, BIS, IMF, UNSGSA, and World Bank, 2024. https://www.cgap.org/research/key-considerations-for-openfinance.
51. See "Índice de Inclusión Financiera de Credicorp 2024", Credicorp, August 2024. https://bancodeideascredicorp.com/assets/files/Ebook-Indice-de-Inclusion-Financiera-de-Credicorp-2024.pdf.
52. See "2025 Global eCommerce Payments & Fraud Report", Visa Acceptance Solutions, 2025. https://www.visaacceptance.com/en-us/insights/fraud-report.html
53. The World Bank FASTT focus note *Fraud Risks in Fast Payments* (October 2023) provides a comprehensive overview of fraud typologies and mitigation techniques in fast payments. The note is available at https://fastpayments.worldbank.org/sites/default/files/2023-10/Fraud%20in%20Fast%20Payments_Final.pdf.
54. See the forthcoming World Bank FASTT focus note "Dispute Resolution Mechanisms in Fast Payments".

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