

Annual Progress Report on Meeting the Targets for Cross-border Payments

2023 Report on Key Performance Indicators



9 October 2023

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Executive summary

In 2020, the G20 made enhancing cross-border payments a priority through a Roadmap developed by the FSB in coordination with the Bank for International Settlements' Committee on Payments and Market Infrastructures (CPMI) and other relevant international organisations and standard-setting bodies (SSBs). The Roadmap aims to make such payments faster, cheaper, more accessible and transparent. In 2021, the G20 endorsed quantitative global targets for addressing these four challenges across three market segments: wholesale, retail and remittances. These targets define the Roadmap's ambition, create accountability and provide a common vision for the improvements sought.

To operationalise the targets, the FSB developed key performance indicators (KPIs) that either directly or indirectly measure the extent to which the targets are being met, where progress is being made and where challenges remain. The threshold between the wholesale and retail segments was set at USD 100,000 (see Section 3 for further detail). No existing data sources comprehensively capture data about cross-border payments globally for any of the three market segments. However, the FSB has identified data sources that it uses in this report to calculate a set of representative KPIs as of end-March 2023. Over time, annual updates of this data will provide informative estimates of progress toward meeting the targets. Nevertheless, data gaps remain, and the FSB will continue to work to enhance the data available and, where possible, fill the gaps.

Overall, at the global level, the KPIs indicate that progress under the Roadmap will be needed to meet the targets across all the market segments. However, KPIs at the global level cannot provide the whole story of a diverse and complex payments ecosystem, which is why, whenever possible, more granular breakdowns of the global KPIs are provided to promote a fuller understanding of where, and the degree to which, challenges remain. This can help stimulate discussion in the public and private sectors about the nature of those challenges and potential ways forward to address them.

A key theme in this report is that across all market segments user experiences differ substantially across regions. For example, payments involving some, typically lower income, regions tend to be among the furthest from the cost and speed targets across market segments. However, the extent to which this is the case can differ depending on whether the region is the sender or the receiver of payments. Further, whereas in the retail segment, foreign exchange (FX) costs seem to be the largest component of total costs, the degree to which this is true differs across regions and use-cases and, in the remittances segment, other fees tend to be larger than FX costs.

Similar regional variation is seen for the access targets. While the KPIs, which are proxies for the access targets, suggest that account ownership among individuals globally is relatively high, differences in the level of account ownership and the type of account ownership (financial institution versus mobile money) exist across regions, and challenges such as the cost of account ownership or lack of nearby availability of services raise barriers to ownership in many lower-income countries.

An important goal for the FSB in developing these KPIs is to stimulate conversation among the Roadmap's public and private sector stakeholders about the nature of the challenges, the potential ways forward to address them, and whether this data is representative of overall market

trends. As an outcome from that discussion, the actions taken under the Roadmap may be, where needed, further refined and targeted over time in order to sharpen the Roadmap's focus on meeting the targets. We look forward to continuing to engage with the private sector on these issues.

Quantitative highlights

The following provides some data highlights for each of the market segments from the analysis contained in the report. (The full set of KPIs are described in the body of the report.)

Wholesale segment¹

- When looking at the correspondent banking in-flight processing time over the Swift network in isolation, 89% and 99% of wholesale payments are going from the originating bank to the beneficiary bank within one hour and within one day, respectively.
- However, the final, “beneficiary”, leg takes longer. In addition to the duration of the in-flight processing time, and after being received by beneficiary banks (having left the Swift network), only 60% of wholesale payments are then credited to customer accounts within one further hour. The proportion rises to 93% for payments credited to customers within one further day.
- The overall result is that, globally, 54% of wholesale payments go from the originating bank to being credited to end-customer's accounts within one hour, and 93% within one day, with most of the time spent between the beneficiary bank receiving a payment and the end-customer account being credited.
- In 92% of the world's countries and territories, three or more financial institutions made cross-border payments on the Swift network during Q1 2023. We use this measurement as a proxy for the access target to estimate whether each domestic payment service provider (PSP) within a jurisdiction would have at least one option to send or receive a wholesale cross-border payment.

Retail segment²

- The global average total cost of sending retail payments exceeds the target of 1% of the transfer amount across all use-cases, and ranges from 1.5% for B2B to 2.5% for P2P.
- The G20 targets aim for no country corridor to have costs greater than 3%. Approximately 25% of corridors have average total costs that exceed this target.

¹ There is no cost target for the wholesale segment, therefore no data on the costs of wholesale payments is collected under this exercise.

² Retail payments use-cases include business-to-business (B2B), business-to-person (B2P), person-to-business (P2B), and non-remittance person-to-person (P2P).

- Across all use-cases and receiving regions,³ Sub-Saharan Africa (SSA) and Latin America & the Caribbean are the most expensive regions to send retail payments from, with average total sending costs of 3.9% and 3.3% of the transfer amount, respectively.
- Across all use-cases and sending regions, SSA and Middle East & North Africa (MENA) are the most expensive regions to send retail payments to, with average total sending costs of 2.5% and 2.4% of the transfer amount, respectively.
- Globally, FX costs constitute more than 50% of total cost for all use cases, ranging from 60% for P2P transactions to 97% for P2B transactions on average, with significant differences across regions.
- Globally, the proportion of retail services that make funds available to the receiver in one hour is 42% (versus a target of 75%) and the proportion that do so in one business day is 76% (versus a target of 100%), with significant differences between regions and use-cases.
- Globally, the average proportion of payment services that are transparent about the cost and speed of cross-border payment is 57%, compared with a target of 100% of payments service providers providing the full list of information set out in the target definition.
- As an approximation to the access target for the retail segment (which calls for 100% of end-users having at least one option for sending and receiving cross-border electronic payments), the report looks at the percentage of Micro, Small and Medium-size Enterprises (MSMEs) and adults, respectively, with a transaction account at a regulated financial institution, and both these KPIs are below the target (at 89.8% and 76.0%, respectively).

Remittances segment⁴

- The global average and the World Bank's Smart Remitter Target (SmaRT) average cost of sending a \$200 remittance is 6.3% and 3.5%, respectively, both of which are above the target of 3%.⁵
- Remittance costs, as a percentage of the transfer amount, on average fall as the transfer amount rises, with the global average and SmaRT average cost of sending a \$500 remittance being 4.3% and 2.5%, respectively.
- The G20 targets aim for no remittance corridor to have costs greater than 5%. Globally, 20% and 13.7% of corridors have SmaRT average costs greater than 5% for sending \$200 and \$500, respectively.

³ The definitions of regions that are used for the purpose of this report are described in detail in Section 2.3. The outcomes for individual countries or country corridors may vary significantly from the regional average.

⁴ As remittances are mainly sent from advanced economies to EMDEs, World Bank's Remittance Prices Worldwide (RPW) database uses the countries on the receiving end of each corridor when calculating regional average costs.

⁵ SmaRT indicators are calculated as the simple average of the three cheapest qualifying services for sending the equivalent of \$200 (KPI 3) or \$500 (KPI 4) in each corridor.

- On average, SSA is the most expensive *receiving* region, with an average cost of 8.4% and 6% for \$200 and \$500 remittances, respectively. South Asia is the least expensive *receiving* region, with an average cost of 4.6% and 3.1% for \$200 and \$500 remittances, respectively, but is still above the targets.
- Globally, the proportion of remittances services that make funds available to the receiver in one hour is 53% (versus a target of 75%) and the proportion that do so in one business day is 77% (versus a target of 100%).
- SSA and East Asia & Pacific are the regions with the highest (59%) and lowest (46%) proportion of services, respectively, making funds available to remittance recipients in one hour.
- Latin America & the Caribbean and East Asia & Pacific are the regions with the highest (83%) and lowest (69%) proportion of services, respectively, making funds available to remittance recipients within one day.
- 98% of remittances services in the dataset are transparent about total fees and FX margin for senders.
- As a broad approximation to the access target for the remittances segment (which calls for more than 90% of individuals who wish to send or receive a remittance, including those without bank accounts, to have access to a means of cross-border electronic remittance payment) the report looks at the percentage of adults with a transaction account at a regulated financial institution, which equals 76%.

All the data above are approximate estimates based on the data currently available. Further calculation details are provided in the report and the accompanying methodology document.⁶

Next steps

The KPIs in this report will be updated on an annual basis to monitor progress of the cross-border payments Roadmap over the coming years. The FSB will continue to work to enhance the data available and, where possible, to fill the gaps. In the meantime, as noted above, this report aims to stimulate conversation among the Roadmap's public and private sector stakeholders about the nature of the challenges and potential ways forward to address them, and also about whether this data is representative of overall market trends.

⁶ FSB (2023), *Annual Progress Report on Meeting the Targets for Cross-Border Payments: Methodology document*, October.

1. Introduction

In 2020, the G20 endorsed the Roadmap for enhancing cross-border payments⁷ – a comprehensive, high-level plan designed to address the frictions that lead to four challenges that cross-border payments face relative to domestic payments: high transaction costs;⁸ slow end-to-end processing times;⁹ limited access for users accessing payment service providers (PSPs) as well as PSPs accessing payment systems and other arrangements; and limited transparency about costs, speed, processing chains and payment status for end-users and PSPs alike.

In 2021, the G20 Leaders endorsed the Targets for Addressing the Four Challenges of Cross-Border Payments: Final Report (Targets report), which established 11 global targets across three market segments: wholesale payments, retail payments and remittances. These targets define the Roadmap's ambition for addressing the four challenges, create accountability and provide a common vision for the improvements sought under the Roadmap.¹⁰ The FSB committed to monitor progress toward the targets using KPIs and to provide annual reports to the G20 and the public.

In 2022, the FSB adopted, and the G20 endorsed, Developing the Implementation Approach for the Cross-border Payments Targets: Final Report (Implementation report),¹¹ which set out the KPIs for monitoring the targets. As part of that report, the FSB revised the Targets report's definitions of the wholesale and retail market segments from being based on the end-users involved to being based on a specific payment-value threshold. Following careful evaluations, the threshold value for wholesale payments was set at USD 100,000.

1.1. Progress monitoring report

This KPI monitoring report is published in parallel with the FSB's annual progress monitoring report.¹² These reports are complementary and together provide a quantitative and qualitative overview about the challenges facing cross-border payments, the progress being made on the G20's priority actions, and some of the public and private sector projects underway globally to enhance cross-border payments.

⁷ FSB (2020), *Enhancing Cross-border Payments - Stage 3 report to the G20*, October. Cross-border payments can be broadly defined as funds transfers for which the sender and the recipient are located in different jurisdictions. Cross-border payments may or may not involve a currency conversion. This simple definition does not cover all circumstances in which individuals or businesses make use of cross-border payments systems. For instance, a tourist may be temporarily physically located in the same country as the receiver of funds but wishes to send funds from an account in his home location; or a company may wish to make an internal transfer of funds between accounts in different currencies or locations.

⁸ The challenge of cost refers to total transaction costs incurred by end-users (including costs incurred both by the payer and by the receiver of funds), and comprises various elements including transaction fees, account fees, applied FX conversion rates, and fees along the payment chain.

⁹ The challenge of speed involves the processing time of a payment from end to end, including factors such as the time required for dispute resolutions, reconciliations and searches, possible slow processes for funding and defunding, daily cut-off times and closing times, as well as Anti-Money Laundering/ Combating the Financing of Terrorism (AML/CFT) checks.

¹⁰ FSB (2021), *Targets for addressing the four challenges of cross-border payments: Final report*, October

¹¹ FSB (2022), *Developing the Implementation Approach for the Cross-border Payments Targets: Final report*, November.

¹² FSB (2023), *G20 Roadmap for Enhancing Cross-border Payments: Consolidated progress report for 2023*, October.

1.2. Purpose of the KPIs

The Roadmap targets are designed as high-level global goals to be achieved through the work under the Roadmap, in a form that can be readily communicated and will be meaningful to a wide range of stakeholders. The targets and KPIs are not intended to set compliance expectations, to serve as supervisory tools, or to be used to measure individual market participants' performance. As the Targets report emphasised, the aim is to obtain an overview of progress in the market, rather than to monitor progress by individual PSPs. Nor are the targets and KPIs intended to promote any particular model of cross-border payments. The targets are outcome-oriented and the KPIs are designed to measure improvements throughout the cross-border payments ecosystem, both as a result of the actions under the Roadmap and of other technological or process improvements.

2. The data supporting KPI monitoring

Consistent with the principles articulated in the Targets report and the public feedback received, the FSB is taking a proportionate approach to monitoring progress toward the targets by leveraging existing datasets and channels, and not developing new datasets to avoid imposing new burdens on industry. This section discusses the primary data sources used for monitoring progress toward the targets and some of the ways in which relying on existing datasets affects the analyses throughout the report.

2.1. The primary data sources

The FSB evaluated a wide range of potential data sources from both the public and private sectors. For each market segment, the FSB identified core data sources for estimating the KPIs and therefore monitoring progress toward the targets going forward. The FSB expects that the information the KPIs provide may potentially grow over time through the use of additional data from other sources.

2.1.1. Wholesale

Swift (Society for Worldwide Interbank Financial Telecommunication) has provided statistics for the speed and access KPIs for the wholesale market segment based on actual cross-border payment flows facilitated over its network. Swift's data represents a significant portion of wholesale cross-border payments flows and is deemed representative of the different contexts of end-users in the wholesale segment.¹³ Swift enables millions of cross-border financial flows annually over its network that connects more than 4 billion accounts across 11,500 institutions in more than 200 countries and territories.¹⁴ Swift's messaging platform enables its users to

¹³ Data relating to Swift messaging flows are published with the permission of S.W.I.F.T. SC. SWIFT © 2023. All rights reserved. Because financial institutions have multiple means to exchange information about their financial transactions, Swift statistics on financial flows do not represent complete market or industry statistics. Swift disclaims all liability for any decisions based, in full or in part, on Swift statistics, and for their consequences.

¹⁴ Swift, Swift Corporate Rules, available [here](#).

exchange standardised financial messages that facilitate, among other transactions, cross-border payments.¹⁵

2.1.2. *Retail*

The retail segment is highly heterogeneous in terms of use-cases, service providers and payment mechanisms, which makes aggregating and standardising representative data to cover this market segment particularly challenging. Retail payment use-cases include business-to-business (B2B), business-to-person (B2P), person-to-business (P2B), and non-remittance person-to-person (P2P). The FSB evaluated various potential options for sourcing the data from both the public and private sectors. The FSB has chosen to source data for calculating KPIs for the retail market segment from FXC Intelligence, which is a private-sector data aggregator that specialises in retail cross-border payments data and intelligence.¹⁶

FXC Intelligence utilises a variety of mechanisms for acquiring representative data on cross-border payments, including mystery shopping, automated application programming interfaces (API) tools and other proprietary techniques and technologies. In addition to providing data and intelligence to private-sector entities and subscribers across the payments ecosystem, FXC Intelligence has been providing the underlying data used in the World Bank's Remittance Prices Worldwide (RPW) since Q2 2021.¹⁷

In addition to the data from FXC Intelligence, the retail-segment KPIs for access and transparency leverage the World Bank's Global Findex Database, Global Payment Systems Survey (GPSS) and Enterprise Surveys. The Global Findex Database is based on nationally representative surveys of over 125,000 adults in 123 economies and is considered the definitive source of demand-side financial inclusion data.¹⁸ The GPSS surveys national and regional central banks and monetary authorities on the status of payment systems.¹⁹

2.1.3. *Remittances*

The calculation of KPIs in the remittances segment uses the World Bank's RPW database, GPSS and Global Findex database. Launched in 2008, the RPW is the authoritative data source for the cost incurred by remitters when sending money along major remittance corridors. RPW indicators are used to measure the progress toward targets of global efforts for the reduction of remittance costs, including the UN Sustainable Development Goals (SDGs), which the Targets report reaffirmed by adopting them as the Roadmap's target for remittance costs. While the RPW primarily monitors the cost of sending remittances as a percentage of the amount sent, it also contains data on speed, access and transparency. Currently, the database covers 367 country corridors worldwide. The corridors studied represent flows from 48 remittance sending countries to 105 receiving countries. In most cases, data was captured from the main sending

¹⁵ To learn more about Swift, see [here](#).

¹⁶ To learn more about FXC Intelligence, see [here](#).

¹⁷ The World Bank bids out the data collection for the RPW every two years.

¹⁸ See World Bank Global Findex Database [here](#).

¹⁹ See World Bank Global payment Systems Survey [here](#).

location/area for the corridor in question to the capital city or most populous city in the receiving market.

2.2. Data gaps

Over the past year, the FSB has focused on bringing together KPI data that are currently available and the FSB believes that the KPIs in each market segment are representative and informative. However, as noted in the 2022 report, gaps remain in the available data to assess those KPIs. For each KPI, where data gaps exist they are transparently acknowledged. For example, for the wholesale speed target, Swift measures the speed of payments from the time they enter its network. The originator-leg (the time between a payer initiating a payment with their originating bank and the originating bank submitting that payment on Swift's network) occurs outside of Swift's network and is therefore not reflected in the speed KPIs. The beneficiary-leg is not executed on the Swift network but is measured using the UETR.²⁰ (see Graph 1)

The FSB is evaluating ways to better understand and, in future reports, to communicate the magnitude of these gaps and, if significant, to fill them. For example, for the wholesale segment, the FSB is evaluating the feasibility of conducting limited, exploratory surveys in cooperation with industry groups to better understand and dimension the average speed of payment initiation and reconciliation with due consideration for additional burden on stakeholders.

No data source has yet been identified for calculating the KPIs to measure progress against the transparency target in the wholesale segment. The FSB is continuing to look for suitable datasets to support the calculation of KPIs for this target.

2.3. Using multiple datasets

This report currently relies on six different datasets to monitor progress toward the targets, most of which predated the targets and were developed for purposes other than monitoring progress toward the targets. Reliance on disparate, mostly pre-existing, datasets has allowed the FSB to produce the KPIs more quickly and, in line with industry feedback, to avoid imposing new burdens on industry by advocating for new reporting requirements. However, it also means that differences exist between the datasets.

The datasets have different scopes of coverage geographically and do not always define regions in the same way. The retail-payments data procured from FXC Intelligence and the remittances data in the World Bank's RPW both define regions based on World Bank country groups,²¹ however there are differences between the two data sets. The retail segment aggregate data includes more country corridors (4,359) than the remittances segment data (367) because the remittances data specifically focuses on remittance receiving countries from an economic development perspective. For example, the 367 corridors monitored in RPW are from 48 major

²⁰ Swift's End-to-End Transaction Reference (commonly known as a UETR) allows tracking payments until they are credited to customer accounts. UETR is a string of 36 unique characters featured in all payment instruction messages carried over Swift. UETRs are designed to act as a single source of information about a payment and provide complete transparency for all parties in a payment chain via the payment tracker.

²¹ For information on World Bank regions see [here](#).

remittance sending countries to 105 major remittance receiving countries. As such, the analysis in the remittances section focuses on a regional breakdown from the perspective of remittance receiving countries and, for example, does not include the North America region in the breakdowns because the countries in that geographic region are not among those that rely on remittances. In addition, regional breakdowns in the remittances section using data from the World Bank's GPSS and Global Findex datasets exclude from each of the geographic regions "high-income" countries, which are represented by member countries of the Organisation for Economic Co-operation and Development (OECD), and include a separate region of "High-income OECD" countries to enable consistency within the remittances section. The wholesale data defines regions differently; for example, Eurozone countries are separated into their own region. The FSB has published along with this report a table of the regional groupings of countries for all the datasets used to develop this report.²²

The datasets offer differing degrees of historical information. The World Bank's RPW, GPSS, Global Findex and Enterprise Surveys have all existed for many years and therefore have historical information that is leveraged for this report when feasible. In contrast, the data from FXC Intelligence is a newly procured dataset for the FSB beginning in Q1 2023 and therefore does not include historical data that can be included in this report. Future reports will include historical data across each of the market segments starting in 2024.

The datasets contain different data elements. For example, the World Bank's GPSS and Global Findex datasets include World Bank Income Group as a data element and therefore allow analysis based on country and region income level whereas the other datasets do not.²³

3. Wholesale payments

For the purposes of monitoring progress toward the targets, wholesale payments are defined as payments with a value of USD 100,000 or more.²⁴ The purpose of this threshold is to provide a consistent grouping of transactions based on the infrastructures often used to facilitate them, and therefore an informative indication of the progress being made in addressing the frictions that transactions using those infrastructures face. A key challenge in setting a single global threshold to differentiate wholesale from retail payments is the differences in the size of typical payments between countries and corridors. The threshold was set to ensure broad coverage of corridors involving not only advanced and larger economies but also smaller and developing economies, reflecting the global nature of the G20 Roadmap, and to respond to industry feedback during the development of the KPIs about how they distinguish between wholesale and retail payments.

In developing the targets, the FSB decided not to set a cost target for the wholesale segment due to the difficulty in measuring an average cost across the market (especially as the payment service is often bundled with other services) and costs are highly individualised depending on

²² Available [here](#).

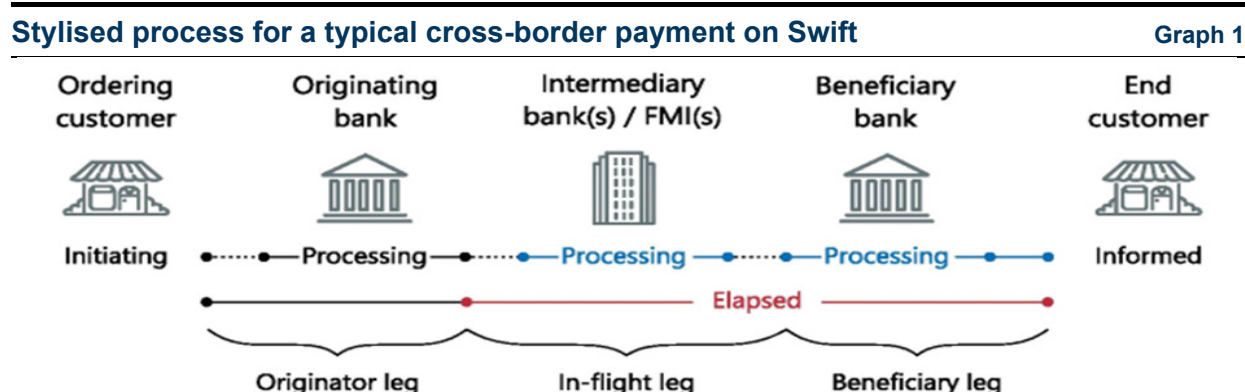
²³ The World Bank assigns the world's economies to four income groups – low, lower-middle, upper-middle and high income. For information on World Bank regions see [here](#).

²⁴ The FSB has defined the USD 100,000 threshold here solely for the purpose of measuring progress to the targets. Swift and the Swift community use up to USD 10,000 as the threshold for different products and services created as a standard for international consumer and SME products.

individual participants' volumes and values. Nevertheless, many of the actions to be undertaken under the Roadmap will, when implemented, reduce costs in the wholesale market.

3.1. Correspondent banking chain

Many wholesale cross-border payments are facilitated through networks of correspondent banks facilitated by Swift's messaging network. At a high level, there are three distinct processing phases involved in a cross-border payment conducted through correspondent banking (Graph 1).



Source: CPMI, Swift gpi data indicate drivers of fast cross-border payments (2022)

- **Originator leg:** the time from a payer initiating a payment with its originating bank until the originating bank submits that payment on Swift's network.
- **In-flight leg:** the time, over the Swift network, from when the originating bank initiates the payment on the Swift network until the beneficiary bank receives it, either directly from the originating bank or through one or more intermediary banks or a financial market infrastructure (FMI). If the originating bank has a relationship with the beneficiary bank, no additional intermediaries may be involved. In fact, as discussed below, for more than 84% of wholesale payments there are either zero or one intermediary institutions between the originating and beneficiary bank.
- **Beneficiary leg:** the time from the beneficiary bank receiving the payment until the funds are credited to the end-customer's account.²⁵ The beneficiary leg can be viewed as being outside of the core correspondent banking chain because its duration for any given payment is influenced by local factors such as compliance processing, local bank and FMI operating hours, and currency and capital controls. The Roadmap has a number of actions to address these frictions.

²⁵ The beneficiary leg does not take place on the Swift network but can be measured using the UETR and updates done by the beneficiary bank to the payment tracker.

3.2. Speed of wholesale cross-border payments

Table 1: Wholesale speed KPIs

Target: 75% of cross-border wholesale payments to be credited within one hour of payment initiation²⁶ or within one hour of the pre-agreed settlement date and time for forward-dated transactions²⁷ and for the remainder of the market to be within one business day²⁸ of payment initiation, by end-2027. Payments to be reconciled by end of the day on which they are credited, by end-2027.

KPI	2023
KPI 1: Percentage of cross-border wholesale payments (other than forward-dated) credited within one hour of payment initiation	53.8%
KPI 2: Percentage of cross-border wholesale payments (other than forward-dated) credited within one business day of payment initiation	92.7%
KPI 3: Percentage of forward-dated cross-border wholesale payments credited on the pre-agreed forward date	
KPI 4: Percentage of cross-border wholesale payments reconciled by the end of the day on which they are credited	

Source: Swift

The wholesale speed KPIs 1 and 2 include both the in-flight time (processing by the Swift network) and the beneficiary time (time taken by the beneficiary bank to make the funds available to the end-customer). However, it does not currently reflect the end-to-end speed of wholesale payments, because it excludes weekends and public holidays in the processing bank's country location, as well as the time for the originating leg (for which data is not currently available).

The FSB does not currently have a data source for calculating KPIs 3 and 4.

Speed KPIs versus targets – KPIs 1 and 2

Swift facilitates the back-end processing of cross-border payments from the originating bank to the beneficiary bank in any country and provides traceability at every step of the processing chain, including the final steps of the beneficiary leg using the UETR. The tracking capability of the Swift network allows the calculation of the in-flight and beneficiary legs. Swift's data reveals that 53.8% of payments that use Swift complete both the in-flight leg on the Swift network and the beneficiary leg, being credited to customers' accounts, within one hour, and 92.7% do so in one day, with most of the time taken occurring in the beneficiary leg (Graph 2).

²⁶ For this purpose, a wholesale payment is considered initiated at the moment of entry into a payment infrastructure or correspondent bank as defined by their applicable rules.

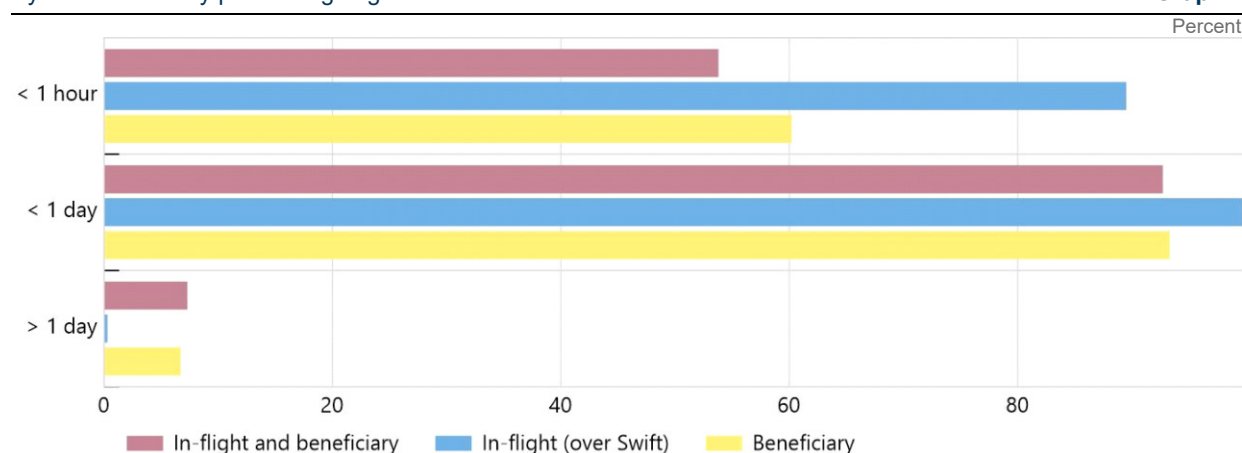
²⁷ The settlement date and time are agreed and contracted between the counterparties at the point the transaction is agreed. On this date and time, there will be an exchange of payments between counterparties in each of the currencies contracted for exchange.

²⁸ In cases where the hours or dates of the business days in the locations where the initiation and receipt do not coincide, the payment should be credited within a period that, in each location, includes one business day.

Comparison of wholesale payments processing times

By duration and by processing “leg”

Graph 2



Source: Swift

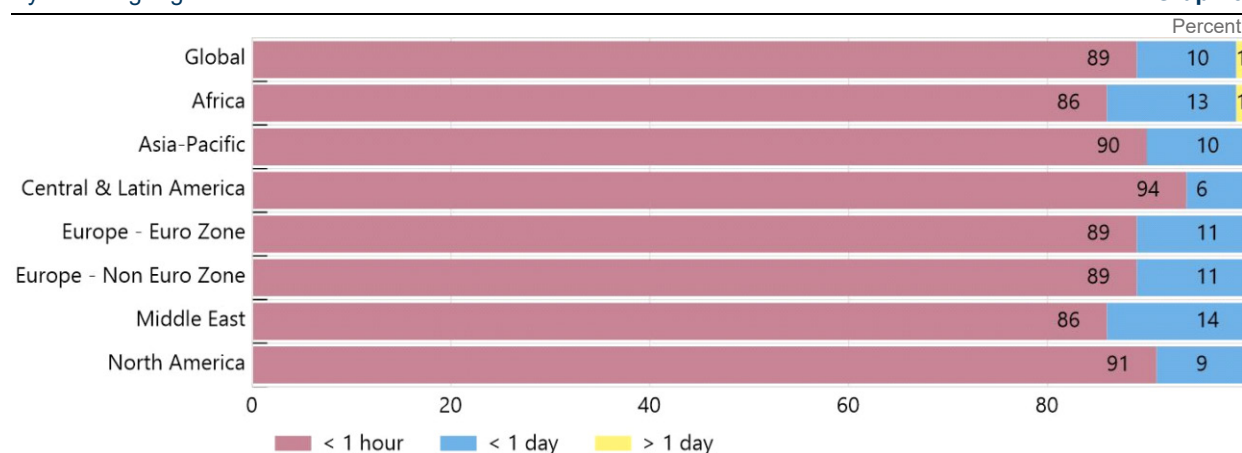
Correspondent banking in-flight “processing time” facilitates achieving the targets across regions

Swift notes that, aligned with the G20 agenda, it has been working with its community over the last few years to significantly accelerate the in-flight processing time of cross-border transactions towards a vision of achieving instant cross-border payments. It reports that, as a result, globally, 89% of wholesale payments processed on the Swift network complete the in-flight leg and reach the beneficiary bank within one hour and 99% within one day. Graph 3 shows there is little variability across regions in the in-flight processing time of wholesale payments. (The in-flight processing time excludes weekends and public holidays in the processing bank’s country location.)

In-flight processing time from originating bank to beneficiary bank over the Swift network

By receiving region

Graph 3



Source: Swift

Speed of beneficiary leg varies across regions

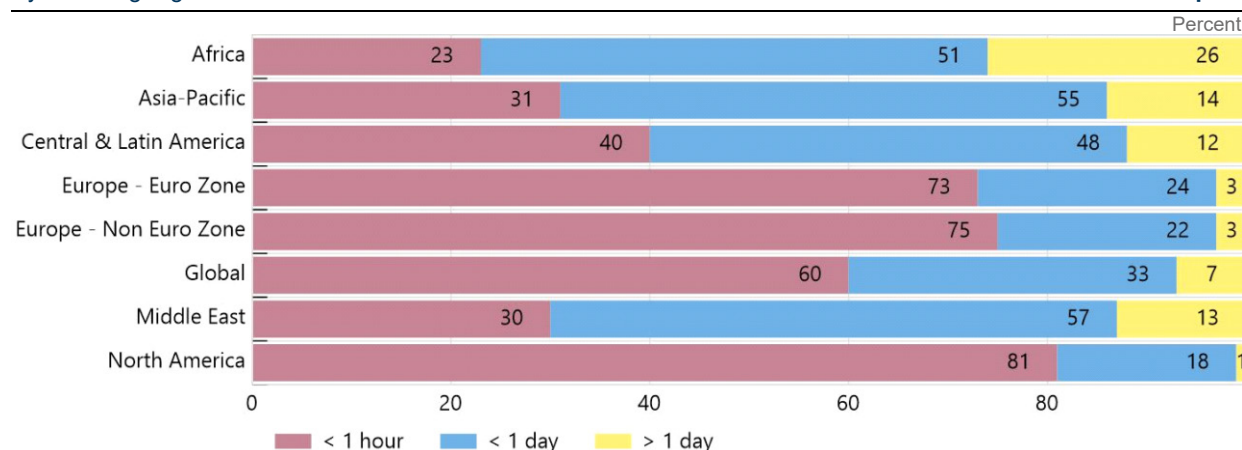
In contrast to the consistency of the in-flight processing times over the Swift network, the time taken by the beneficiary banks to credit funds to end-customers’ accounts varies widely by

region. For example, 81% of wholesale payments sent to North America are credited to beneficiary accounts within one hour compared to 23% of wholesale payments sent to Africa (Graph 4).

Speed of beneficiary banks depositing funds into clients' accounts (beneficiary leg)

By receiving region

Graph 4



Source: Swift

Swift comments that there are several reasons payments could be delayed at beneficiary banks before being credited to end-customer accounts. These include:

- Bank offline hours and batch processing prevent real-time processing.
- Market infrastructure operating hours do not allow for 24/7 settlement.
- Time zones have impact. Payments that “follow the sun” tend to reach end beneficiary accounts faster than payments sent in the opposite direction.
- Currency and capital controls also significantly affect final speed.

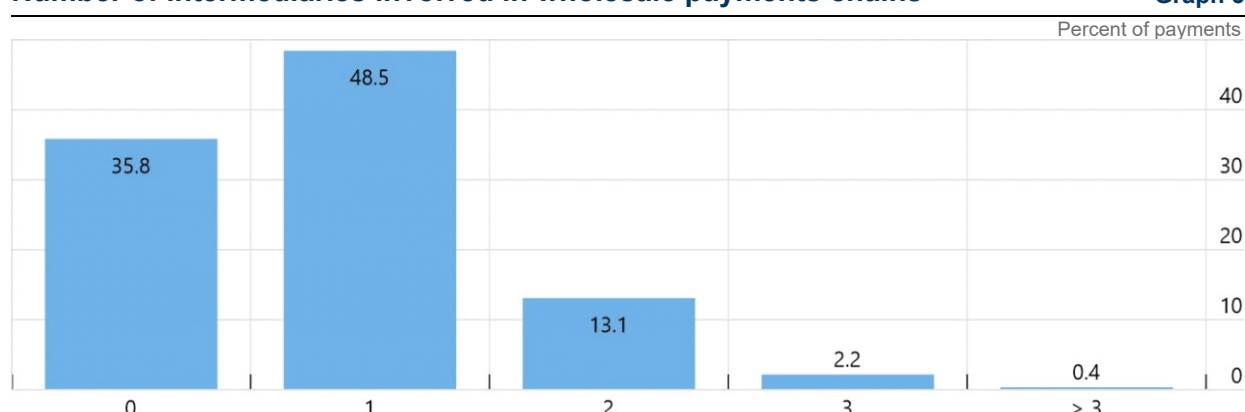
In addition to Swift’s observations, industry participants also note that AML/CFT compliance procedures within banks are often sources of frictions.

Cross-border payments chains tend to be short

Swift data is also able to show the number of intermediaries involved in each cross-border payment that travels over the Swift network. The Swift data show that long cross-border wholesale payment chains are not common, with 84.3% of wholesale payments involving none, or only one, intermediary between the originating and the beneficiary bank (Graph 5).

Number of intermediaries involved in wholesale payments chains

Graph 5



Zero intermediaries means that the originating bank sent the payment directly to the beneficiary bank without going through any additional correspondent banks or FMIs.

Source: Swift

3.3. Access to wholesale cross-border payments

Table 2: Wholesale access KPIs

Target: All financial institutions (including financial sector remittance service providers) operating in all payment corridors to have at least one option and, where appropriate, multiple options (i.e. multiple infrastructures or providers available) for sending and receiving cross-border wholesale payments by end-2027.

KPI	2023
KPI 1: Percentage of jurisdictions with no option for financial institutions for sending and receiving wholesale cross-border payments	7.6%

Source: Swift

The Swift network connects 11,500 institutions in more than 200 countries and territories. Swift's data provided for the KPI measures the number of countries in which fewer than three financial institutions were active (i.e. made or received at least one cross-border payment on the Swift network during Q1 2023). It should be noted that the KPI is a proxy for the target, which is for all financial institutions (rather than jurisdictions) to have at least one option for sending and receiving cross-border payments.

Access KPI versus target

In 92.4% of the world's countries and territories, three or more financial institutions made or received at least one payment on the Swift network during Q1 2023. Globally, in only 17 of 223 countries and territories (7.6%) were there fewer than three institutions (local banks or foreign branches) with access to send or receive wholesales cross-border payments. In addition, Swift noted that most of those 17 are territories of larger countries and that the active banks are well established branches of large global transaction banks offering cross-border payment services.

3.4. Transparency of wholesale cross-border payments

Table 3: Wholesale transparency KPIs

Target: All payment service providers to provide at a minimum the following list of information concerning cross-border payments to payers and payees by end-2027: total transaction cost (showing all relevant charges, including sending and receiving fees including those of any intermediaries, FX rate and currency conversion charges); the expected time to deliver funds; tracking of payment status; and terms of service.

KPI
KPI 1: Percentage of PSPs providing the following sets of information to payers and payees: i) expected time to fund delivery; ii) payment tracking status; iii) Terms of service
KPI 2: Percentage of jurisdictions with laws/regulations, market practices and industry agreements requiring transparency measures in the wholesale segment

Source: No source currently available

The FSB does not currently have a data source for calculating the wholesale transparency KPIs.

4. Retail payments

The retail segment is highly heterogeneous in terms of use-cases, service providers and payment mechanisms. In addition, end-user experiences vary significantly across corridors and regions, and are often correlated in a variety of ways with a jurisdiction's and region's level of income and development.

For purposes of monitoring progress toward the targets, retail payments are defined as payments with a value less than USD 100,000, not including remittances.²⁹ Note that the FSB has decided to calculate the retail-segment KPIs for cost, speed and transparency using a single transfer amount for each use-case (Table 4). Comparative information about user-experiences across the transfer amounts available in the data is provided both in this section where differences are particularly noteworthy.³⁰

Table 4: Retail use-case transfer amounts

USD	B2B	B2P	P2P	P2B
Transfer amount for KPIs	20,000	5,000	1,000	100

The KPIs and associated metrics for cost (KPIs 1 through 4), speed, and transparency are weighted averages of the values for each corridor. The weights are based on IMF Direction of Trade Statistics: Goods, Value of Exports, Free on board, USD for 2022. The choice of weighting reflects the lack of comprehensive and granular data about the global volume and value of retail payments, and it results heavier weightings for corridors between jurisdictions across which a greater value of trade occurs. Further details on the methodology underlying the calculation of

²⁹ Although the retail segment is defined as payments with values less than USD 100,000 not including remittances, the dataset available to the FSB does not have data on payments with values greater than USD 20,000.

³⁰ Available [here](#).

the KPIs and metrics reported in this section are discussed in the accompanying methodology document.

4.1. Cost of retail cross-border payments

Table 5: Retail cost KPIs

Target: Global average cost of payment to be no more than 1%, with no corridors with costs higher than 3% by end-2027	
KPI	2023
KPI 1: Average cost of B2B (MSME) cross-border payment transactions	1.5%
KPI 2: Average cost of B2P cross-border payment transactions	1.7%
KPI 3: Average cost of P2B cross-border payment transactions	2.0%
KPI 4: Average cost of P2P (non-remittances) cross-border payment transactions	2.5%
KPI 5: Percentage of corridors with costs higher than 3%	23.7%

Source: FXC Intelligence. Data as of March 2023.

The KPIs and metrics on the cost of retail payments do not include any costs the receiver of the funds may incur because that information is not generally or broadly available.

Cost KPIs versus targets – KPIs 1 to 4

None of the use-cases meet the target of a 1% average global cost. B2B and B2P payments are closest to the target, with average global costs of 1.5% and 1.7%, respectively. P2P payments are furthest from the target, with an average global cost of 2.5%.³¹

Retail costs show significant variation across jurisdictions and use-cases – KPIs 1 to 4

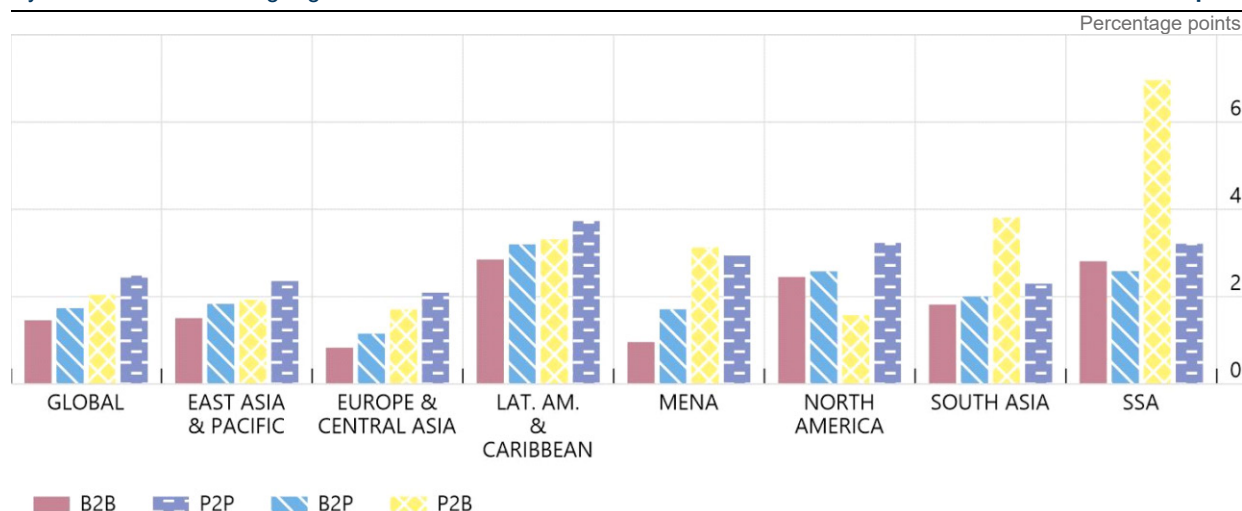
Across regions, costs differ substantially by use-case (Graph 6). In four of the seven sending regions (East Asia & Pacific, Europe & Central Asia, Latin America & the Caribbean, and North America), P2P is the most expensive use-case. In the remaining three sending regions (Middle East & North Africa, South Asia, and Sub-Saharan Africa), P2B payments are the costliest, followed by P2P payments.

³¹ As noted later in the report, costs as a percentage of transfer amount are generally negatively correlated with transfer amounts. Therefore, it is currently unclear whether the relative costs by use-case are due to the unique characteristics of payments for each use-case or the difference in transfer amounts used to distinguish the use-cases.

Total cost

By use case and sending region

Graph 6



Source: FXC Intelligence

For B2B payments, the lowest cost sending regions are Europe & Central Asia and MENA, which, at 0.8% and 1%, respectively, are the only two instances across all use-cases and regions that are below the global G20 target (Graph 6). The most-costly region for sending B2B payments is Latin America & the Caribbean, with a weighted average total sending cost equal to 2.9%. Latin America & the Caribbean is also the most-expensive sending region for B2P payments, with an average cost that is more than double that of the least-expensive region, which is Europe & Central Asia (3.2% versus 1.2%).

These same two regions, Europe & Central Asia and Latin America & the Caribbean, also sit at the extremes of the cost distribution for P2P payments, at 2.1% and 3.7%, respectively. Finally, P2B payments exhibit the widest cost range across regions, with an average sending cost of 1.6% in North America and of 7% in SSA.

Box 1: Costs differ depending on the direction of payments flows

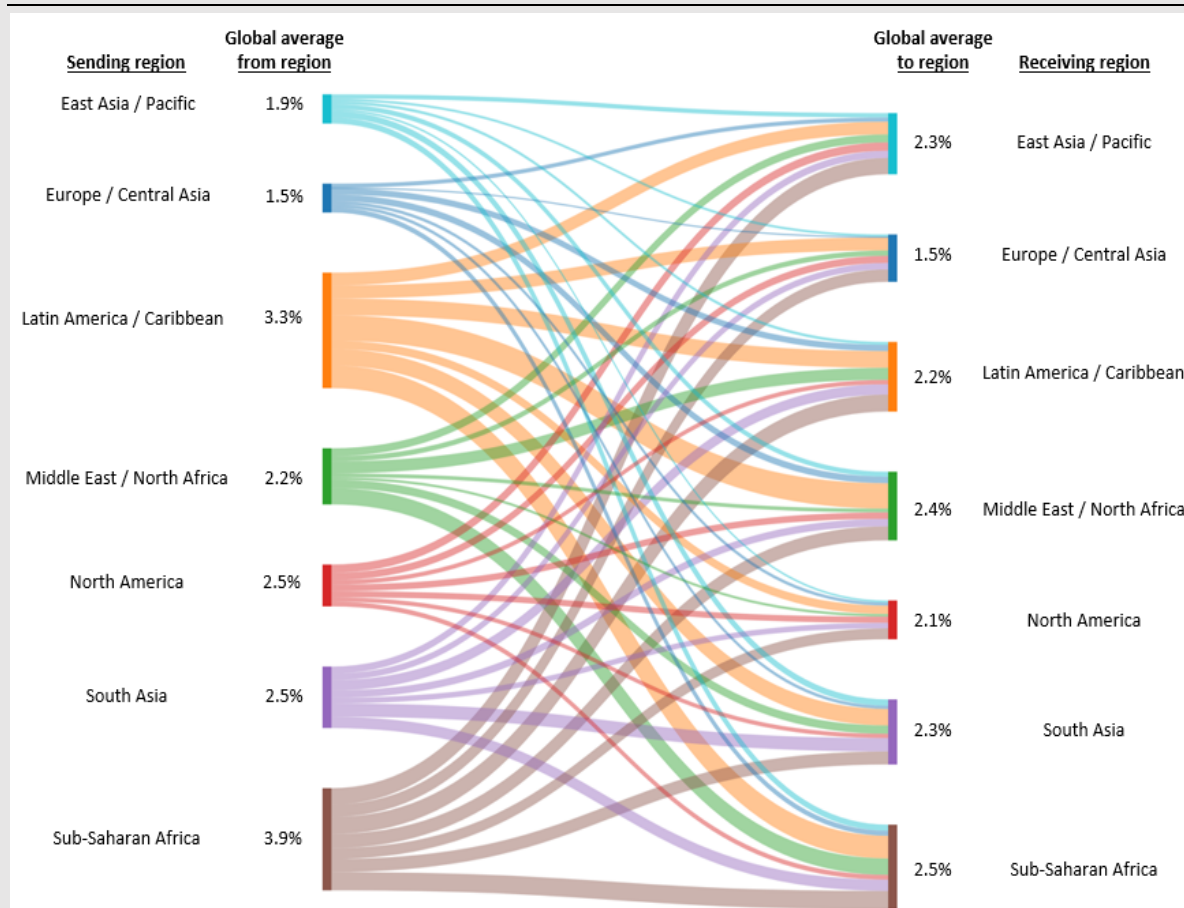
Regional analyses of payments flows can be conducted from either the perspective of where the payments are being sent from (sending region) or where they are being sent to (receiving region). As it relates to the cost and speed of payments, analyses from these different perspectives often yield different results. Graph 5 below visualises the relative cost of sending retail payments across regional corridors and reports the global average cost of sending payments from and to each region. It shows that some regions are more expensive to send retail payments from than they are to send retail payments to, and vice versa. For example, the global average cost of sending retail payments *from* Latin America & the Caribbean is 3.3% of the transfer amount independent of the region to which the payment is being sent, but the global average cost of sending retail payments *to* Latin America & the Caribbean is 2.2% of the transfer amount independent of the region from which the payment is being sent. Fully understanding the challenges in this complex ecosystem makes analysing the available data from both perspectives important when the data permits. Nevertheless, for clarity, the retail segment analysis in this report is primarily from the perspective of the sending region, with differences between the same region as sender versus receiver highlighted when significant, such as in Graph 7 below (see also Table 6 and Table 8).

In the remittances segment, the primary perspective is from the receiving region because the RPW is focused on the countries that are the largest receivers of remittances and the cost and speed of sending remittances to them.

Relative cost of sending retail payments by regional corridor

All use-cases

Graph 7



The thicker (thinner) the line, the more (less) expensive the relative cost.

Source FXC Intelligence, Data as of March 2023

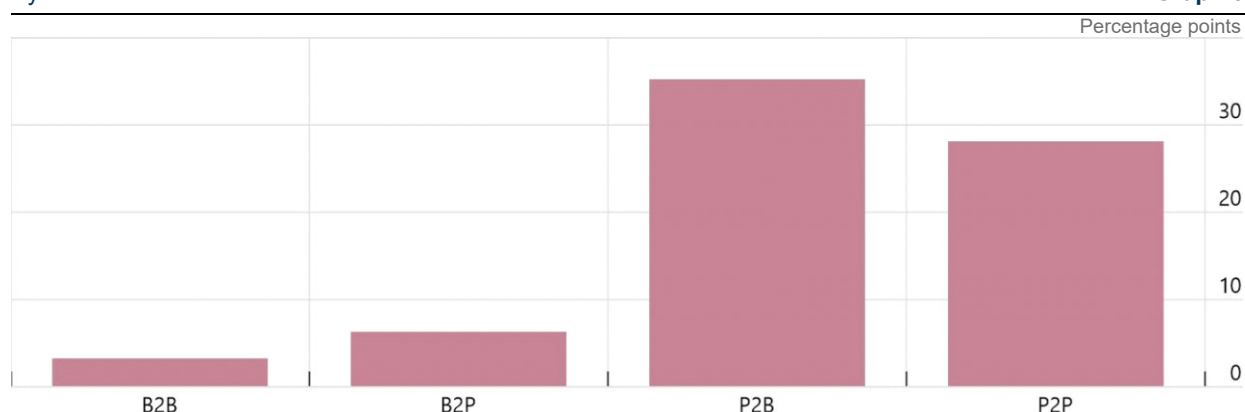
Corridors with average costs greater than 3% – KPI 5

The G20 targets also prescribe that no corridor should have costs greater than 3%. Globally, approximately one quarter of corridors have average costs greater than 3%, with significant variation by use-case (Graph 8). For B2B and B2P payments, only 3% (51 of 1,564) and 6% (108 of 1,715) of corridors, respectively, have average costs greater than 3%. The share of corridors with costs greater than 3% is much higher for P2B and P2P payments.

Country corridors with average total cost > 3%

By use-case

Graph 8



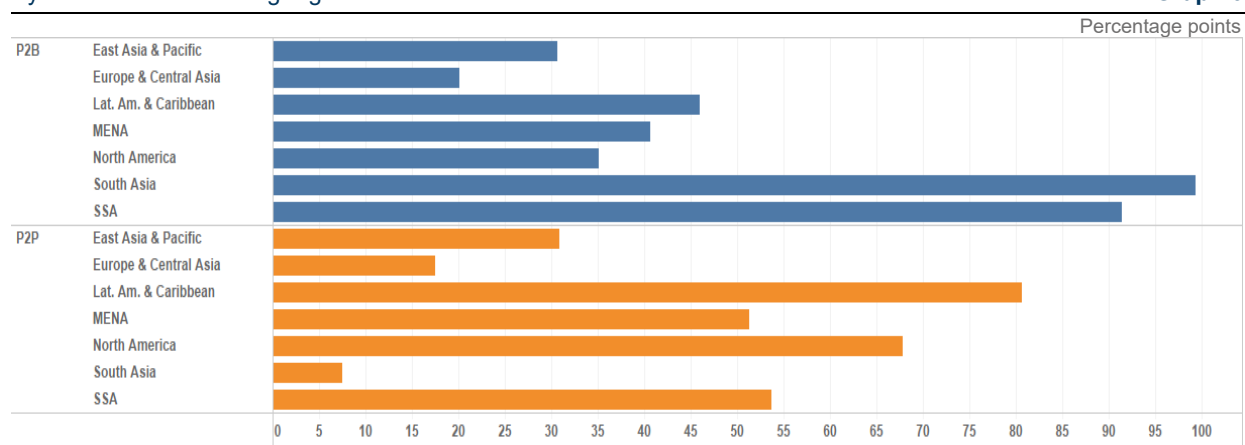
Source: FXC Intelligence

Looking closer at the P2B and P2P use-cases shows again that there is a large variation across regions. Graph 9 shows that for the P2B use-case more than 90% of the corridors originating from South Asia and Sub-Saharan Africa have average costs greater than 3%. For the P2P use-case, 80.7% and 67.8% of the corridors originating from Latin America & the Caribbean and North America, respectively, have average costs greater than 3%.

Country corridors with average total cost > 3%

By use-case and sending region

Graph 9



Source: FXC Intelligence

Table 6 show some examples of how the percentages of corridors with average costs greater than 3% differ depending on whether payments are being sent from a region or to a region. (The regions shown here, for illustrative purposes, are those with particularly large differences.) For P2B payments in the South Asia and Sub-Saharan Africa regions, the percentage of corridors with costs greater than 3% when sending cross-border payments *from* those regions is more than twice the percentage of corridors with costs greater than 3% when sending cross-border payments *to* those regions. For P2P payments in North America, the difference is even greater. 67.8% of corridors originating from the region have costs greater than 3% compared with 15.2% of corridors terminating in the region.

Table 6: Country corridors with average total cost > 3% based on direction of payments

Use-case	Region	Sending payments from	Sending payments to
P2B	South Asia	99.4%	41.5%
	Sub-Saharan Africa	91.5%	41.6%
P2P	Latin America & the Caribbean	80.7%	54.6%
	North America	67.8%	15.2%

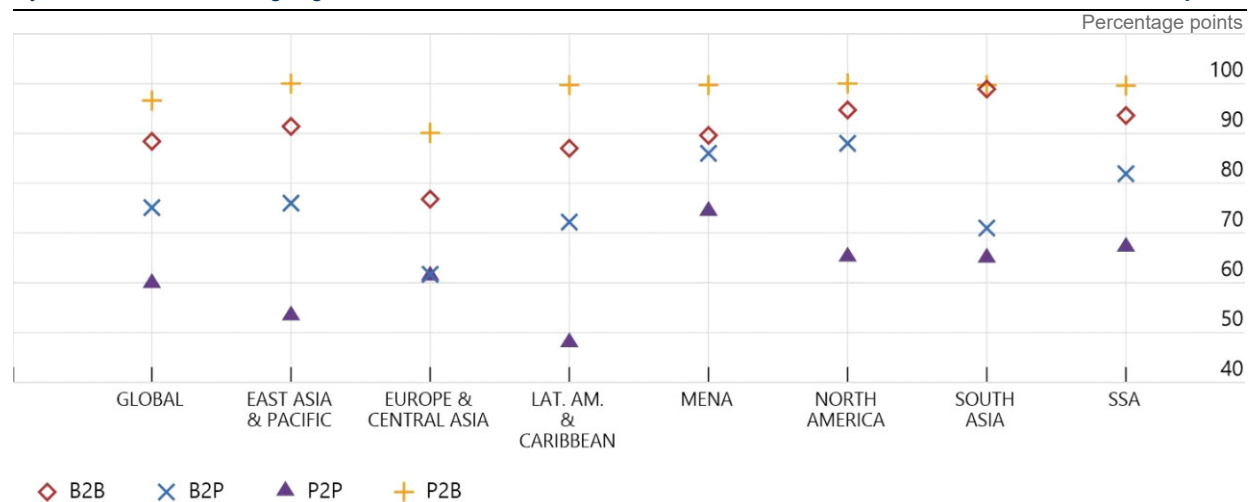
Foreign exchange costs are a primary driver of total costs³²

The total cost of a cross-border payment is typically comprised of a fee and an FX component. For cross-border retail payments globally, the FX cost generally constitutes more than half of the total cost, ranging from 60% for P2P transactions to 97% for P2B transactions (Graph 10).

FX-to-total-cost ratio

By use-case and sending region

Graph 10



Source: FXC Intelligence

Average FX costs vary across regions, with Sub-Saharan Africa experiencing the highest average FX costs when sending cross-border payments (Graph 11). The regional variation is particularly acute in the P2B segment, where the average FX cost for payments originating from Sub-Saharan Africa is 6.9%, compared to 1.6% for P2B payments originating from Europe & Central Asia.³³

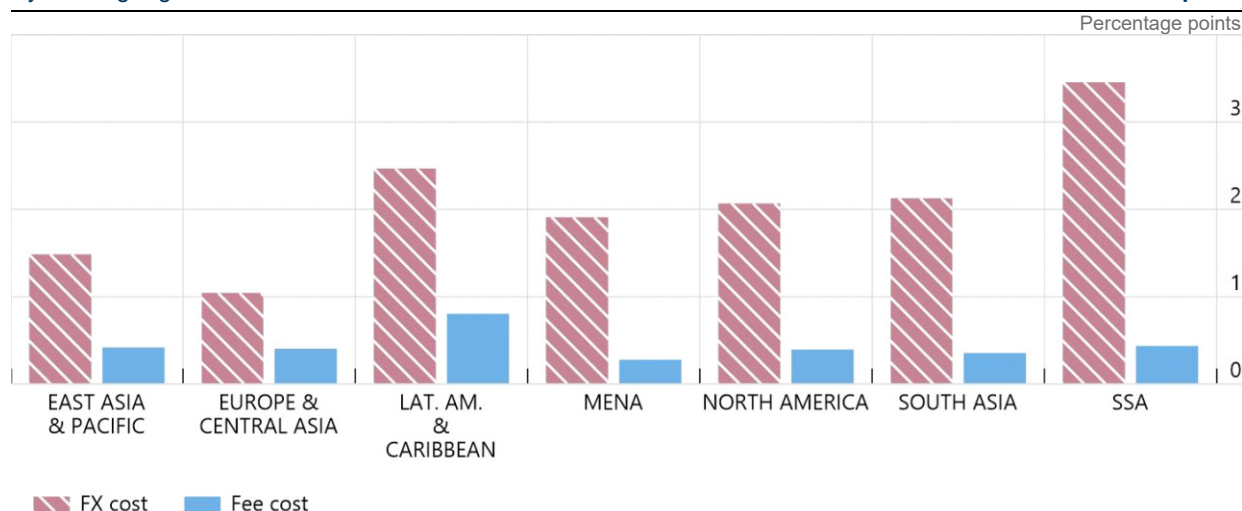
³² For purposes of monitoring progress toward the target, FX cost is defined as the difference between the FX rate charged by a service and the Interbank rate. Both the FX rate and the interbank are from the date of data collection.

³³ This result likely reflects, at least in part, the corridors in the Europe & Central Asia region that do not require FX conversion because the sending and receiving countries are both members of the European Monetary Union.

Average FX and fee cost across use-cases

By sending region

Graph 11



Source: FXC Intelligence

Although the bulk of total cost is typically attributed to “FX,” the distinction between the fee and FX components may sometimes reflect service providers’ marketing rather than the true source of the costs. For example, certain providers advertise “zero fee” transfer services but charge higher FX rates, while others charge a higher fee but offer their customers the mid-market/interbank FX rate (i.e. zero FX cost). In practice, if a provider decides that they wish to charge a total cost of 2%, they are free to set the price as: zero fee and 2% FX, 2% fee and zero FX, or any combination in between.

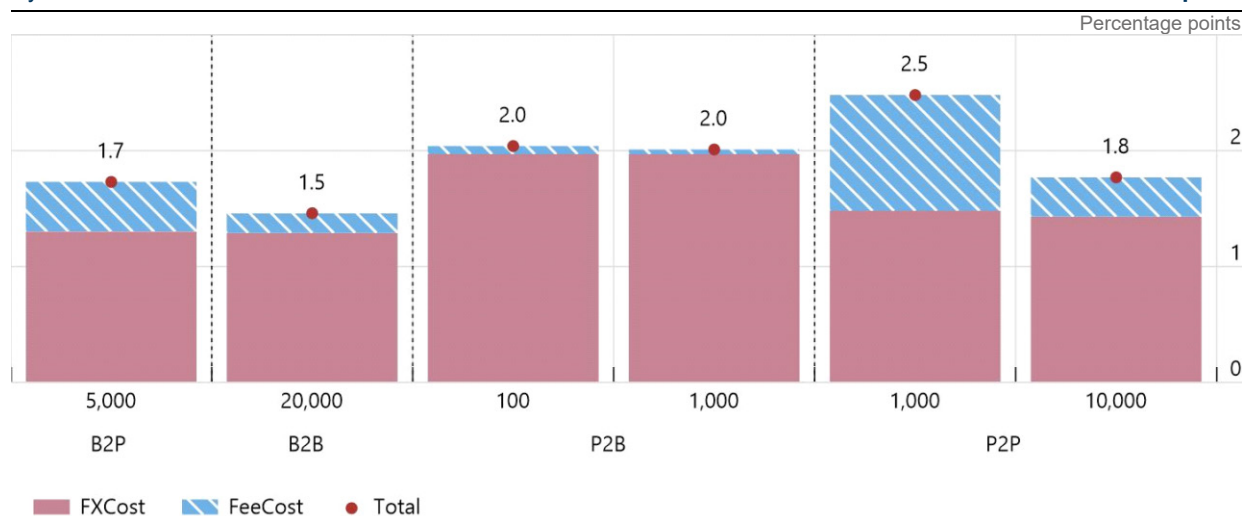
Costs as a percentage of transfer amount are generally negatively correlated with transfer amounts

Evaluating average total cost by use-case and transfer amount shows that on average, at the global level across all corridors, larger transfer amounts incur lower total costs (Graph 12). This appears to be related mainly to the fee component, which often contains at least some portion of a flat fee that does not scale with the transfer amount, while average FX cost is relatively stable across different transfer amounts (average FX cost are 2% for P2B, 1.3% for B2P and B2B, 1.5% for P2P across transfer amounts).

Average total cost

By use-case and transfer amount

Graph 12



4.2. Speed of retail cross-border payments

Table 7: Retail speed KPIs

Target: 75% of cross-border retail payments to provide availability of funds for the recipient within one hour from the time the payment is initiated and for the remainder of the market to be within one business day of payment initiation, by end-2027

KPI	2023
KPI 1: Percentage of cross-border retail payments services that credit recipients within one hour of initiation	41.8%
KPI 2: Percentage of cross-border retail payments services that credit recipients within one business day of initiation	76.3%

Source: FXC Intelligence. Data as of March 2023.

Note: Percentages computed including only services for which speed information is provided to end-users (56.7% of services in dataset) and excludes P2B payments.

The speed KPIs and metrics are proxies for the target because they report the percentage of cross-border payment *services* that credit recipients in either one hour or one business day, whereas the target refers to the proportion of *payments* that are credited to recipients within those timeframes.³⁴ In addition, the KPIs and metrics reflect the speed of services for which information about the speed with which funds are credited to the receiver is available. As KPI 1 for the transparency target shows, not all payment services are transparent in this way; 56.7% of the services in the dataset from which the KPIs and metrics are calculated provide this speed information to end-users; correspondingly, 43.3% do not. In addition, P2B card-based payments are excluded from the KPI calculations. For this use-case, the speed with which the end-user (i.e. merchants) receive funds, for example from their acquiring bank or third-party service

³⁴ Services are defined as the method by which a sender can fund their payment and they include bank account, cash, credit/debit card and mobile wallet. Payment services providers may allow users to fund their payments in a variety of ways and in different sending currencies and therefore offer multiple services.

provider, is individualised based on their contractual arrangement and the information is not generally or broadly available. However, this section includes some information about the speed of P2B payments based on a limited survey of service providers (Table 9).

Speed KPIs versus targets

Globally, among services for which speed information is available, the proportion of retail services that make funds available to the receiver in one hour is 41.8% (versus target of 75%) and the proportion that do so in one business day is 76.3% (versus target of 100%). The KPIs therefore suggest that it is likely that a meaningful proportion of payments are not being credited to recipients in timeframes consistent with the targets.

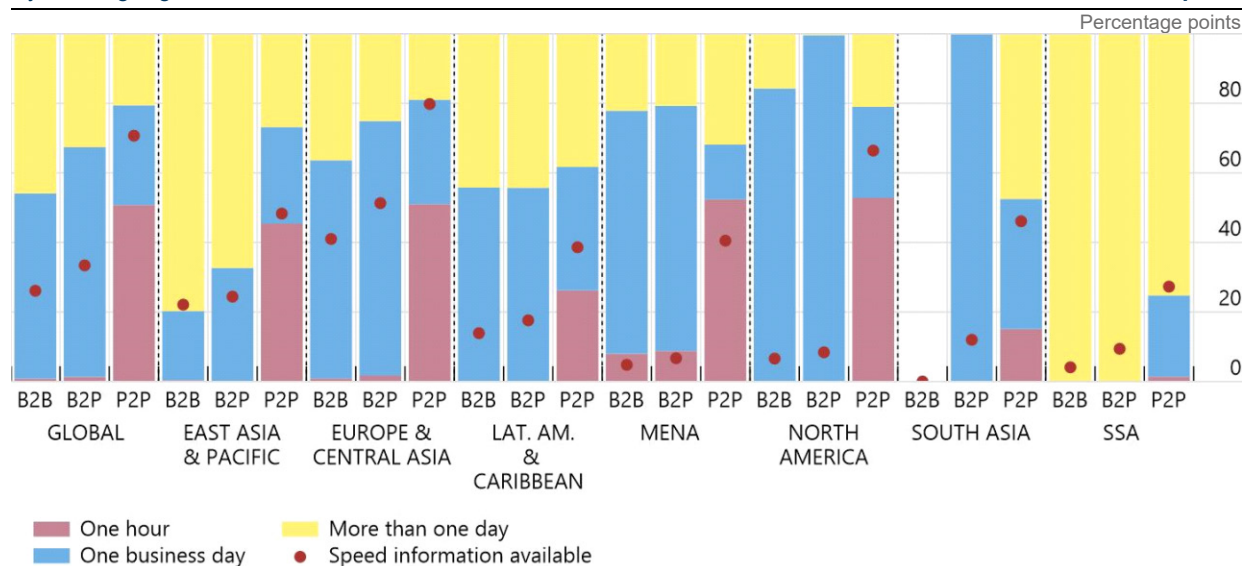
There is significant variation across the different regions and use-cases

Graph 13 highlights the variation in speed among use-cases and regions. For example, globally, an average of about 1% of B2B and B2P services provide receipt of funds in one hour, while approximately 50% of P2P services provide receipt of funds in one hour (red stacked bars). Similarly, the proportion of B2B, B2P and P2P services that take longer than one day to credit recipients are 46%, 32.7% and 20.6%, respectively (blue stacked bars). Even though P2P services are comparatively faster than B2B and B2P, in 18 of the 49 regional corridors (36.7%) at least one-third of P2P services take longer than one day to credit funds to recipients of cross-border payments.

Global average speed of cross-border payment services

By sending region and use-case

Graph 13



Note: Percentages computed including only services for which speed information is provided to end-users.

Source: FXC Intelligence

Looking closer at the P2P use-case, for which information on speed is reported by a higher share of services relative to the other use-cases, significant variation in average speed can be observed depending on where payments are sent from and to. For example, Table 8 shows that in both the South Asia and Sub-Saharan Africa regions, relatively few payment services offer receipt of funds within an hour when sending payments *from* those regions (see corresponding

rows) but significantly more services offer receipt of funds within the hour when sending payments to those regions (see corresponding columns). The data suggests that for payments originating from Sub-Saharan Africa, payment services providing receipt of funds within one hour are largely only available for cross-border payments within the region.

Table 8: Percentage of P2P services crediting funds to recipient in one hour

Sending Region	Receiving Region						
	East Asia & Pacific	Europe & Central Asia	Lat. Am. & Caribbean	MENA	North America	South Asia	SSA
East Asia & Pacific	47.6%	46.5%	39.3%	28.3%	32.4%	58.2%	58.5%
Europe & Central Asia	63.4%	48.4%	54.5%	63.0%	44.3%	63.2%	60.1%
Lat. Am. & Caribbean	32.8%	23.1%	44.0%	56.5%	18.5%	27.2%	50.0%
MENA	63.2%	46.2%	76.9%	42.1%	30.8%	52.4%	70.3%
North America	58.2%	41.6%	63.9%	56.3%	42.8%	52.8%	57.7%
South Asia	23.7%	9.2%	11.7%	1.7%	15.3%	18.3%	3.4%
SSA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.5%

Speed of P2B card payments

P2B payments were excluded from the KPI calculation because the speed with which merchants receive funds, for example from their acquiring bank or third-party service provider, is individualised based on their contractual arrangements and such information is not generally or broadly available. However, FXC Intelligence, on behalf of the FSB, conducted a survey of 23 geographically diverse PSPs to learn about the minimum possible settlement times available to their merchant clients.³⁵ Table 9 shows that only 9% of the PSPs surveyed offered settlement to the receiver merchant within one hour, 22% within 1 business day and 69% in more than one business day.

Table 9: P2B Payments speed

Minimum available settlement time	Percentage of PSPs
1 hour	9%
1 business day	22%
More than 1 day	69%

³⁵ Some of the providers sampled offered services across a range of settlement times, with faster settlement as a premium service.

4.3. Access to retail cross-border payments³⁶

Table 10: Retail access KPIs

Target: All end-users (individuals, businesses (including MSMEs) or banks) to have at least one option (i.e. at least one infrastructure or provider available) for sending or receiving cross-border electronic payments by end-2027.	
KPI	2023
KPI 1: Percentage of MSMEs with a transaction account at a regulated financial institution	90%
KPI 2: Percentage of adults with a transaction account at a regulated financial institution (% age 15+)	76%
KPI 3: Percentage of jurisdictions where regulation mandates offering of basic accounts by PSPs and allows for international remittances to be disbursed in basic accounts ³⁷	81%

Sources: World Bank Enterprise Survey (KPI1); World Bank Global Findex Survey 2022 (KPI2); World Bank Global Payments Systems Survey 2021 (KPI3).

The access KPIs and metrics serve as proxies for the target, which focuses on the options available to end-users for making cross-border electronic payments. KPIs 1 and 2 provide insights into the share of MSMEs and individuals, respectively, that have access to a transaction account to facilitate different types of retail payment transactions and are considered the primary indicators. KPI 3 is a supplementary indicator that helps inform the extent to which jurisdictions use legal requirements to expand access to basic accounts.

Access KPIs versus targets

KPIs 1 and 2 suggest that most individuals and MSMEs globally have transaction accounts. 76% of adults have an account either at a bank or similarly regulated deposit-taking financial institution, including a mobile money service provider. Similarly, the proportion of MSMEs owning a transaction account worldwide is 89.8%.

Differences in account ownership rates exist across jurisdictions

Although levels of account ownership at the global level are high, significant differences exist across jurisdictions, and especially between jurisdictions belonging to different World Bank income groups.³⁸ Graph 14 shows the distribution of account ownership across jurisdictions based on their income levels. While all high-income countries in the Global Findex dataset have individual account ownership rates greater than 60% and an overall average of approximately 93%, all but two of the low-income countries in the dataset have individual account ownership rates of 50% or less, with the average account ownership rate in low-income countries being 30%.

³⁶ Comprehensive reports about the current state and trends related to financial inclusion based on the World Bank's Findex database are available [here](#).

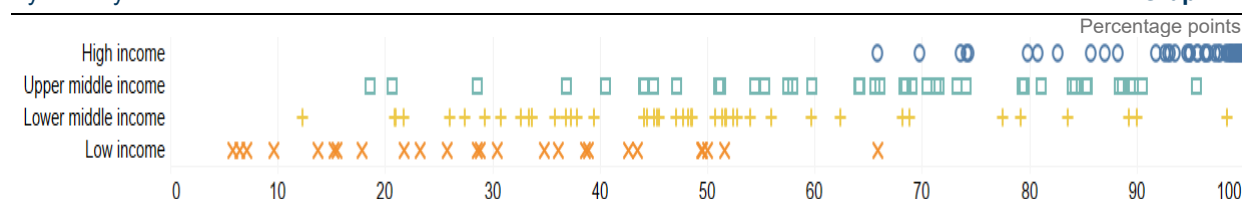
³⁷ Basic accounts are typically focused on payment services and characterised by low-cost and no-frill features. These accounts are often offered in combination with a debit card.

³⁸ The World Bank assigns the world's economies to four income groups – low, lower-middle, upper-middle and high income.

Individual account ownership (15+)

By country and income level

Graph 14



Source: Global Findex Database 2021

The proportion of MSMEs with a transaction account at a regulated financial institution is relatively high on average across all regions, ranging from 81.5% in the Middle East & North Africa to 94.5% in Europe & Central Asia.³⁹

Table 11: MSME account ownership by WB region⁴⁰

Region	MSMEs w/Accounts
Global	89.8%
East Asia & Pacific	83.7%
Europe & Central Asia	94.5%
Latin America & the Caribbean	93.4%
Middle East & North Africa	81.5%
South Asia	84.4%
Sub-Saharan Africa	88.2%

KPI 3 provides some insight into the extent to which jurisdictions use legal requirements to promote access to basic financial accounts. Among the 73 central banks that responded to the relevant questions in the 2021 World Bank's GPSS, 59 of them (80.8%) said "banks and/or other PSPs are required by law to provide basic payment accounts to any customer that requests such an account."⁴¹ 57% of the central banks responding that no such requirements exist are in high income jurisdictions, in which it may be easier to open an account generally.

Challenges to individual account ownership remain

The types of accounts on which people tend to rely differ depending on the country's income levels. In high-and-upper-middle-income countries people rely mainly on banks or similar financial institutions (Table 12). In low-income countries, alternative providers to traditional operators constitute 30% of the payment accounts on average. Regionally, mobile money account ownership is highest in non-high-income jurisdictions in Sub-Saharan Africa (33.2%) and Latin America & the Caribbean (27%).

³⁹ The World Bank Enterprise Surveys from which these statistics are calculated does not include North America.

⁴⁰ World Bank Enterprise Surveys.

⁴¹ Question 10(b) from World Bank GPSS.

Table 12: Individuals 15+: Account type by country income level

Country income group	FI Account	Mobile Money
High income	96.4%	
Upper middle income	83.8%	9.9%
Lower middle income	58.5%	13.9%
Low income	23.9%	27.0%

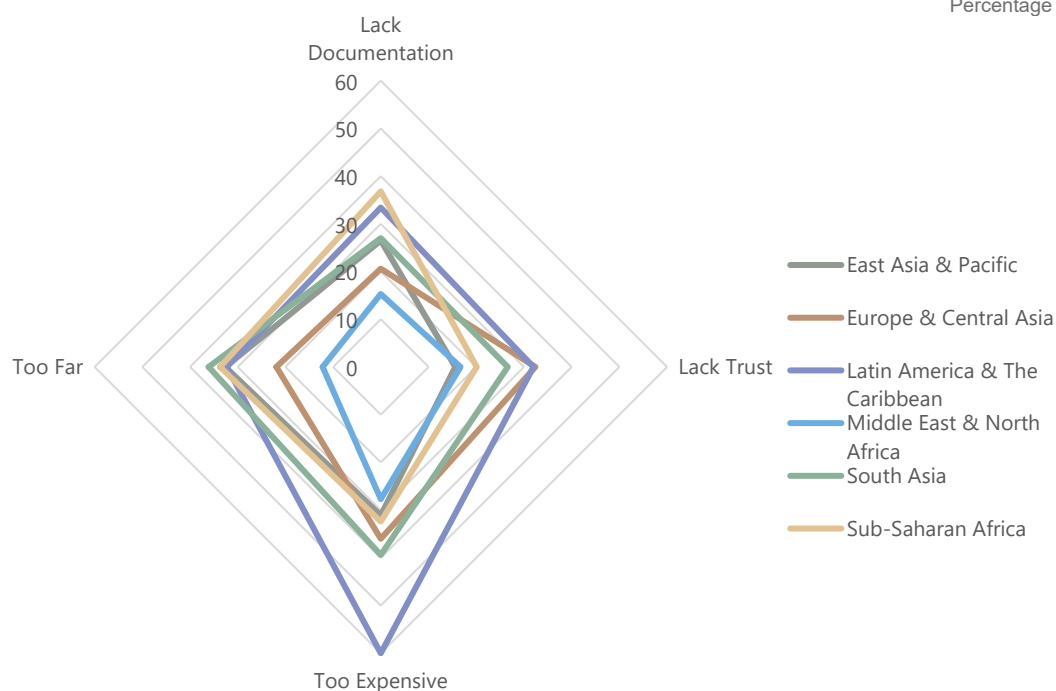
Looking at the potential causes for not owning an account at a regulated financial institution among persons outside of high-income jurisdictions, lack of sufficient funds is the most frequently cited reason across all jurisdictions. However, further evaluation of the reasons shows that issues such as services being too expensive (cost) or too far (access), or people not having the necessary documentation, continue to pose challenges. For example, in Latin American & Caribbean and South Asia, on average 60% and 40%, respectively, of people without accounts at financial institutions cited high cost as a primary reason. In Sub-Saharan Africa, approximately 37% of people cited the lack of required documentation for opening an account (Graph 15).

Reason for no financial institution account (15+)

Excluding high income jurisdictions within the region

Graph 15

Percentage points



Source: Global Findex Database 2021

The Global Findex Database also includes data from jurisdictions in Sub-Saharan Africa that are not high-income jurisdictions about the reasons for not having a mobile money account and similar challenges arise. Among people who do not have a mobile money account, 34.8% do not have a phone, 30% lack the required documentation for opening an account, and for 25% it is too expensive.

4.4. Transparency of retail cross-border payments

Table 13: Retail transparency KPIs

Target:	All payment service providers to provide at a minimum the following list of information concerning cross-border payments to payers and payees by end-2027: total transaction cost (showing all relevant charges, including sending and receiving fees including those of any intermediaries, FX rate and currency conversion charges); the expected time to deliver funds; tracking of payment status; and terms of service.	
KPI		2023
KPI 1: Percentage of payment services providing cost and speed information		56.7%
KPI 2: Percentage of jurisdictions with laws/regulations requiring transparency measures		98.7%

Sources: FXC Intelligence (KPI1), data as of March 2023; World Bank GPSS 2021 (KPI2).

KPI 1 does not cover all the targets' elements; it only covers cost and speed transparency. Further, cost transparency captures only the FX cost and transfer fee.⁴² To be included in the dataset, a service must be transparent about its cost. Therefore, KPI 1 shows the proportion of payment services in the FXC dataset for cost data that also provide information about speed.

Transparency KPIs versus targets

Globally, the weighted average proportion of payment services that are transparent about the cost and speed of cross-border payment is 56.7% compared with a target of 100% of payment service providers for the full list of information.

Transparency varies across regions and use-cases

The level of transparency that services offer varies considerably across regions and use-cases. Globally, the average proportion of payments services that are transparent about speed and cost for P2P, B2P and B2B cross-border payments are 70.7%, 33.4% and 26.1%, respectively.

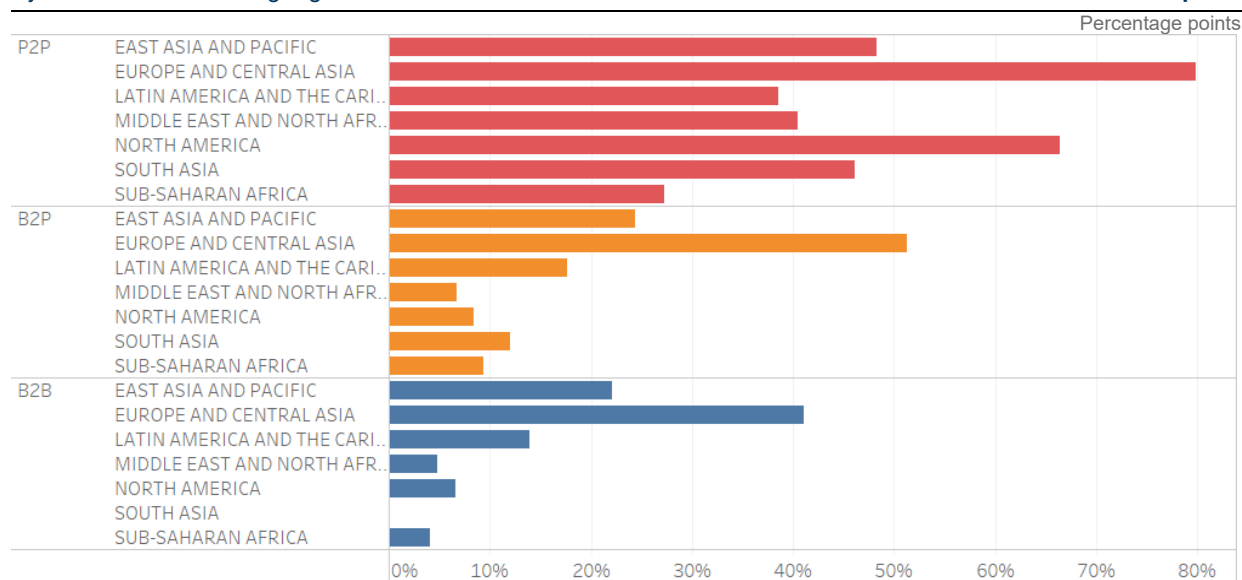
Graph 16 shows that Europe & Central Asia is the region with the greatest proportion of transparent cross-border payments services across all use-cases. Almost 80% of P2P services in Europe & Central Asia are transparent about cost and speed, which is nearly double that of B2B and B2P services across all other regions.

⁴² FX cost is the margin of a provider's FX rate over the Interbank rate.

Retail payments services transparency

By use-case and sending region

Graph 16



Source: FXC Intelligence

Jurisdictions' use of regulations to promote transparency

Among the 75 jurisdictions that responded to the relevant GPSS question, all but one have regulations requiring “terms, conditions, fees, and customer rights to be disclosed upfront by PSPs, i.e. prior to the customer entering into a contract / performing a transaction.”

5. Remittances

Cross-border remittances are low value, high volume, and primarily sent to recipients in emerging market and developing economies (EMDEs). The payment types included in this segment are low-value, non-commercial, person-to-person transfers that are typically to family members/friends abroad, which may be recurring or non-recurring. Major service providers include international money transfer operators, commercial banks, post offices and mobile money operators.

The methodology underlying the KPIs and metrics in this section is consistent with the existing methodology used by the World Bank in monitoring the progress for the UN SDG 10.c.1 on the cost of remittances.⁴³ As remittances are mainly sent from developed economies to EMDEs, World Bank's RPW uses the countries on the receiving end of each corridor when calculating regional average costs. The KPIs and metrics used in monitoring speed, access and transparency are also sourced from existing databases from the World Bank.

⁴³ Please refer to [SDG 10.c.1 metadata file](#) and the website of the *Remittance Prices Worldwide* database, available [here](#).

5.1. Cost of remittances

Table 14: Remittances cost KPIs

Target: Reaffirm UN SDG: Global average cost of sending \$200 remittance to be no more than 3% by 2030, with no corridors with costs higher than 5%

KPI ⁴⁴	2023
KPI 1: Global average cost of sending \$200 remittance	6.3%
KPI 2: Global average cost of sending \$500 remittance	4.3%
KPI 3: Global SmaRT average cost of sending \$200 remittance	3.5%
KPI 4: Global SmaRT average cost of sending \$500 remittance	2.5%
KPI 5: Percentage of corridors with SmaRT average cost of sending \$200 remittance above 5%	20.0%
KPI 6: Percentage of corridors with SmaRT average cost of sending \$500 remittance above 5%	13.7%

Source: Remittance Prices Worldwide, World Bank, Q1 2023.

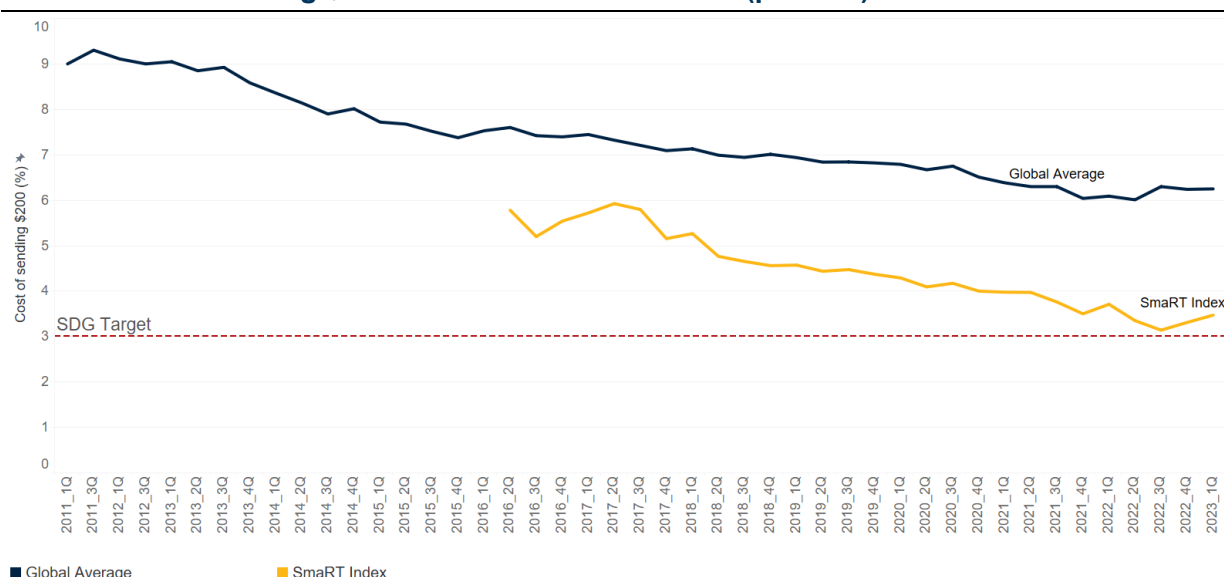
Cost KPIs versus targets

As of Q1 2023, the global average cost of sending \$200 and \$500 remittances is 6.3% (\$12.50) and 4.3% (\$21.65), respectively. Remittance costs, in general, are dependent on the amount sent and remittance service providers (RSPs) generally adopt tiered pricing. Hence, cost as a percentage of the amount sent is lower for higher transaction sizes.

⁴⁴ The KPIs for remittances costs include indicators for sending both \$200 remittances and \$500 remittances to reflect better a wider range of end-user experiences.

Global cost of sending \$200 in remittances over time (percent)

Graph 17



Source: Remittance Prices Worldwide, World Bank, Q1 2023.

KPIs 3 and 4 use a different methodology to calculate the global average cost of sending remittances. The World Bank introduced the Smart Remitter Target (SmaRT) indicators in Q2 2016 after consultations with the Global Remittances Working Group (GRWG).⁴⁵ SmaRT averages reflect the cost that a savvy consumer with access to sufficiently complete information could pay to transfer remittances in each corridor. SmaRT indicators are calculated as the simple average of the three cheapest qualifying services for sending the equivalent of \$200 (KPI 3) or \$500 (KPI 4) in each corridor and is expressed as a percentage of the total amount sent. “SmaRT qualifying” services meet the criteria of transparency, transaction speed (five days or less) and accessibility.

Notably, the SmaRT average cost of sending \$500 is already below the target while that for \$200 is 47 basis points (bps) above the target.

SmaRT indicators are also used at the corridor level to monitor the second part of the remittance cost target which prescribes that costs should be below 5% in all remittance corridors. KPIs 5 and 6 measure this for \$200 and \$500, respectively. In Q1 2023, 20% of corridors monitored by RPW had a SmaRT average cost higher than 5% (KPI 3) for remittances of \$200, while less than 14% of corridors did so for remittances of \$500.⁴⁶ In addition, 27 corridors did not have any services that met the requirements for calculating SmaRT indicators.

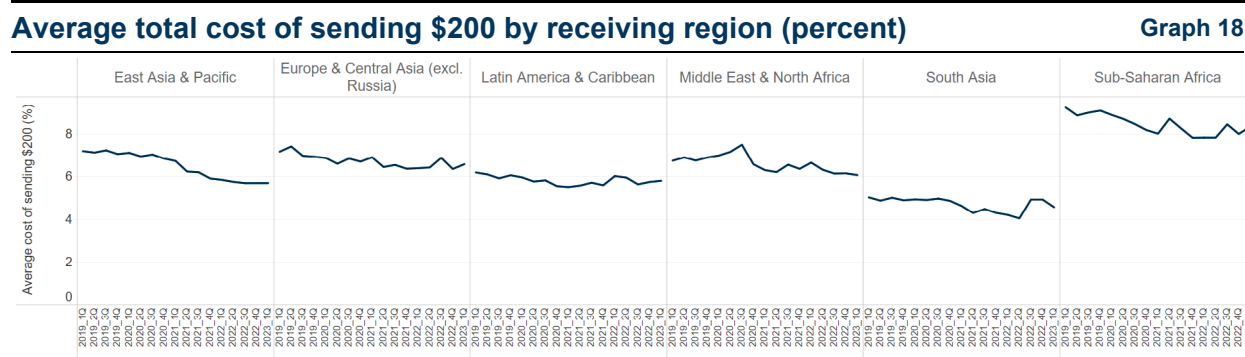
Graph 18 displays average total cost of sending remittances to each region over time. On average, Sub-Saharan Africa and South Asia have been the most and least expensive regions to send money to, respectively. The trends in sending costs have been similar for sending both

⁴⁵ The World Bank (2016), *Getting SmaRT about remittance price monitoring*, June.

⁴⁶ Please note that these calculations exclude the 13 corridors originating in Russia as the World Bank had stopped collecting RPW data in Russia via mystery shopping or APIs and instead only publicly available data on corridors originating in Russia were collected. Due to this deviation in data collection methodology, these data points were not included in the analysis to ensure consistency across corridors.

\$200 and \$500 but the costs of sending \$500 is on average lower than the costs of sending \$200. For example, the cost of sending \$500 to South Asia is only 14 bps above the 3% target.

Regional variations in cost for sending \$200



Source: Remittance Prices Worldwide, World Bank, Q1 2023.

Cash vs. digital and fees vs. FX margins for sending \$200

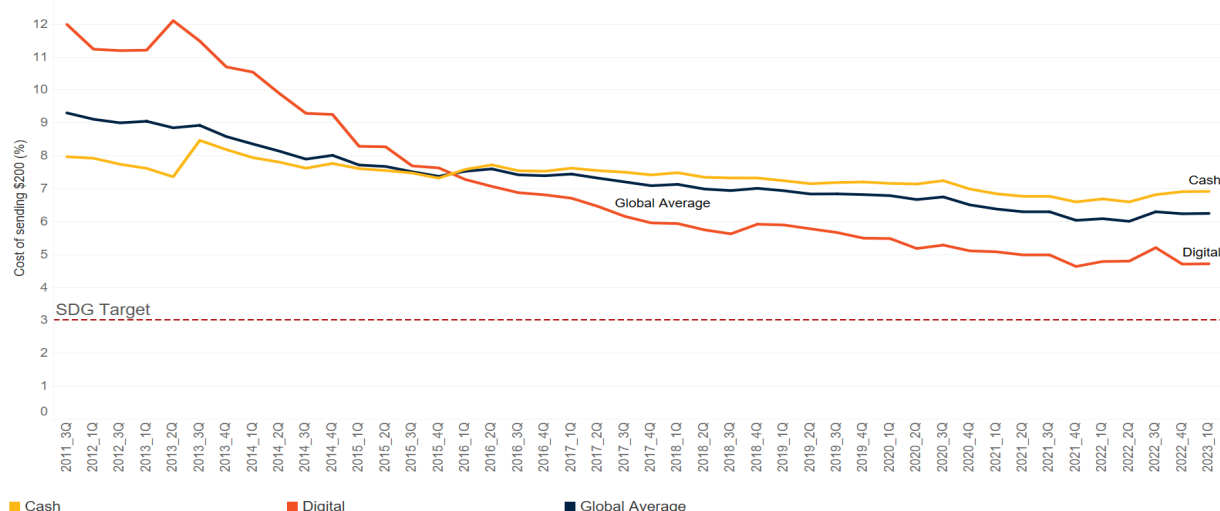
The RPW database also contains data on digital remittances, which are defined as remittances that “must be sent via a payment instrument in an online or self-assisted manner, and received into a transaction account, i.e., bank account, transaction account maintained at a non-bank deposit taking institution (say a post office), mobile money or e-money account.”⁴⁷

Digital remittance services were not commonly offered or used when RPW first started collecting data on remittance costs. Over time, as digital financial services gained traction, RPW included more digital remittance services in the dataset, consistent with its methodology of aiming to cover 80-85% of the remittances market globally and at corridor level. As of Q1 2023, digital services account for 31% of all services collected by RPW. Graph 19 shows how the average cost of digital remittances declined significantly over time, from an average of approximately 12% (\$24) for sending \$200 in 2011 to around 4.7% (\$9.44) in Q1 2023.

⁴⁷ World Bank, Remittance Prices Worldwide Quarterly Reports.

Trends in the cost of digital remittances, \$200

Graph 19

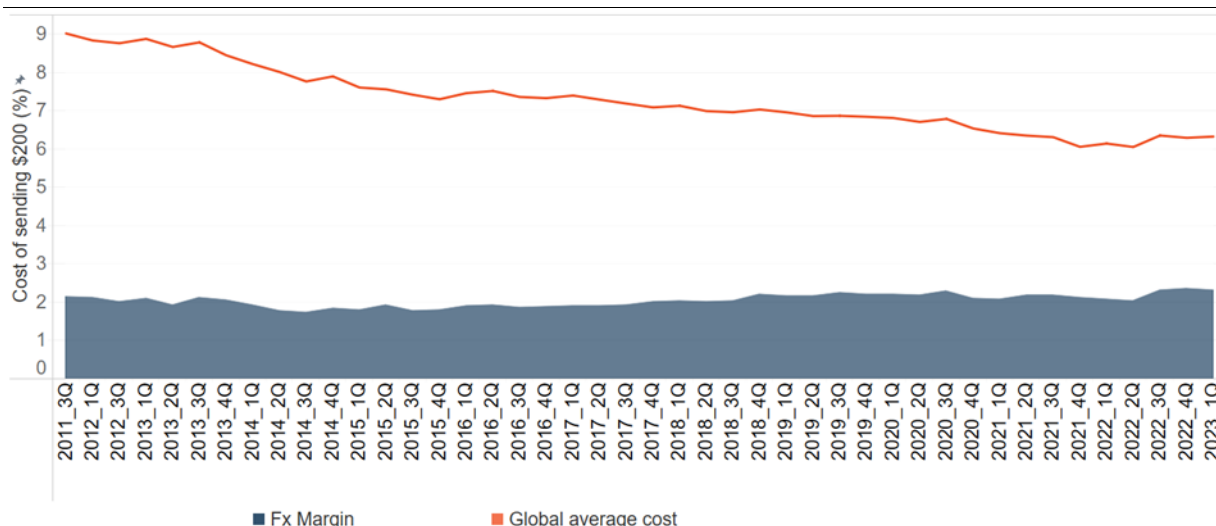


Source: Remittance Prices Worldwide, World Bank, Q1 2023.

As shown in Graph 20, additional analysis of costs broken down by fees and FX margins indicates that FX margins have traditionally been around 2% on average globally, with an increase to around 2.3-2.5% in the past year, which seems to be reflected as an increase in the global average cost. However, average fees across regions vary widely, ranging from 2.1% to 6%, while average FX margins are more than 3% in Sub-Saharan Africa, which is higher than the cost target by itself. Graph 21 shows that average fees tend to be higher for cash remittances than for digital remittances across all regions despite displaying a large geographical heterogeneity.

FX margin as a share of global average cost, \$200

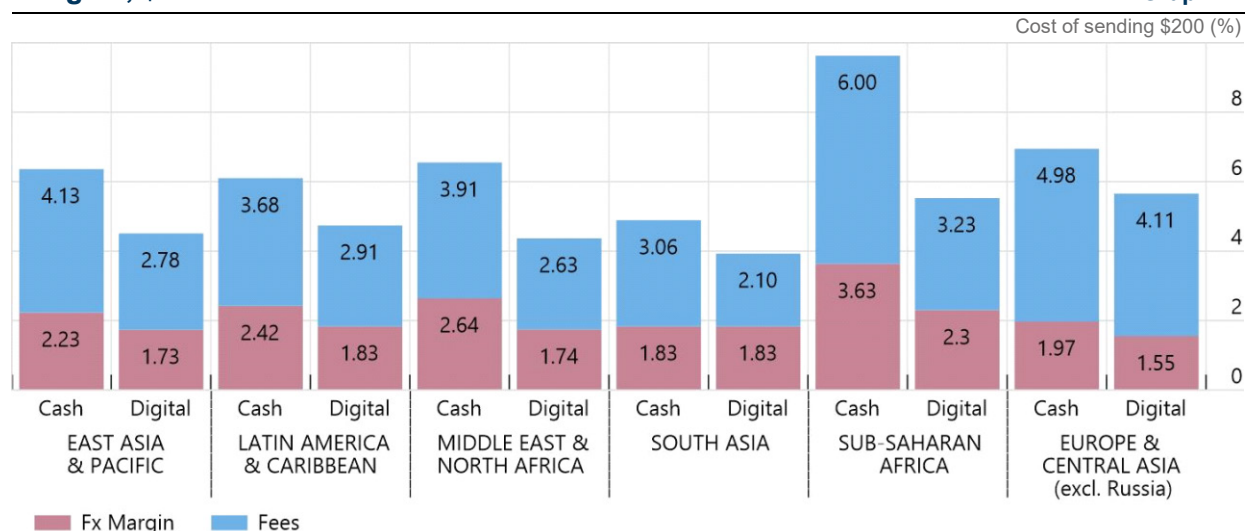
Graph 20



Source: Remittance Prices Worldwide, World Bank, Q1 2023.

Average costs by receiving region: cash vs digital services; fees vs. FX margins, \$200

Graph 21



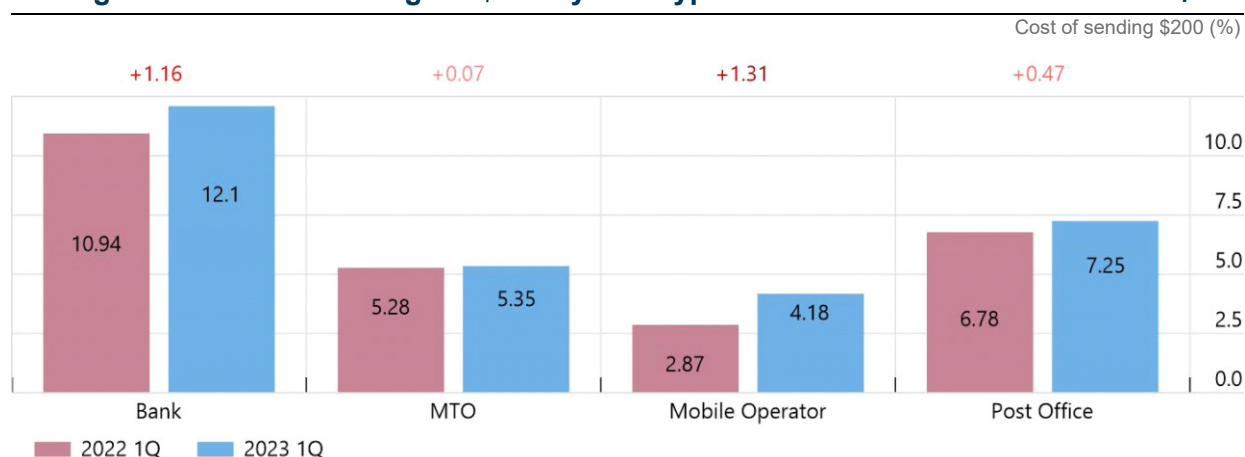
Source: Remittance Prices Worldwide, World Bank, Q1 2023.

Cost by remittance service provider (RSP) type for sending \$200

RPW categorises RSPs into four groups: banks, money transfer operators (MTOs), mobile operators and post offices. Graph 22 provides a comparison of the average cost of sending \$200 for each provider type in Q1 2023 and Q1 2022. Costs on average have increased across all provider types, with the largest increases seen for mobile operators and banks. Banks are the costliest provider type while mobile operators are the cheapest, despite experiencing the largest year-over-year increase in average cost.

Average total cost of sending US \$200 by RSP type

Graph 22



Source: Remittance Prices Worldwide, World Bank, Q1 2023.

RPW also calculates average cost by instrument used to fund the transaction (bank account transfers, cash, mobile money and payment cards). While mobile money is the cheapest instrument on average to fund the transaction, the cost of using mobile money for this purpose has increased significantly in the past year, from 2.8% to 4.4%. At the same time, it is also possible to calculate average costs by means of disbursing the funds. The average cost of sending remittances between bank accounts within the same bank or to a partner of the

originating bank is the costliest instrument to receive (8.1%) while receiving in mobile money accounts is the cheapest (4.3%).⁴⁸

5.2. Speed of remittances

Table 15: Remittances speed KPIs

Target: 75% of cross-border remittance payments in every corridor to provide availability of funds for the recipient within one hour of payment initiation and for the remainder of the market to be within one business day, by end-2027	
KPI	2023
KPI 1: Percentage of services making remittance funds available to the recipient within one hour	53%
KPI 2: Percentage of services making remittance funds available to the recipient within one business day	77%

Source: Remittance Prices Worldwide, World Bank, Q1 2023.

Note: Based on sending \$200. Percentages computed including only services for which speed information is provided to end-users.

Speed KPIs versus targets

As of Q1 2023, 53% of services monitored by RPW make funds available to the remittance recipient within one hour of the sender initiating the transaction and 77% make funds available to the recipient within one business day. Due to the way in which data is collected for the two sending amounts of \$200 and \$500, there is no difference in speed between the transfer amounts.⁴⁹

Variation in speed across regions

There is some regional variation in the speed KPIs for remittances, although less than what is observed in the retail segment. Table 16 shows that Sub-Saharan Africa has the highest percentage of services (59%) making remittance funds available to the recipient in one hour and East Asia & Pacific has the lowest percentage of services (46%) making remittance funds available to the recipient in one hour. Looking at services that make funds available to remittance receivers within one day, Latin America & the Caribbean has the highest percentage (83%) and East Asia & Pacific has the lowest percentage (69%).

⁴⁸ For charts and further details on costs disaggregated by payment instrument see World Bank (2023). *Remittance Prices Worldwide, Quarterly Report, Q1 2023*.

⁴⁹ RPW monitors speed using the following breakdown: less than one hour, same day, next day, 1-3 days, 2 days, 3-5 days, 6 days or more. For KPI 2, services that make funds available to the sender in less than one hour, same day and next day are used. In addition, RPW uses the same set of services to monitor the cost of sending \$200 and \$500. While some nuances in the availability of cost information for different sending amounts occur on occasion, the difference in terms of KPIs 1 and 2 were negligible. Hence, the reporting in this sub-section focuses on only one set of speed indicators, based on speed for \$200.

Table 16: Speed of remittances by receiving region

Region	% less than one hour	% within one business day
East Asia & Pacific	46%	69%
Europe & Central Asia	55%	78%
Latin America & the Caribbean	58%	83%
Middle East & North Africa	48%	77%
South Asia	51%	76%
Sub-Saharan Africa	59%	81%

5.3. Access to remittances

Table 17: Remittances access KPIs

Target: More than 90% of individuals (including those without bank accounts) who wish to send or receive a remittance payment to have access to a means of cross-border remittance payment by end-2027

KPI	2023
KPI 1: Percentage of adults with a transaction account at a regulated financial institution (% age 15+)	76%
KPI 2: Percentage of jurisdictions where regulation mandates offering of basic accounts by PSPs and allows for international remittances to be disbursed in basic accounts	81%

Source: Sources: World Bank Global Findex Survey 2022 (KPI1); World Bank Global Payments Systems Survey 2021 (KPI2).

Access KPIs versus targets

Globally, 76% of adults have a transaction account offered by a regulated provider. As digital remittances are cheaper, as mentioned above, access to a transaction account by remittance senders and receivers is important in facilitating a cheaper means of sending remittances. At the same time, 81% of jurisdictions responding to the GPSS noted that there is a regulation mandating offering of basic accounts by payment service providers. It is important to note, however, that not all these accounts may allow for sending and receiving cross-border payments. While GPSS also enquires about this issue, there were not enough respondents in the latest iteration of the survey to yield a meaningful analysis.

Variation across regions in terms of access

There is significant variation across regions in accessing an account. The demand-side data collected from households, which is used in calculating KPI 1, shows that account ownership

ranges from 48% in Middle East & North Africa to 81% in East Asia & the Pacific. High-income OECD economies have the greatest proportion of adults with accounts (97%).

Adults with an account, by region (percent)

Graph 23



¹ excluding high income

Source: Remittance Global Findex, World Bank, 2021

Table 18 shows that mandated provision of basic accounts also varies across regions. Such mandates exist mostly in developing economies, and not as much in high-income economies.

Table 18: Basic account mandates, global and by region⁵⁰

Region	Jurisdictions with mandate percent and (count / total)	
Global	81%	(59/73)
East Asia & Pacific	75%	(3/4)
Europe & Central Asia	89%	(8/9)
High Income OECD	73%	(19/26)
Latin America & the Caribbean	80%	(8/10)
Middle East & North Africa	100%	(8/8)
South Asia	67%	(2/3)
Sub-Saharan Africa	85%	(11/13)

⁵⁰ Source: GPSS, World Bank, 2021. The relevant GPSS is "Banks and/or other PSPs are required by law to provide basic payment accounts to any customer that requests such an account."

5.4. Transparency of remittances

Table 19: Remittances transparency KPIs

Target:	All payment service providers to provide at a minimum the following list of information concerning cross-border payments to payers and payees by end-2027: total transaction cost (showing all relevant charges, including sending and receiving fees including those of any intermediaries, FX rate and currency conversion charges); the expected time to deliver funds; tracking of payment status; and terms of service.	
KPI		2023
KPI 1: Percentage of jurisdictions that have laws/regulations that require provision of receipt containing transaction details by RSPs		91%
KPI 2: Percentage of jurisdictions that have laws/regulations that require disclosure of fees applied to a transaction by RSPs		92%
KPI 3: Percentage of jurisdictions that have laws/regulations that require disclosure of FX rate applied to the transaction by RSPs		89%
KPI 4: Percentage of services for which a breakdown of total fees and FX margin is provided by RSPs		98%

Sources: World Bank Global Payments Systems Survey 2021 (KPI1, 2, 3); RPW, World Bank, Q1 2023 (KPI 4).
 Note: KPI 4 based on sending \$200

Transparency KPIs versus targets

The transparency target for remittances is monitored via four KPIs that measure different aspects of transparency. KPIs 1-3 measure the regulatory requirements in place on different aspects, such as provision of receipts containing transaction details, disclosure of fees and disclosure of FX rates. KPI 4 measures what happens in practice in terms of transparency with respect to cost using service level data monitored by the RPW database.

According to KPIs 1-3, regulatory requirements regarding transparency of remittance services exist in around 90% of jurisdictions responding to the relevant questions in the latest iteration of GPSS. In practice, more than 98% of services monitored by RPW disclose a breakdown of costs between fees and FX margins, regardless of the transfer amount.

Regional Variations

There is not much variation across regions in terms of transparency across Europe & Central Asia, Sub-Saharan Africa, and Middle East & North Africa, where regulations requiring receipts are in effect in all the jurisdictions responding to the GPSS. Similarly, all responding jurisdictions in Europe & Central Asia and Sub-Saharan Africa have regulations in place requiring the fees to be disclosed prior to the transaction. East Asia & the Pacific and South Asia are the two regions where these regulations do not seem to be as common. Disclosure of FX rates is much less common overall but is mandated by regulation in more than 90% of the responding jurisdictions in high-income OECD economies, Europe & Central Asia, and in Sub-Saharan Africa (Graph 24).

In practice, almost all services monitored in the RPW database have the cost breakdown disclosed. Graph 22 shows that there is not much regional variation. As the collection of RPW is done via mystery shopping or APIs, the disclosure of the breakdown of costs is done prior to the transaction so that the sender is informed before deciding to send.

Transparency KPIs 1-3, global and by region

Graph 24

Global		By Region						
		East Asia & Pacific	Europe & Central Asia	High Income OECD	Latin America & Caribbean	Middle East & North Africa	South Asia	Sub-Saharan Africa
g. RSPs are required by laws/regulations to provide customers with a receipt containing the details of the transaction	91% (67/74)	75% (3/4)	100% (12/12)	83% (19/23)	92% (11/12)	100% (6/6)	67% (2/3)	100% (14/14)
a. RSPs are required by laws/regulations to disclose upfront fees they apply for remittance services	92% (68/74)	75% (3/4)	100% (12/12)	96% (22/23)	82% (9/11)	86% (6/7)	67% (2/3)	100% (14/14)
c. RSPs are required by laws/regulations to disclose upfront the FX rate that is applied in the remittance	89% (65/73)	75% (3/4)	91% (10/11)	91% (21/23)	82% (9/11)	86% (6/7)	67% (2/3)	100% (14/14)

Source: GPSS, World Bank, 2021.

Table 20: Transparency KPI 4 across regions

Region	% Transparent (\$200)
East Asia & Pacific	99.0%
Europe & Central Asia*	98.6%
Latin America & the Caribbean	98.3%
Middle East & North Africa	95.7%
South Asia	97.6%
Sub-Saharan Africa	98.6%

Annex: Targets for the Cross-Border Payments Roadmap

Challenge	Payment Sector		
	Wholesale ⁵¹	Retail ⁵²	Remittances
Cost	No target set. ⁵³	Global average cost of payment to be no more than 1%, with no corridors with costs higher than 3% by end-2027.	Reaffirm UN SDG: Global average cost of sending \$200 remittance to be no more than 3% by 2030, with no corridors with costs higher than 5%.
Speed	75% of cross-border wholesale payments to be credited within one hour of payment initiation ⁵⁴ or within one hour of the pre-agreed settlement date and time for forward-dated transactions ⁵⁵ and for the remainder of the market to be within one business day ⁵⁶ of payment initiation, by end-2027. Payments to be reconciled by end of the day on which they are credited, by end-2027.	75% of cross-border retail payments to provide availability of funds for the recipient within one hour from the time the payment is initiated ⁵⁷ and for the remainder of the market to be within one business day ⁵⁶ of payment initiation, by end-2027.	75% of cross-border remittance payments in every corridor to provide availability of funds for the recipient within one hour of payment initiation ⁵⁴ and for the remainder of the market to be within one business day ⁵⁶ , by end-2027.
Access	All financial institutions (including financial sector remittance service providers) operating in all payment corridors to have at least one option and, where appropriate, multiple options (i.e. multiple infrastructures or providers available) for sending and receiving cross-border wholesale payments by end-2027.	All end-users (individuals, businesses (including MSMEs) or banks) to have at least one option (i.e. at least one infrastructure or provider available) for sending or receiving cross-border electronic payments by end-2027.	More than 90% of individuals (including those without bank accounts) who wish to send or receive a remittance payment to have access to a means of cross-border electronic remittance payment by end-2027.
Transparency	All payment service providers to provide at a minimum the following list of information concerning cross-border payments to payers and payees by end-2027: total transaction cost (showing all relevant charges, including sending and receiving fees including those of any intermediaries, FX rate and currency conversion charges); the expected time to deliver funds; tracking of payment status; and terms of service.)		

⁵¹ The wholesale payments are defined as payments with a value of USD 100,000 or more, while the retail payments are defined as payments with less than USD 100,000 other than remittances.

⁵² The retail market segment includes B2B, P2B/B2P and P2P other than remittances.

⁵³ Due to the difficulty of estimating average costs across the wholesale market where transactions are typically not individually priced, a target has not been set for this segment.

⁵⁴ For this purpose, a wholesale payment is considered initiated at the moment of entry into a payment infrastructure or correspondent bank as defined by their applicable rules.

⁵⁵ The settlement date and time are agreed and contracted between the two counterparties of the transaction at the point the transaction is agreed. On this date and time, there will be an exchange of payments between counterparties in each of the currencies contracted for exchange.

⁵⁶ In cases where the hours or dates of the business days in the locations where the initiation and receipt do not coincide, the payment should be credited within a period that, in each location, includes one business day.

⁵⁷ For this purpose, a retail or remittance payment is considered initiated when the payment order is received by the payer's payment service provider. The transaction is considered complete once the recipient can access the funds.