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Connecting the dots: A new dataset on global payment system interlinking

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Abstract

This note introduces a newly constructed dataset of currently operational cross-border payment system interlinking arrangements and uses it to document broad trends in the evolution of payment system interlinking. We document two main findings. First, from the 1970s to the early 2010s, interlinking occurred almost entirely among wholesale payment systems, with new linkages added slowly and incrementally. However, since the early 2010s, interlinking has occurred almost exclusively between retail systems, driven by the rapid expansion of fast payment system (FPS) linkages, most of which have taken the form of cross-border QR-code arrangements concentrated in Asia. Second, this proliferation of FPS linkages has produced a set of relatively independent regional FPS networks that differ in their structure.

Topics: Money and payments, Payment and financial market infrastructures
JEL codes: E42, F36

Résumé

Nous présentons un nouvel ensemble de données sur les dispositifs d'interconnexion transfrontière des systèmes de paiement actuellement opérationnels et l'utilisons pour dégager les grandes tendances de l'évolution de l'interconnexion de ces systèmes. Nous faisons ressortir deux principaux constats. Premièrement, des années 1970 jusqu'au début des années 2010, seuls les systèmes de paiement de gros ou presque étaient interconnectés. De nouvelles interconnexions s'ajoutaient lentement et progressivement. Toutefois, depuis le début des années 2010, les dispositifs d'interconnexion concernent presque exclusivement les systèmes de paiement de détail, surtout en raison de l'essor marqué des interconnexions entre systèmes de paiement rapide, dont la plupart prennent la forme de dispositifs transfrontaliers reposant sur des codes QR, principalement en Asie. Deuxièmement, leur multiplication a donné lieu à plusieurs réseaux régionaux de systèmes de paiement rapide relativement indépendants les uns des autres et de structures différentes.

Sujets : Argent et paiements, Infrastructures de paiement et de marchés financiers
Codes JEL : E42, F36

Introduction

Cross-border payment systems are an essential component of the global economy, underpinning international trade, remittances, and financial integration more broadly. Traditionally, cross-border payments have been handled through the correspondent banking system: a network of bilateral relationships in which banks in different jurisdictions maintain accounts with one another and settle cross-border obligations by crediting and debiting those balances. This model has proved durable but has been associated with several frictions such as high transaction costs, slow processing times, high error frequency, and limited transparency, with frictions compounding along chains of intermediary institutions (FSB, 2020).

An alternative means by which to facilitate cross-border payments is payment system interlinking, in which the domestic payment infrastructures of different jurisdictions are connected directly so that payment service providers (PSPs) in these jurisdictions can transact with one another. Interlinking has attracted growing policy attention since the G20 identified cross-border payment frictions as a priority issue and proposed interlinking as part of a broader reform agenda (FSB, 2020). Despite this emerging interest, there is no existing dataset that systematically covers all currently operational wholesale and retail payment system interlinking arrangements while also recording key design features, including settlement model, currency model, interlinking form, and launch dates. This note addresses that gap by making publicly available a new dataset and using it to document trends in interlinking activity and highlight stylized facts that may warrant further study.

Background

Domestic payment systems

Jurisdictions maintain payment systems through which financial institutions clear and settle payment obligations. These systems can be usefully classified along two dimensions. The first is the nature of the transactions processed: *wholesale* (or large-value) payment systems handle higher-value, lower-volume transactions, while *retail* payment systems handle higher-volume, lower-value transactions. The second dimension is the settlement mechanism: under *real-time gross settlement (RTGS)*, transactions are settled individually and continuously, whereas under *deferred net settlement (DNS)*, obligations are accumulated and multilaterally netted before periodic settlement. Combining these two dimensions yields four broad categories of payment systems.

Table 1. Taxonomy of domestic payment systems

	Wholesale	Retail
RTGS	High-value payments settled individually and in real time, typically in central bank money. Most commonly used infrastructure for large-value payments. Ex. Canada's large-value payment system, Lynx	Low-value payments settled individually and in real time. Almost all fast payment systems (FPS) are of this type. Ex. Canada's forthcoming fast payment system, the RTR.
DNS	High-value payment obligations accumulated and multilaterally netted before periodic settlement. These systems are largely obsolete, having been upgraded to incorporate real-time settlement features. Ex. The UK's CHAPS before it was upgraded in 1996.	Low-value retail payments processed in batches, with net positions settled at defined intervals. Ex. Canada's retail batch payment system, ACSS, is an example.

In practice, the boundaries of this taxonomy are fuzzy. That is, a given system may combine elements of more than one category (some wholesale DNS systems incorporate real-time elements, and some retail systems have evolved toward continuous settlement). It is possible for a system to be a blend of wholesale and retail and/or RTGS and DNS.

Correspondent banking

Cross-border payments are more complex than domestic payments as they require the domestic payment infrastructures of different jurisdictions to interact with one another. Traditionally, cross-border payments are handled through correspondent banking. Under these arrangements, banks in different jurisdictions establish bilateral relationships with one another, maintaining special reciprocal accounts, namely *nostro* accounts, which are funds held abroad in a foreign bank, and *vostro* accounts, which are funds held domestically on behalf of a foreign bank. Cross-border transfers are settled by crediting and debiting these account balances. Figure 1 illustrates the basic mechanics of a correspondent banking arrangement.

Correspondent banking has been associated with several frictions. The FSB (2020) identifies the four most prominent to be the following:

High costs. This comprises various elements such as transaction fees, account fees, compliance costs, applied FX conversion rates and fees, fees across the payment chain, and liquidity costs for prefunding. For end-users, this can lead to decreased demand for cross-border payments among large corporations and small and medium-size enterprises alike or encourage the usage of unregulated cross-border payment solutions. For PSPs, many of these cost elements can lead to high barriers to entry and an unwillingness to do business with less profitable customers.

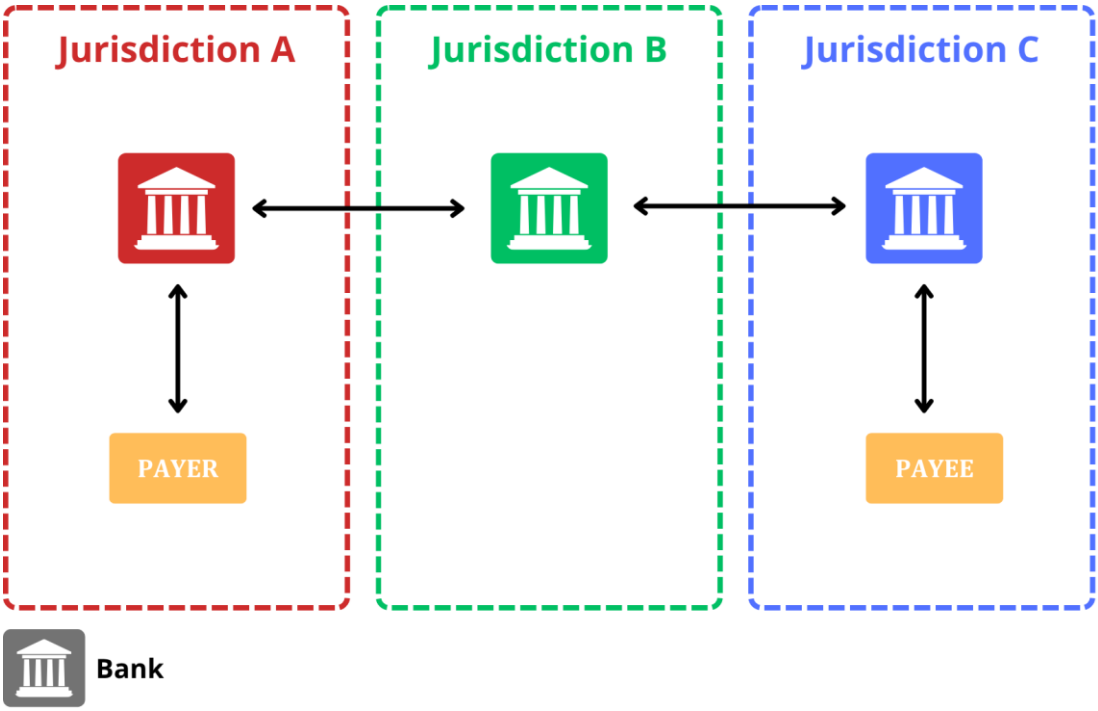
Slow processing times. This involves the processing time of payments from end to end. Delays may arise from dispute resolutions, reconciliation and searches, slow funding and defunding procedures, daily cut-off times and closing times, AML/CFT checks, and a lack of interoperability between domestic payment systems. For end users, this results in higher uncertainty, and liquidity and credit risk in the cross-border payments space. For PSPs, slow processing times increase the cost of liquidity and FX settlement risk, making liquidity management more complex.

Limited access. This refers both to limitations on end-users' access to cross-border payment services and to barriers preventing PSPs from accessing payment systems and other payment arrangements. End-user constraints are particularly pronounced for small and medium-sized enterprises and for individuals and businesses in developing economies, potentially limiting financial inclusion and encouraging reliance on unregulated payment solutions. PSPs may lack direct access to domestic or foreign payment systems and to foreign-currency funding. As a result, they may depend on intermediary providers and become subject to those providers' services, fees, and AML/CFT policies, potentially limiting the availability and increasing the cost of their services.

Insufficient transparency. This refers to limited information for both end-users and PSPs regarding costs, processing times, payment-chain details, and transaction status. For end-users, uncertainty about fees, foreign-exchange rates, delivery times, and the final amount received can disrupt business planning and service delivery and may create additional hedging or insurance costs. PSPs face similar uncertainty, which can make it more difficult to meet service commitments to customers.

Adding to these frictions, the correspondent banking network has contracted in recent years, as rising AML/CFT compliance costs have prompted banks to exit lower-volume corridors, a retreat felt most acutely in emerging markets and developing economies, even as the compliance costs driving that retreat are largely incurred by banks in advanced economies (Rice, von Peter & Boar, 2020; Stebunovs, 2025).

Figure 1a. A typical correspondent banking chain



Note: Figure 1a presents a typical correspondent banking chain. The payer in Jurisdiction A instructs its bank to send a payment to the payee in Jurisdiction C. Because the payer's bank and the payee's bank do not have a direct relationship, the payment is routed through an intermediary correspondent bank in Jurisdiction B. The payer's bank debits the payer's account and sends the payment instruction to the correspondent bank, which maintains account relationships with the banks on either side of the chain. The correspondent bank then passes the payment instruction onward to the payee's bank. The payee's bank credits the payee's account once it receives the funds or confirmation through the correspondent chain.

Source: CPMI, 2022

Figure 1b. A typical correspondent banking chain

Bank A

Assets	Liabilities
Nostro account at Bank B **-$100**	Payer's deposit **-$100**

Bank B

Assets	Liabilities
No change **$0**	Deposit owed to Bank A **-$100** Deposit owed to Bank C **+$100**

Bank C

Assets	Liabilities
Nostro account at Bank B **+$100**	Payee's deposit **+$100**

Note: Figure 1b illustrates the balance-sheet effects of a $100 payment sent through a typical correspondent banking chain. Bank A debits the payer's deposit and reduces its nostro balance at Bank B by $100. Bank B settles the payment by reducing its deposit liability to Bank A and increasing its deposit liability to Bank C by the same amount, leaving its total balance sheet unchanged. Bank C records the increase in its nostro balance at Bank B and credits the payee's deposit by $100.

Source: Author's visualization

Interlinking payment systems

Given the frictions associated with correspondent banking, several alternative arrangements have received increasing attention. One such arrangement is payment system interlinking[1]. The CPMI broadly defines an interlinking arrangement as "a set of contractual agreements, technical links and standards, and operational components between payment systems of different jurisdictions, allowing their respective participating PSPs (payment service providers) to transact with one another as if they were in the same system" (CPMI, 2022). The key distinction from correspondent banking lies in the level at which the cross-border connection is established. Payment system interlinking connects the payment systems in which PSPs operate, rather than only the individual institutions themselves. It therefore establishes cross-border connectivity at the infrastructure level, rather than at the level of individual institutional relationships. CPMI, 2022 defines three attributes by which interlinking arrangements can be differentiated: *interlinking form, currency arrangement, type of payment system being interlinked*.

Interlinking form. Under a *single access point* arrangement, PSPs in one jurisdiction are linked with a single "gateway" entity in a foreign jurisdiction[2]. An example of this model is euroSIC in Switzerland[3]. A *bilateral link* connects two payment systems entirely, enabling all participants in one jurisdiction's payment system to directly transact with all participants in another jurisdiction's payment system as if they were participants of the same system. Examples of this model include Directo a México, which connects all participants of the US FedACH with all participants of Mexico's SPEI, and UPI-PayNow, which connects all participants of India's UPI with all participants of Singapore's PayNow. A notable form within this category is the QR code arrangement. These are bilateral arrangements in which a customer in one jurisdiction can scan a merchant's QR code in another jurisdiction to exchange payment information between their respective banks. Importantly, these arrangements do not necessarily establish direct technical links between domestic payment systems at the infrastructure level. Rather, the QR code

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1 Other proposed arrangements include crypto-asset and distributed ledger technology-based models, such as stablecoin-based cross-border payment arrangements and tokenized settlement platforms. However, these approaches are outside the scope of this note.

2 This model bears a resemblance to correspondent banking but differs in the way access is governed. In a single access point model, access is provided through a gateway entity under common rules, service level agreements, and access criteria agreed for the interlinking arrangement, rather than through many separate bilateral correspondent banking relationships.

3 Swiss PSPs maintain euro-denominated settlement account in euroSIC, which are managed by the Swiss Euro Clearing Bank (SECB). SECB acts as the correspondent, liquidity manager and settlement agent for euroSIC participants and routes and is a participant of the T2 system. Any conversion from Swiss francs into euros is done separately by the PSP, not by euroSIC itself.

functions as a messaging mechanism, with settlement occurring through existing arrangements such as correspondent banks or infrastructure-level interlinkages. Nevertheless, we consider these arrangements a lighter form of bilateral interlinking, as they establish common contractual and operational links between jurisdictions, which is consistent with the CPMI definition outlined above. A *hub-and-spoke* link is an arrangement capable of linking more than two systems, where the inter-system accounting and clearing are done at a common intermediary hub. An example of this model is the Regional Payment and Settlement System (REPSS) of the Common Market for Eastern and Southern Africa. Finally, a *common platform* arrangement enables PSPs from one jurisdiction to directly reach PSPs in other jurisdictions through a single common payment system[4]. Diagrams of each of these arrangement models, along with a more in-depth explanation of their mechanics, can be found in the appendix.

Currency arrangement. Under a *single-currency* arrangement, a single currency acts as the arrangement's settlement asset, which can either be the currency of one of the jurisdictions in the arrangement or another currency (typically USD or Euro). In this arrangement, the conversion from a non-settlement currency to the settlement currency is executed outside of the arrangement itself. SADC in Africa and Swiss euroSIC are examples of this model. Under a *multicurrency* arrangement, settlement can occur in multiple. In this arrangement, the conversion from a non-settlement currency to any of the settlement currencies is executed outside of the arrangement itself[5]. TIPS is an example of this model. Under a *cross-currency* arrangement, multiple settlement currencies exist and conversion from one currency to another can take place through the interlinking arrangement itself. This allows a debtor to be debited in one currency and the creditor to be credited in the other currency. Directo a México is an example of this model.

Type of payment system interlinked. Both wholesale and retail payment systems can be interlinked. *Wholesale* interlinkages handle higher-value, lower volume cross-border transactions, while *retail* payment systems process higher-volume, lower-value cross-border transactions. Interlinking arrangements can also be classified by the type of payment system involved (RTGS or DNS).

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4 There is some debate as to whether common platforms should strictly be classified as payment system links, since participating PSPs operate within a single shared payment system rather than through linked domestic systems. They are included here because they nonetheless involve cross-border institutional arrangements between jurisdictions and serve a similar functional purpose in facilitating cross-border payments.

5 For example, TIPS can settle instant payments in both euro and Swedish kronor, but a euro-denominated payment and a krona-denominated payment are settled separately in their respective currencies. A payment that requires conversion between currencies would require an additional cross-currency mechanism, such an intermediary participant holding accounts in both currencies acting as an FX operator. Absent such a mechanism, the foreign exchange conversion occurs outside the arrangement before the payment is submitted for settlement.

A small literature has begun to categorize and document payment system interlinking. Bech, Faruqui and Shirakami (2020) provide an early scan of selected cross-border payment arrangements, while CPMI (2022) develops the conceptual framework described above. Empirical work has also started to document interlinking activity more systematically, with Minesso et al. (2026) providing the first publicly available dataset of operational cross-border fast payment system links. However, fast payment system links only represent a subset of the broader universe of payment system interlinking activity. There is, therefore, a need for a broader dataset that covers currently operational retail and wholesale arrangements and records the design features emphasized in the CPMI framework. Such a dataset should also make the underlying sources and classification decisions transparent to better support replication and further work.

Overview of the dataset

This note builds on existing work by providing an expanded dataset of currently operational, public sector-facilitated[6], cross-border payment system interlinking arrangements. The dataset covers both wholesale and retail arrangements and adds variables modelled on the CPMI taxonomy described in the preceding section. The unit of observation is a jurisdiction-linkage pair: each row records one jurisdiction's participation in one interlinking arrangement, so that linkages appear as multiple rows—one per participating country[7]. Key variables include the jurisdiction name, the name of the arrangement, the interlinking form (bilateral link, hub-and-spoke, or common platform), the currency arrangement (single-currency, multicurrency, or cross-currency), the payment system type (wholesale or retail), the settlement mechanism (RTGS or DNS), the date the arrangement went live, and the date the jurisdiction entered the arrangement[8]. The dataset was hand-collected from publicly available sources, including central bank websites, official reports and white papers, press releases, speeches, and news articles. A more detailed explanation of the collection methodology is available in the appendix.

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6 The dataset focuses on public sector-facilitated arrangements for tractability and consistency purposes. Many private sector arrangements may also be viewed as forms of cross-border payment interlinking, but their boundaries are often more difficult to define systematically because they may involve proprietary networks, correspondent banking relationships, commercial partnerships, or overlay services rather than direct links between payment system infrastructures.

7 For example, the bilateral PromptPay-PayNow linkage between Thailand and Singapore appears as two rows: one for each country. A multilateral arrangement such as TIPS, which spans over twenty jurisdictions, appears as one row per participating country.

8 For bilateral arrangements, the arrangement live date and the jurisdiction entry date are identical by construction. For multilateral arrangements, these may differ: an arrangement may launch with an initial set of participants and admit additional jurisdictions over time (e.g. TIPS, which has expanded its participant base since its 2018 launch).

As noted above, fast payment systems are almost always retail RTGS systems, and all retail RTGS systems in the dataset are FPS. In limited circumstances, however, a system using a DNS settlement mechanism with an instant payments layer can also function as an FPS[9]. For the analysis below, retail RTGS interlinking should be understood as referring to the interlinking fast payment systems.

The dataset contains 286 observations representing 62 unique interlinking arrangements across 124 jurisdictions. Temporal coverage runs from the earliest recorded arrangement in November 1975 through the most recent linkages established in June of 2026. A fuller description of the dataset, including variable definitions and summary statistics, is provided in the Appendix.

Patterns of Interlinking

Historical interlinking trends

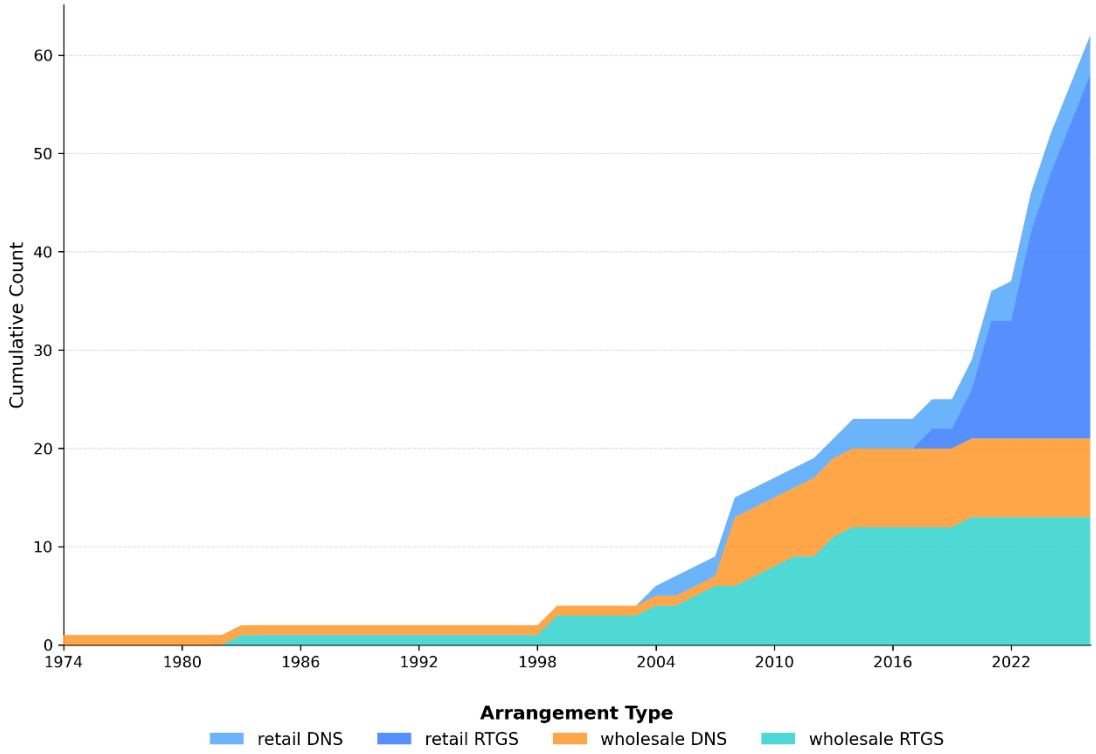
The data point to two broad phases in the history of payment system interlinking. The first stretches from the 1970s to the early 2010s. During this period, interlinking was almost entirely between wholesale systems. The earliest arrangements, established in the 1970s, were built on wholesale DNS infrastructure, while wholesale RTGS linkages began to appear in the 1980s. Through the 1990s and 2000s, the number of linkages continued to expand, but only gradually. The second phase begins in the mid-2010s with the emergence of the first FPS linkages. These arrangements, which are focused on facilitating retail payments, expanded quickly and soon came to constitute the overwhelming majority of new interlinking activity. These trends are illustrated in Figures 2 and 3.

For completeness, we also compiled a list of announced interlinking arrangements that are not yet operational; these are shown in Table 2. Without exception, these forthcoming arrangements are FPS linkages, suggesting a continued focus on FPS interlinking.

Altogether, these data reveal an interesting pattern. Fast payment systems are a recent technology, with the first domestic systems coming online in the early 2010s. Yet they are already being interlinked at a pace that far exceeds anything observed over the much longer history of wholesale linkages.

9 This occurs only once in the dataset with PAPSS (Pan-African Payment and Settlement System), which operates an instant payment layer over a DNS settlement mechanism. We have nevertheless added an *is_fps* variable to make this clear.

Figure 2. Cumulative interlinking arrangements[10]

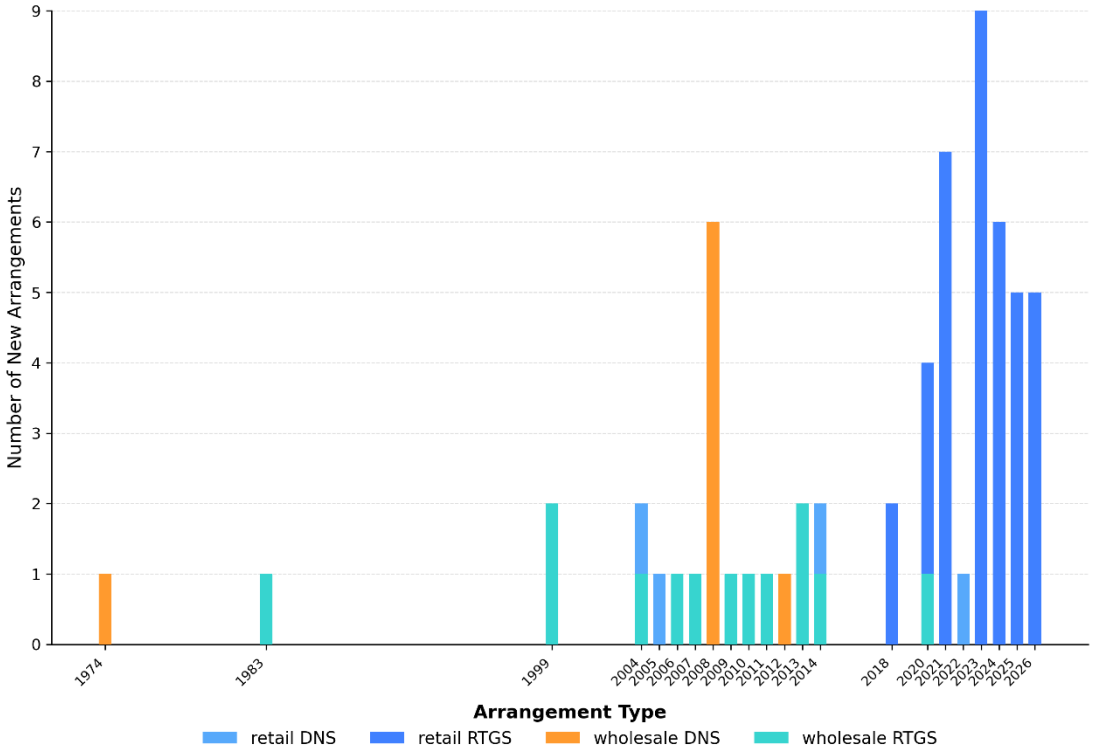


Note: Figure 2 shows the cumulative number of operational cross-border payment system interlinking arrangements over time, classified by arrangement type. Arrangement type combines the payment system's use case, wholesale or retail, with its settlement mechanism: RTGS or DNS. Each arrangement is counted once using the arrangement-level launch date.

Source: Authors' dataset

10 Figures 2 and 3 are plotted using arrangement-level launch dates rather than jurisdiction-specific go-live dates, as the latter were unavailable for a number of observations. We do not believe this affects the figures materially as these charts track arrangements rather than jurisdiction-level participation. We suspect that missing jurisdiction go-live dates would only be consequential if we were plotting the growth of jurisdiction-level participation over time, which we are not.

Figure 3. New interlinking arrangements launched per year, FPS and Non-FPS



Note: Figure 3 reports the number of new operational interlinking arrangements launched each year, classified by arrangement type. Arrangement type combines the payment system's use case, wholesale or retail, with its settlement mechanism: RTGS or DNS. Each arrangement is counted once using the arrangement-level launch date.

Table 2: Announced arrangements[11]

Arrangement	Region	Whole/Ret	RTGS/DNS	Is FPS	Countries
Nexus Global Payments	Asia-Pacific	Retail	RTGS	Yes	India, Malaysia, Philippines, Singapore, Thailand
UPI-TIPS	Asia-Pacific, Europe	Retail	RTGS	Yes	India, Euro area countries
Western Balkans TIPS Clone	Europe	Retail	RTGS	Yes	Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia
UPI-Favara	Asia-Pacific	Retail	RTGS	Yes	India, Maldives

11 Table 2 includes only announced new interlinking arrangements and excludes arrangements that are already live but in the process of onboarding additional members, such as PAPSS, BUNA, and AFAQ, which are each in various stages of expanding their country coverage

UPI-AANI	Asia-Pacific, Middle East	Retail	RTGS	Yes	India-UAE
InstaPay-DuitNow QR	Asia-Pacific	Retail	RTGS	Yes	Philippines, Malaysia
PayNow-InstaPay QR	Asia-Pacific	Retail	RTGS	Yes	Singapore, Philippines

Source: Authors' compilation based on BIS Innovation Hub (2025), European Central Bank (2025), Banca d'Italia (2025), Bank of Albania (2025), Maaldif (2025), Times of India (2025), and FXC Intelligence (2025).

Note: Table 2 lists announced interlinking arrangements that were not yet operational at the time of data collection. Classifications reflect publicly available information and may be revised as arrangements are implemented.

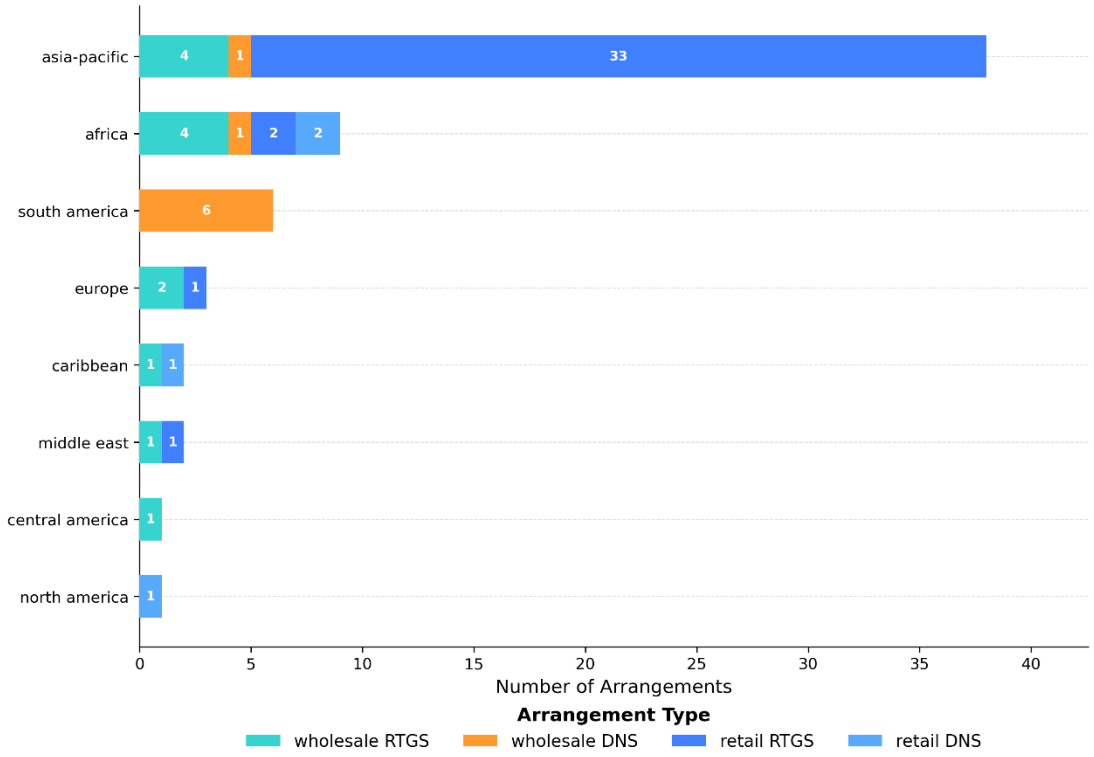
The emergence of regional networks

This rapid expansion in FPS interlinking has not been geographically uniform. As Figure 4 illustrates, FPS interlinking activity has so far been limited to Europe, Africa, the Middle East, and the Asia-Pacific, with no operational FPS interlinkages observed in the Caribbean, Central America, South America, or North America.

Within these regions, Figure 5 reveals the emergence of a set of independent networks of fast payment systems. The fact that these networks are regional is not a new finding: Ferrari Minesso et al. (2025), for example, document the strong role of geopolitical proximity as a determinant of interlinking. What our analysis does suggest is that these regional networks appear to be organized according to distinct topologies. In Europe, Africa, and the Middle East, FPS interlinking has largely been built around common platform models, with TIPS in Europe, PAPSS, SADC TCIB, and GIMACPAY in Africa, and Buna in the Middle East serving as shared multilateral infrastructures through which participating countries connect. In India, a hub-and-spoke model has taken shape, with India's UPI system functioning as the central node from which bilateral linkages to other countries radiate outward. In Southeast Asia the pattern is a decentralized network of bilateral arrangements developed between a growing number of country pairs, without a single shared platform or central node.

Figure 4 also reveals that most global FPS interlinking has occurred in Asia. Figure 6 shows that this growth has been driven primarily by QR-based bilateral interlinkages. Indeed, of the 33 FPS arrangements in Asia in the dataset, 28 are QR linkages, with full bilateral FPS links accounting for the remainder.

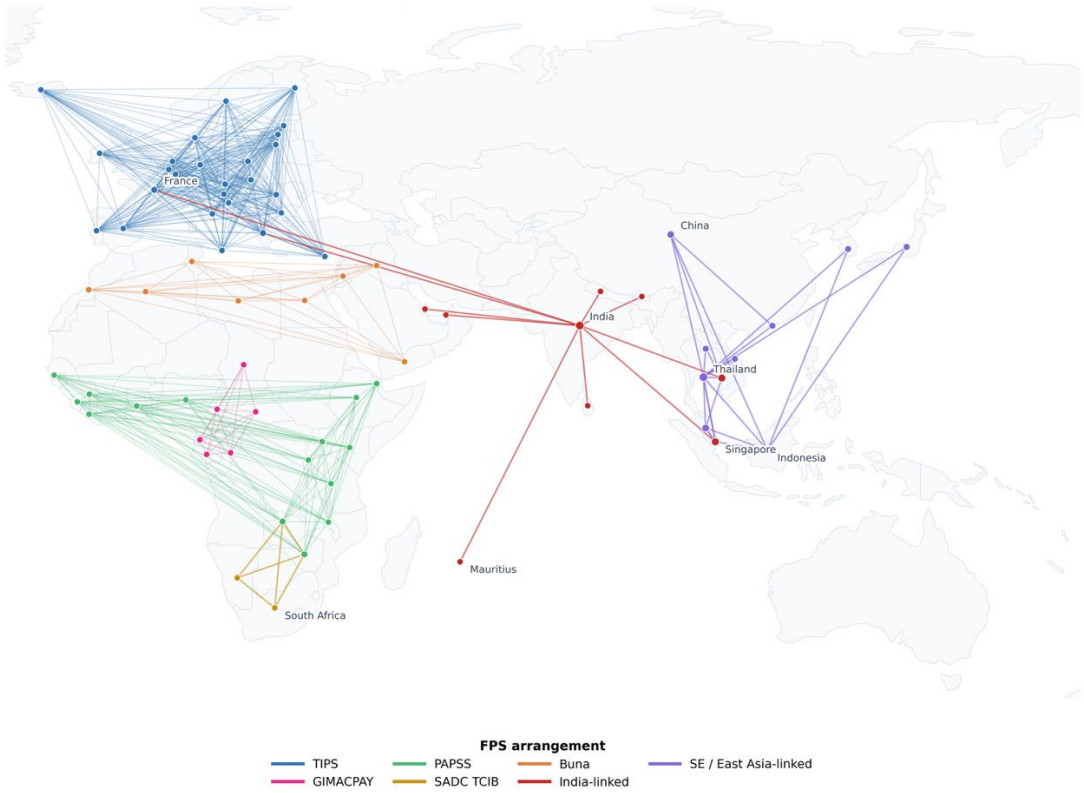
Figure 4. Interlinking arrangements by type and region



Note: Figure 4 reports the number of operational interlinking arrangements by region and arrangement type. Arrangement type combines the payment system's use case, wholesale, retail, or hybrid, with its settlement mechanism, RTGS, DNS, or hybrid.

Source: Authors' dataset

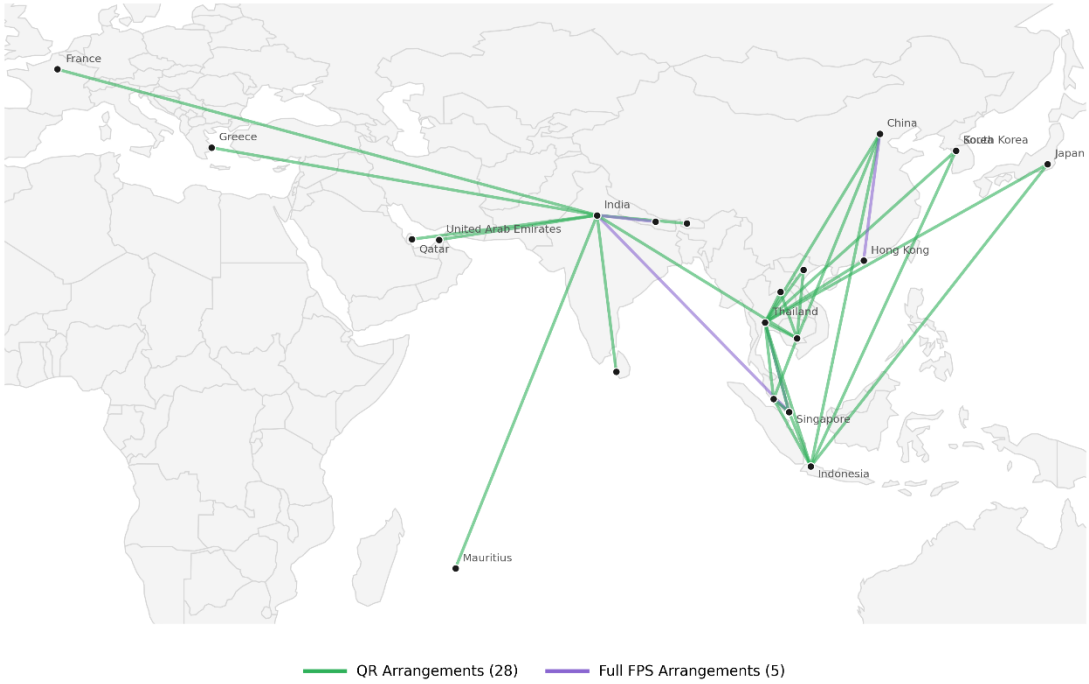
Figure 5. Global FPS Networks



Note: Figure 5 maps operational FPS interlinking arrangements in the dataset. Colours distinguish different FPS arrangements or regional linkage groups. Lines connect jurisdictions participating in the same FPS arrangement and are used to illustrate the geographic structure of each network; they should not necessarily be interpreted as individual bilateral payment corridors. Dots identify participating jurisdictions.

Source: Authors' dataset

Figure 6. FPS interlinkages in Southeast Asia



Note: Figure 6 maps operational Asian FPS interlinking arrangements in the dataset. Green lines denote QR-based FPS linkages, while purple lines denote full FPS linkages.

Source: Authors' dataset

Conclusion

This note introduces a newly constructed and publicly available dataset of cross-border payment system interlinking arrangements and uses it to document a set of salient facts about their development over time.

The data point to two broad phases in the history of payment system interlinking. From the 1970s to the early 2010s, interlinking occurred almost entirely between wholesale systems, and new linkages were added very incrementally. From the early 2010s to the present, interlinking has shifted from wholesale to retail systems, driven by the rapid expansion of FPS linkages.

In recent years, FPS interlinkages have been most commonly observed in the Asia-Pacific, with the vast majority of growth being driven by QR code fps arrangements. It is also interesting to observe that the FPS networks have largely been regional; each with a distinct network topology. In Europe, Africa, and the Middle East, interlinking has been built around common platforms through which participating countries connect multilaterally. India has followed a hub-and-spoke model, with its UPI fast payment system as the central node and bilateral linkages radiating outward. Southeast Asia, by contrast, has developed as a decentralised web of bilateral arrangements, without a

shared platform or dominant hub. The drivers and consequences of these patterns merit further investigation.

The dataset should be interpreted with some caution. Its main limitation is uneven source availability across regions and arrangements. Well-documented systems, particularly in Europe and parts of the Asia-Pacific, often have detailed official documentation. However, for others—particularly in Africa, Central America, and South America—official documentation was more difficult to find. In such cases, we relied on secondary sources such as journalistic publications. This creates some variation in the confidence with which individual observations can be classified. Date variables are especially affected. Arrangement-level launch dates are generally reliable, but jurisdiction-level go-live dates are less so, particularly for older multilateral arrangements and arrangements in developing regions.

Appendix

Overview of dataset[12]

Table A1. Main variables in the dataset

Variable	Description
jurisdiction	Participating jurisdiction included in the arrangement. Each arrangement may appear across multiple rows if it includes multiple jurisdictions.
arrangement	Full name of the cross-border payment interlinking arrangement.
region	Geographic region associated with the participating jurisdiction.
interlinking_form	Structural form of the interlinking arrangement, such as bilateral link or common platform.
currency_arrangement	Currency model used by the arrangement, such as cross-currency, single-currency, or multicurrency.
wholesale_retail	Use-case classification of the arrangement as retail, wholesale, or hybrid.
rtgs_dns	Settlement or system-type classification, including RTGS, DNS, or hybrid.
bilateral_multilateral	Recording whether the arrangement is bilateral (if between two countries) or multilateral (if between more than two countries)
is_fps	Binary indicator identifying whether the arrangement constitutes a fast payment system linkage.
arrangement_launch	Year or date when the overall arrangement became operational.
jur_go_live_date	Year or date when a specific jurisdiction went live within the arrangement.

Note: The table defines the main variables included in the dataset. The dataset is organized at the jurisdiction-arrangement level: each row records one jurisdiction's participation in one operational interlinking arrangement. As a result, the same arrangement may appear in multiple rows when it includes multiple participating jurisdictions

Source: Authors' dataset.

12 A small number of arrangements are unidirectional, meaning that payment flows are enabled in only one direction between participating jurisdictions. Since these cases are relatively few, this feature is not reported in our dataset

Table A2: Interlinking arrangements in the dataset

arrangement	region	interlinking_form	currency_arrangement	wholesale_retail	rtgs_dns	bilateral_multilateral	is_fps	arrangement_launch
TARGET	europe	common platform	single currency	wholesale	RTGS	multilateral	no	1999-01
TIPS	europe	common platform	multicurrency	retail	RTGS	multilateral	yes	2018-11
EuroSIC	europe	single access point	single access point	wholesale	RTGS	multilateral	no	1999-01
PromptPay–PayNow linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2021-04
UPI–PayNow linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-02
DuitNow–PayNow linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-11
Thailand-Indonesia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2021-08
Thailand-Indonesia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2021-09
Thailand-Hong Kong QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-12
Thailand-Lao QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2024-04

Thailand-China QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2025-10
Thailand-Korea QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2025-07
Thailand-Japan QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2018-12
Thailand-Cambodia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2020-02
Thailand-Vietnam QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2021-03
Thailand-Malaysia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2021-06
Singapore-Indonesia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-11
Singapore-Malaysia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-03
Indonesia-Malaysia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-05

Cambodia-Malaysia QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2024-09
Cambodia-Vietnam QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-12
Cambodia-Laos QR linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-08
Indonesia-Japan QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2025-08
Indonesia-South Korea QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2026-04
India-Sri Lanka QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2024-02
India-Mauritius QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2024-02
India-Bhutan QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2021-07
India-Nepal linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2026-06
India-France QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2024-01

India-Qatar UPI Expansion	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2025-09
India-UAE QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2024-03
India-Cambodia QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2026-06
India-Greece QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2026-06
Indonesia-China QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2026-04
China-Cambodia QR Linkage	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2023-12
HKMA-PBoC Payment Connect	asia-pacific	bilateral link	cross-currency	retail	RTGS	bilateral	yes	2025-06
Asian Clearning Union	asia-pacific	hub and spoke	multicurrency	wholesale	DNS	multilateral	no	1975-11
CHATS-RENTAS RTGS Link	asia-pacific	bilateral link	multicurrency	wholesale	RTGS	bilateral	no	2006-11
CHATS-BIRTGS Link	asia-pacific	bilateral link	multicurrency	wholesale	RTGS	bilateral	no	2010-01

CHATS-BATHNET	asia-pacific	bilateral link	multicurrency	wholesale	RTGS	bilateral	no	2014-07
CHATS-CDFCPS RTGS Link	asia-pacific	single access point	multicurrency	wholesale	RTGS	multilateral	no	2009-03
Directo a Mexico	north america	bilateral link	cross-currency	retail	DNS	bilateral	no	2004-02
PAPSS	africa	common platform	cross-currency	retail	DNS	multilateral	yes	2022-01
SADC RTGS	africa	common platform	single-currency	wholesale	RTGS	multilateral	no	2013-07
EAPS	africa	hub and spoke	multicurrency	wholesale	RTGS	multilateral	no	2013-11
REPSS	africa	hub and spoke	single-currency	wholesale	DNS	multilateral	no	2012-10
SADC TCIB	africa	common platform	cross-currency	retail	RTGS	multilateral	yes	2021-11
GIMACPAY	africa	common platform	single-currency	retail	RTGS	multilateral	yes	2020-07
STAR-UEMOA	africa	common platform	single-currency	wholesale	RTGS	multilateral	no	2004-06
SICA-UEMAO	africa	common platform	single-currency	retail	DNS	multilateral	no	2005-11
SYGMA	africa	common platform	single-currency	wholesale	RTGS	multilateral	no	2007-11
ECCB-RTGS	caribbean	common platform	single-currency	wholesale	RTGS	multilateral	no	1983-10
ECACH	caribbean	common platform	single-currency	retail	DNS	multilateral	no	2014-09
Sistema de Interconexión de Pagos	central america	hub and spoke	single-currency	wholesale	RTGS	multilateral	no	2011-02
SML-Brazil-Argentina	south america	bilateral link	multicurrency	wholesale	DNS	bilateral	no	2008-10

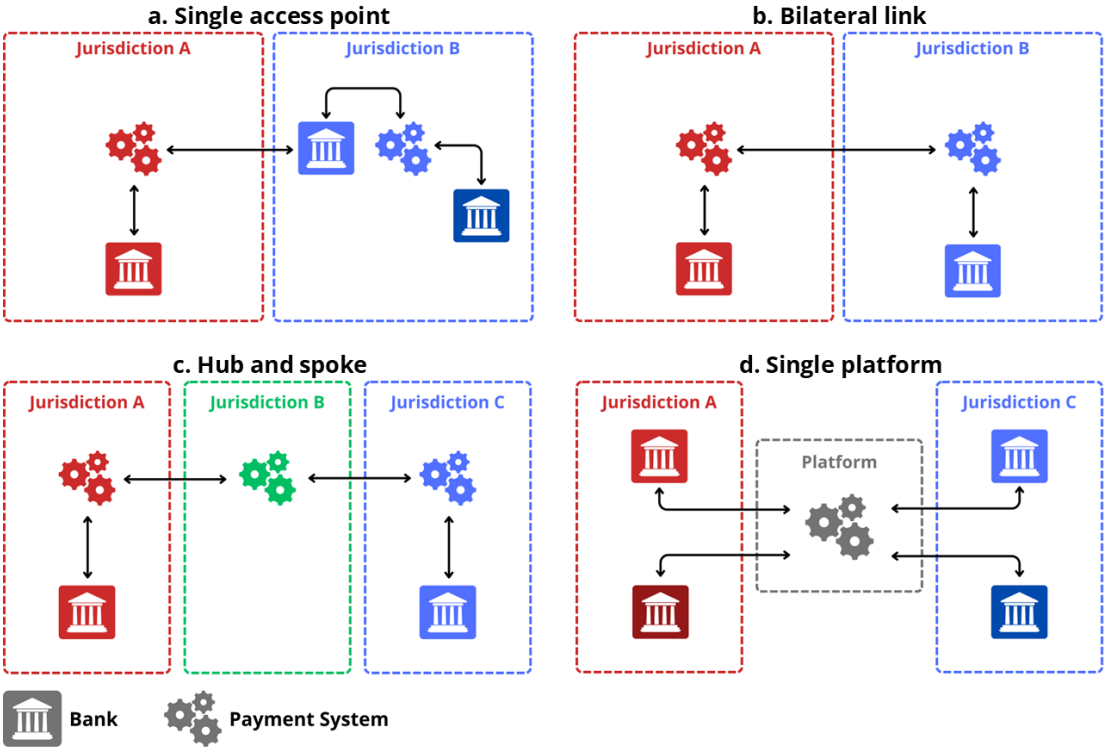
SML-Brazil-Uruguay	south america	bilateral link	multicurrency	wholesale	DNS	bilateral	no	2008-10
SML-Brazil-Paraguay	south america	bilateral link	multicurrency	wholesale	DNS	bilateral	no	2008-10
SML-Paraguay-Uruguay	south america	bilateral link	multicurrency	wholesale	DNS	bilateral	no	2008-10
SML-Argentina-Paraguay	south america	bilateral link	multicurrency	wholesale	DNS	bilateral	no	2008-10
SML-Argentina-Uruguay	south america	bilateral link	multicurrency	wholesale	RTGS	bilateral	no	2008-10
AFAQ	middle east	common platform	cross-currency	wholesale	RTGS	multilateral	no	2020-12
Buna	middle east	common platform	multicurrency	retail	RTGS	multilateral	yes	2020-02

Note: The table lists the operational interlinking arrangements included in the dataset at the arrangement level. Each arrangement appears once, with its region, interlinking form, currency arrangement, payment system type, settlement mechanism, bilateral or multilateral status, FPS classification, and launch date. For arrangements spanning multiple regions, the region field identifies the regions represented by participating jurisdictions in the dataset.

Source: Authors' dataset.

Additional Figures

Figure A1. Stylized models for interlinking cross-border payment systems



Note: The figure provides stylized representations of four interlinking forms. In a single access point arrangement, participants in one jurisdiction access another jurisdiction's payment system through a gateway institution. In a bilateral link, two payment systems are connected directly. In a hub-and-spoke arrangement, multiple payment systems connect through a central hub. In a single/common platform arrangement, participants from different jurisdictions use a shared multilateral infrastructure. The diagrams are schematic and are intended to illustrate the basic connectivity structure rather than the full legal, operational, or settlement design of each arrangement.

Source: CPMI, 2022

Single access point. Figure illustrates a single access point arrangement. The payment system in Jurisdiction A connects to the payment system in Jurisdiction B through a single designated gateway institution. A participant in Jurisdiction A submits the payment through its domestic payment system, which transmits the payment instruction to the gateway bank. The gateway bank is a direct participant in Jurisdiction B's domestic payment system and submits the payment into that infrastructure. The payment is then routed through Jurisdiction B's system to the

Bilateral link. The figure illustrates a bilateral link between two domestic payment systems. Under this model, the payment system in Jurisdiction A is connected directly to the payment system in Jurisdiction B, allowing institutions in each jurisdiction to reach one another through their respective domestic infrastructures. A participant in Jurisdiction A submits the payment through its domestic payment system, which transmits the payment instruction directly to the linked payment system in Jurisdiction

B. The payment is then routed through Jurisdiction B's domestic infrastructure to the receiving bank, which credits the final beneficiary.

Hub and spoke. Figure 2c illustrates a hub-and-spoke arrangement. Under this model, the payment systems of multiple jurisdictions are connected through a central hub, shown here as the payment system in Jurisdiction B. The payment systems in Jurisdictions A and C do not connect directly to one another. Instead, payment instructions are routed through the hub. A participant in Jurisdiction A submits the payment through its domestic payment system, which transmits the instruction to the hub in Jurisdiction B. The hub then routes the payment onward to the payment system in Jurisdiction C, where it is delivered to the receiving bank and credited to the final beneficiary.

Single platform. The figure illustrates a common platform arrangement. Under this model, participants from multiple jurisdictions access a shared payment platform rather than relying on separate domestic payment systems linked to one another. Banks or payment service providers in Jurisdictions A and C connect to the common platform, which provides the central infrastructure through which payment instructions are processed and routed between participants. A payer's bank submits the payment to the platform, and the platform makes the payment reachable to the receiving bank in the other jurisdiction, which then credits the final beneficiary. Unlike a bilateral link or hub-and-spoke arrangement, the connection is not between separate domestic payment systems; instead, participants operate through a shared multilateral infrastructure.

Data collection process

The dataset was hand-collected from publicly available sources, including central bank websites, official reports and white papers, press releases, speeches, and news articles. This section describes the collection process and the decisions made in recording each variable.

Data collection proceeded in two stages. The first was a broad scan to identify candidate arrangements. This involved a combination of AI-assisted searching (using ChatGPT and Claude) and manual review of reports, surveys, and news articles from reputable sources such as the BIS, producing an initial list of interlinking arrangements for further investigation. The second stage involved processing each candidate arrangement individually to populate the dataset variables.

For each arrangement, we first recorded the arrangement name, assigned an internal code, and identified the participating jurisdictions and their regions. Jurisdiction coverage was verified by cross-referencing multiple sources. We then consulted official central bank documentation and white papers where available — falling back to news articles and other secondary sources where not — and applied the CPMI taxonomy

described in the background section of this note to assign values for interlinking form, currency arrangement, wholesale/retail classification, RTGS/DNS classification, and bilateral/multilateral structure. The FPS classification was determined by looking for explicit designation as a fast payment system, or equivalent language such as "instant payments," in official documentation.

Recording launch dates required different levels of effort depending on the variable. The arrangement-level launch date was generally straightforward, as it was typically documented in a press release or official announcement. Jurisdiction-level go-live dates were more challenging, particularly for multilateral arrangements where participating jurisdictions are added over time. In a number of cases, available documentation was sparse, contradictory, or described phased implementation timelines. Where this occurred, we prioritised the most authoritative source available — central bank reports or official communications — and, where no authoritative source could be found, required corroboration across at least two secondary sources. Where implementation was phased, we recorded the date of the first phase. For each jurisdiction-arrangement pair, we also recorded the URL of the most useful source consulted.

The dataset also includes an arrangement-by-arrangement justification sheet documenting the main sources and reasoning used to classify each observation. The same information is provided in the accompanying README file released with the dataset.

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