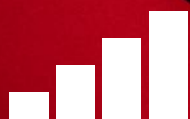


GSMA

Cross-Border Mobile Money Remittance Cost Survey

Key Trends and Insights





The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive.

Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

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Acronyms and abbreviations

AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism	MMP	Mobile Money Provider
CDF	Congolese Franc (for Democratic Republic of Congo)	MNO	Mobile Network Operator
CEMAC	La Communauté Économique et Monétaire de l'Afrique Centrale (Economic and Monetary Community of Central Africa)	MTO	Money Transfer Operator
COMESA	Common Market for Eastern and Southern Africa	P2P	Person-to-Person
EAC	East African Community	PAPSS	Pan-African Payment and Settlement System
ECOWAS	Economic Community of West African States	PSP	Payment Service Provider
FX	Foreign Exchange	QR	Quick Response
GIMACPAY	Le Groupement Interbancaire Monétaire de l'Afrique Centrale (Interbank Monetary Group of Central Africa payment system)	RPW	Remittance Prices Worldwide
KYC	Know Your Customer	RSP	Remittance Service Provider
LMIC	Low- and Middle-Income Country	SADC	Southern African Development Community
		TCIB	Transactions Clear on an Immediate Basis
		USD	United States Dollar
		USSD	Unstructured Supplementary Service Data
		WAEMU	West African Economic and Monetary Union

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Executive summary



The average cost of sending a cross-border mobile money remittance was notably lower. At 2.81 percentage points (or 44.25%) below the global average for all sending methods, which is 6.35% according to the World Bank *Remittance Prices Worldwide* (RPW) report for Q1 2024, this demonstrates the increasing prominence of mobile money as a more affordable and efficient option for international remittances. The significant decline in the benchmark cost of sending \$200 also indicates the potential of mobile money to reduce cross-border transfer costs and expand financial inclusion globally.

Progress towards sustainable remittances

This report provides an in-depth analysis of key trends and insights from the Q2/Q3 2024 Cross-Border Mobile Money Remittance Price Survey. Covering 178 unique corridors from 30 sending countries, the survey examines cross-border mobile money remittance costs and tracks progress towards achieving United Nations Sustainable Development Goal (SDG) 10.c, which aims to reduce the transaction costs of global remittances to less than 3% by 2030.

Shifts in mobile money remittance costs for smaller and larger transfers

The cost analysis shows a mix of trends for different transaction amounts. For example, the cost of sending USD 50 increased slightly by 16 basis points (bps) from 4.64% in 2022 to 4.80% in 2024. The cost of sending a \$100 transfer also saw a modest rise of 10 bps from 4.05% to 4.15% during the same period. However, the cost of sending \$200 – a typical benchmark for remittances – decreased by 19 bps from 3.73% in 2022 to 3.54% in 2024, moving closer to the 3% target set by SDG 10.c.

Unpacking the shifts in mobile money remittance costs

The deep-dive analysis reveals opposite trends, with reductions in service provider fees offset by rising FX margins. Total fees for sending \$200 fell by 19 bps, from 3.73% in 2022 to 3.54% in 2024, driven by a sharp 50 bps reduction in service provider fees, from 1.97% to 1.47%, partially offset by a 31 bps increase in FX margins, from 1.76% to 2.07%. While FX margins rose in higher-priced corridors due to exchange rates, mature mobile money markets such as Kenya, Rwanda, Singapore, Uganda, and Zambia saw average FX margins drop significantly, from 4.45% in 2022 to 2.48% in 2024.

Affordable remittances are closer than ever

Importantly, the survey showed that the total cost of sending \$200 were under 3% for 55.1% of mobile money services – a significant improvement from 43.5% in 2022 and a sign of progress on the SDG target for affordable remittances.

01 Pricing analysis



1.1 Historical comparison

The average total cost of sending a cross-border mobile money remittance is significantly lower than traditional remittance methods, representing a notable shift toward mobile money becoming an increasingly prominent and affordable option for cross-border remittances. The benchmark total cost of cross-border mobile money remittances stood at 3.54%, 2.81% below the global average for all sending methods, which was 6.35%¹

Cross-border mobile money remittances have revolutionised the way individuals transfer funds internationally, providing a more affordable and accessible alternative to traditional remittance channels. The pricing structure of these services plays a critical role in determining their adoption and success, especially in low and middle-income regions where remittances form a significant part of household income.

Figure 1 illustrates the average total fee to send a cross-border mobile money remittance from a range of mobile money providers (MMPs) surveyed in 2020,

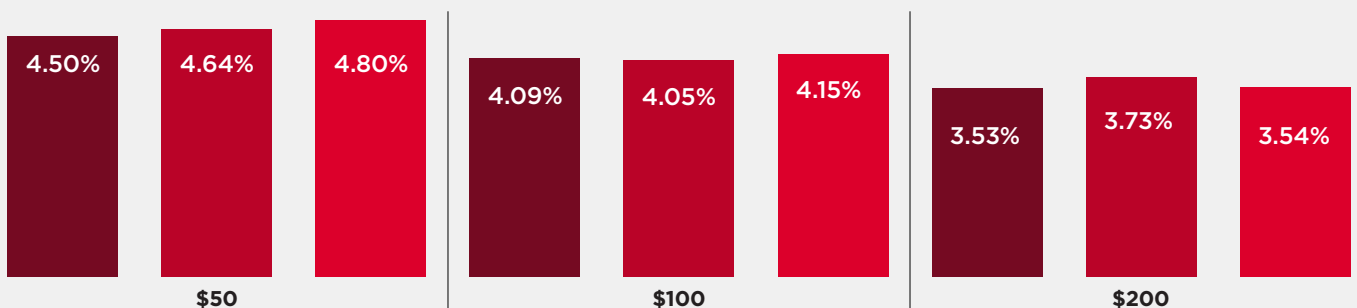
2022, and 2024. The total fee captures both the service provider's fee and the foreign exchange (FX) costs. Notably, cash-out fees are excluded from these figures, reflecting the growing trend in mobile money where funds are typically used for direct payments—such as purchasing goods, P2P transfers, and other digital transactions—rather than being withdrawn as cash.

In 2024, the mobile money remittance total fee for sending \$200 remained at 3.54%, showing little change from the 2020 rate and reflecting stability in costs for higher-value remittances over this period. In contrast, fees for smaller remittances saw an increase, with the cost of sending \$50 in 2024 reaching 4.80%. Despite the upward trend in fees for smaller amounts, mobile money remittance costs continue to be significantly lower than those for traditional remittance services. The global average fee for a \$200 transfer increased from 6.01% to 6.35%, underscoring the cost advantages of mobile money as a more affordable and efficient alternative for cross-border payments, particularly for larger transactions.

Figure 1
Total fee (%) to send a cross-border mobile money remittance

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2020 ■ 2022 ■ 2024



¹ World Bank Remittance Prices Worldwide (RPW) report for Q1 2024

1.2 Breaking down fee structure

This section examines the evolving fee landscape for cross-border mobile money transfers from 2020 to 2024, highlighting the cost components that influence the affordability of these services.

Figure 2

Average service provider fee (%) to send a cross-border mobile money remittance in 2020, 2022 and 2024

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2020 ■ 2022 ■ 2024

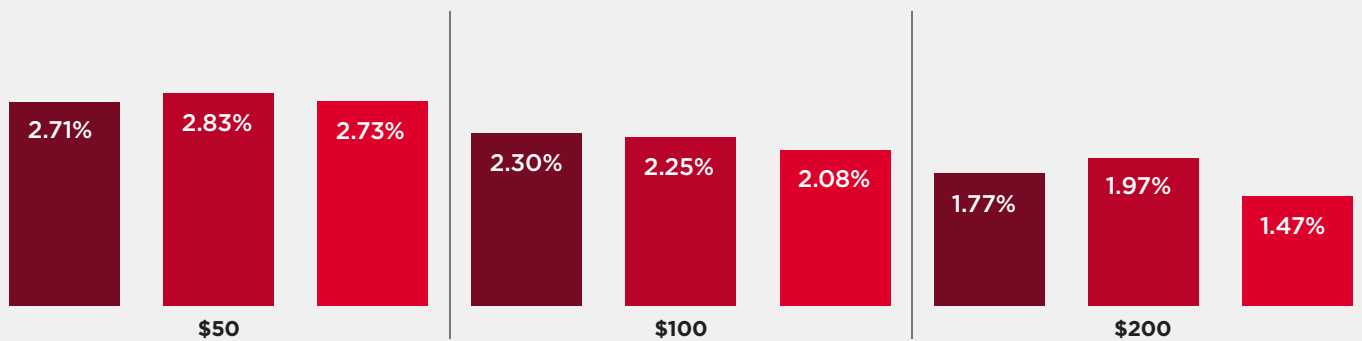
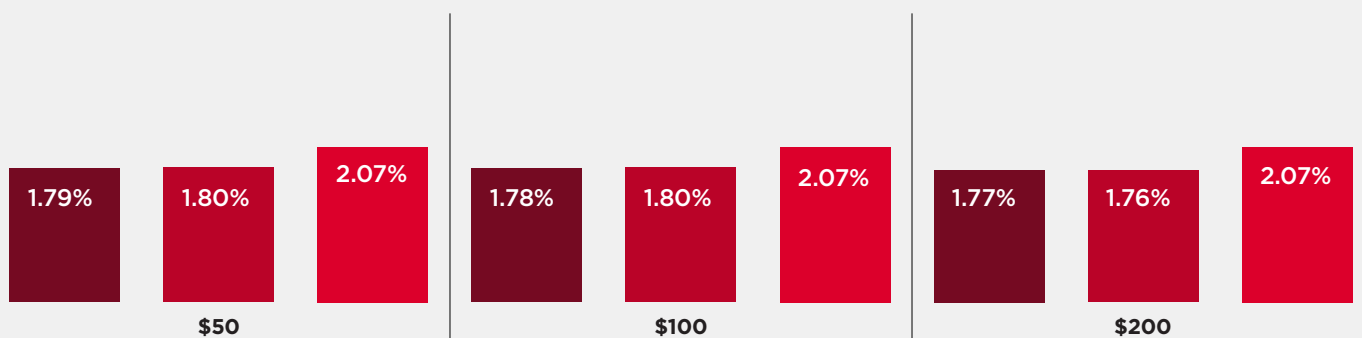


Figure 3

Average FX margin (%) to send a cross-border mobile money remittance in 2020, 2022 and 2024

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2020 ■ 2022 ■ 2024



Service provider fees

The chart highlights that the average fees for sending different amounts (\$50, \$100, and \$200) over three years—2020, 2022, and 2024. For \$50 transfers, fees increased slightly from 2.71% in 2020 to 2.83% in 2022 before a modest decline to 2.73% in 2024. In contrast, \$100 transfers experienced a consistent decrease in fees, dropping from 2.30% in 2020 to 2.08% in 2024. For \$200 transfers, the fees showed a more dramatic reduction, starting at 1.77% in 2020, temporarily rising to 1.97% in 2022, and then decreasing significantly to 1.47% in 2024.

Overall, while the fees for sending \$50 have remained relatively stable with only minor changes, the costs for \$100 and \$200 transfers have shown a clear downward trend, particularly for the higher-value \$200 transactions. This indicates a growing competitiveness in fees for larger remittances, reflecting a broader shift toward more affordable rates for higher-value cross-border payments.

Foreign exchange margins

Figure 2 illustrates the average FX margin for sending funds in the years 2020, 2022, and 2024, across three transaction amounts: \$50, \$100, and \$200. The data highlights a clear upward trend in FX margins from 2022 to 2024 across all transaction sizes, suggesting that costs associated with currency conversion have increased recently. The margin reached 2.07% for each transaction amount in 2024, indicating a uniform approach to FX pricing regardless of the value sent.

Exchange rates are often the main factor pushing up fees in higher priced corridors. The average exchange rate is 2.07% in 2024, an increase of 17.6% from 2022 when the average was 1.76%. However, this value is not representative of all the exchange rates in play since several corridors use the same currency. In part, the increase can be explained by the different corridors surveyed in 2022 and 2024. The 2024 survey includes 14 sending countries with an FX margin included, compared to only 10 in 2022. The four additional countries all have comparatively high average FX margins, especially Malawi where the average margin is 13.1%, and the Qatar to Cameroon corridor where the margin is exceptionally high at 19% (and likely rarely used).

Despite these increases, there has been a significant reduction in FX margins in more mature mobile money markets where margins have traditionally been high. Average FX margins in Kenya, Rwanda, Singapore, Uganda and Zambia are all down from 2022. Figure 4 shows the average FX margins of comparable sending countries included in the 2020, 2022 and 2024 surveys. The average FX margin for this group of countries was 4.45% in 2022, but dropped to 2.48% in 2024.

The downward trend in FX margins in mature mobile money markets is driven by three factors. First, there is greater awareness of the impact of exchange rates on consumers in the mobile money industry, and MMPs have taken steps to provide better value for money, including improving their operations and seeking out new FX suppliers. Second, increased competition in some markets has helped to lower prices. Third, there are more corridors in the sample that use the same currency, notably West Africa, and therefore do not have an FX margin.

Figure 4

FX margin by sending country

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2020 ■ 2022 ■ 2024

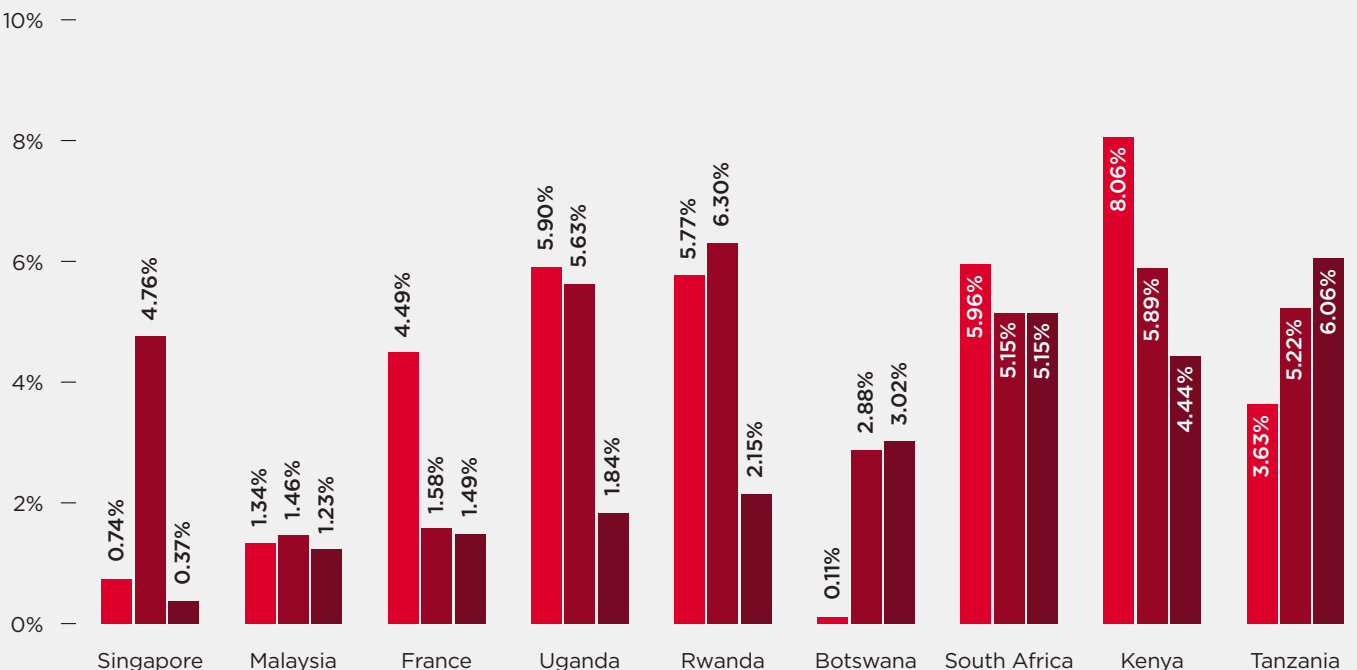


Figure 5

FX margin by corridor in 2022 and 2024 - \$200

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2022 ■ 2024

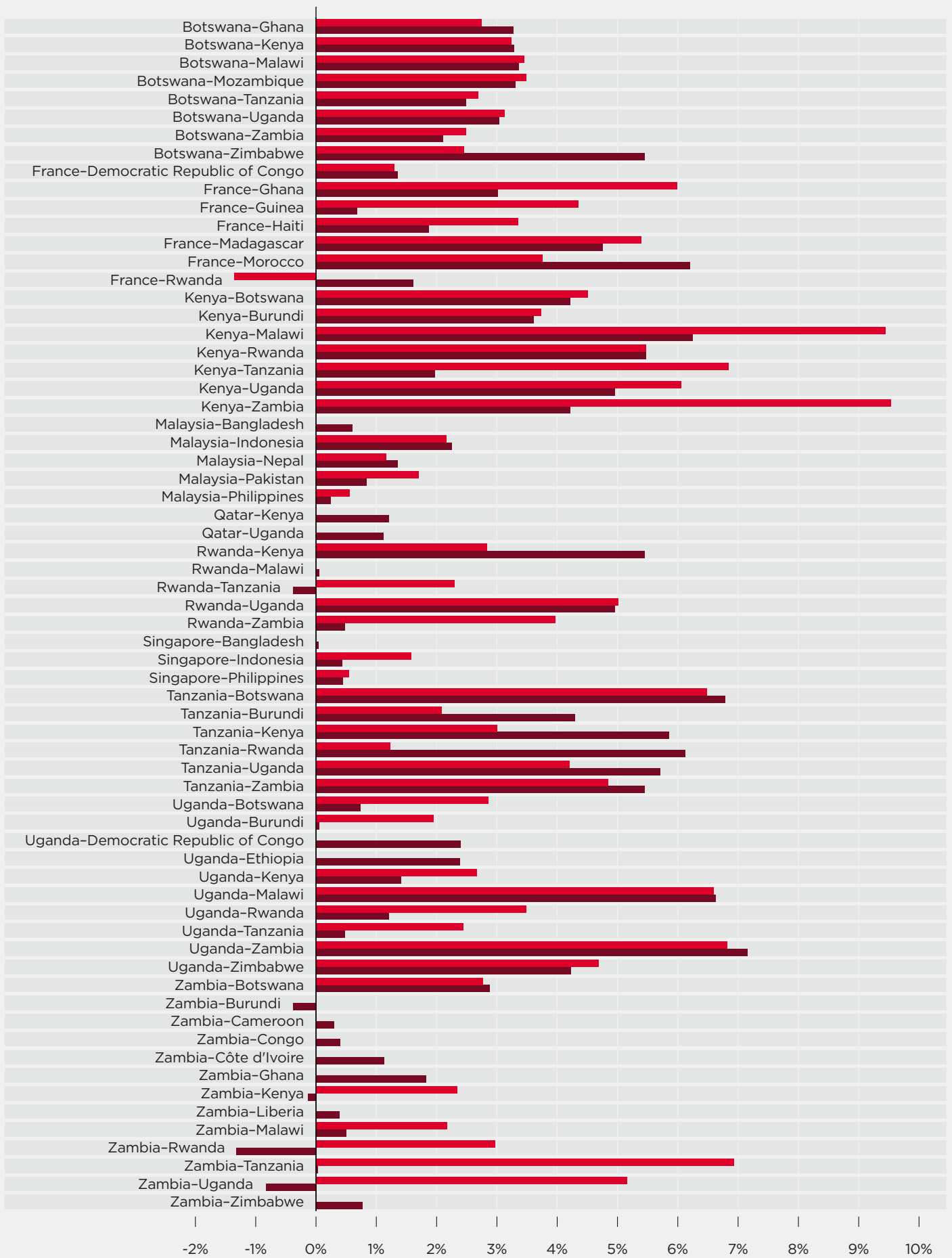


Figure 6

FX margin by corridor in 2022 and 2024 - \$100

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2022 ■ 2024

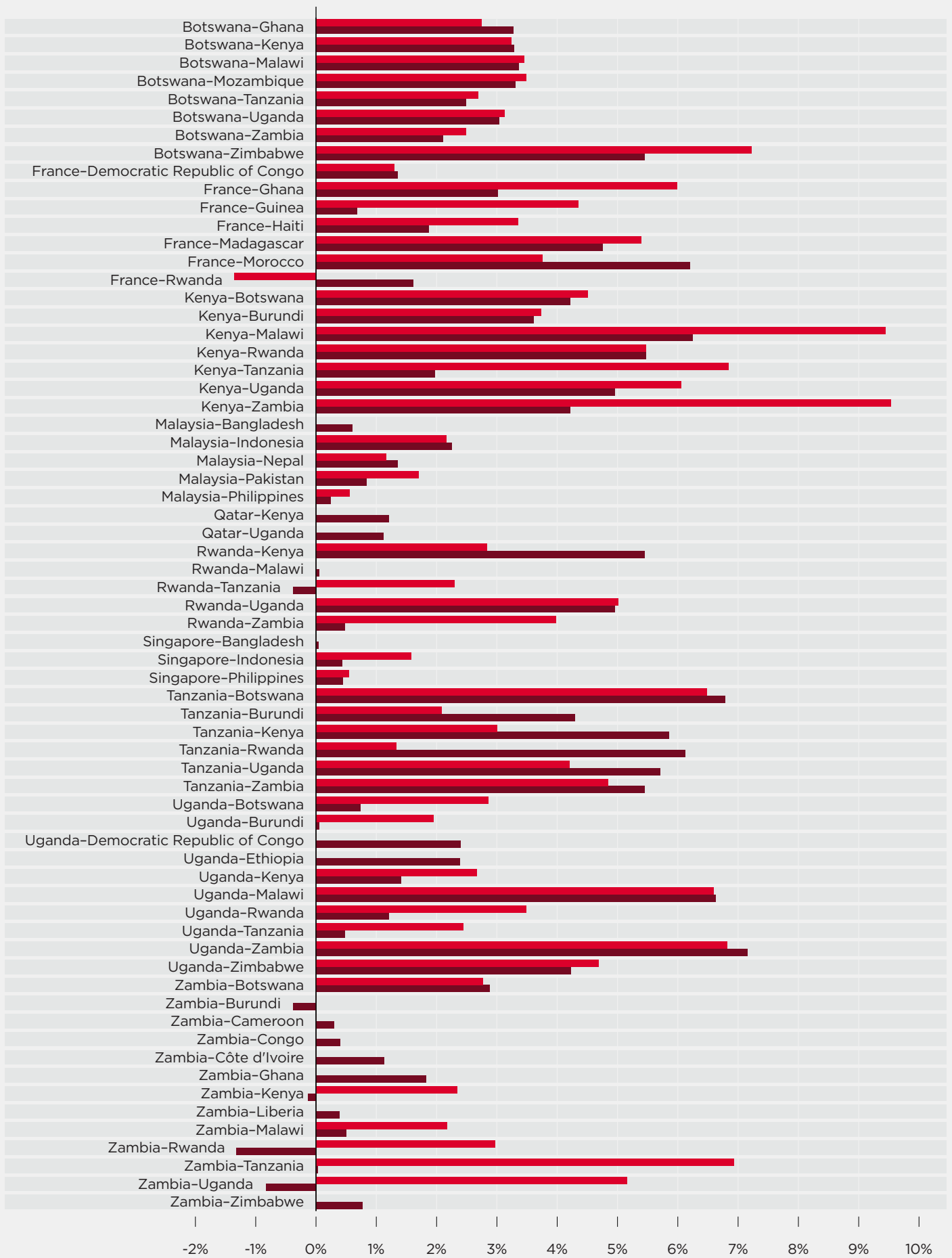
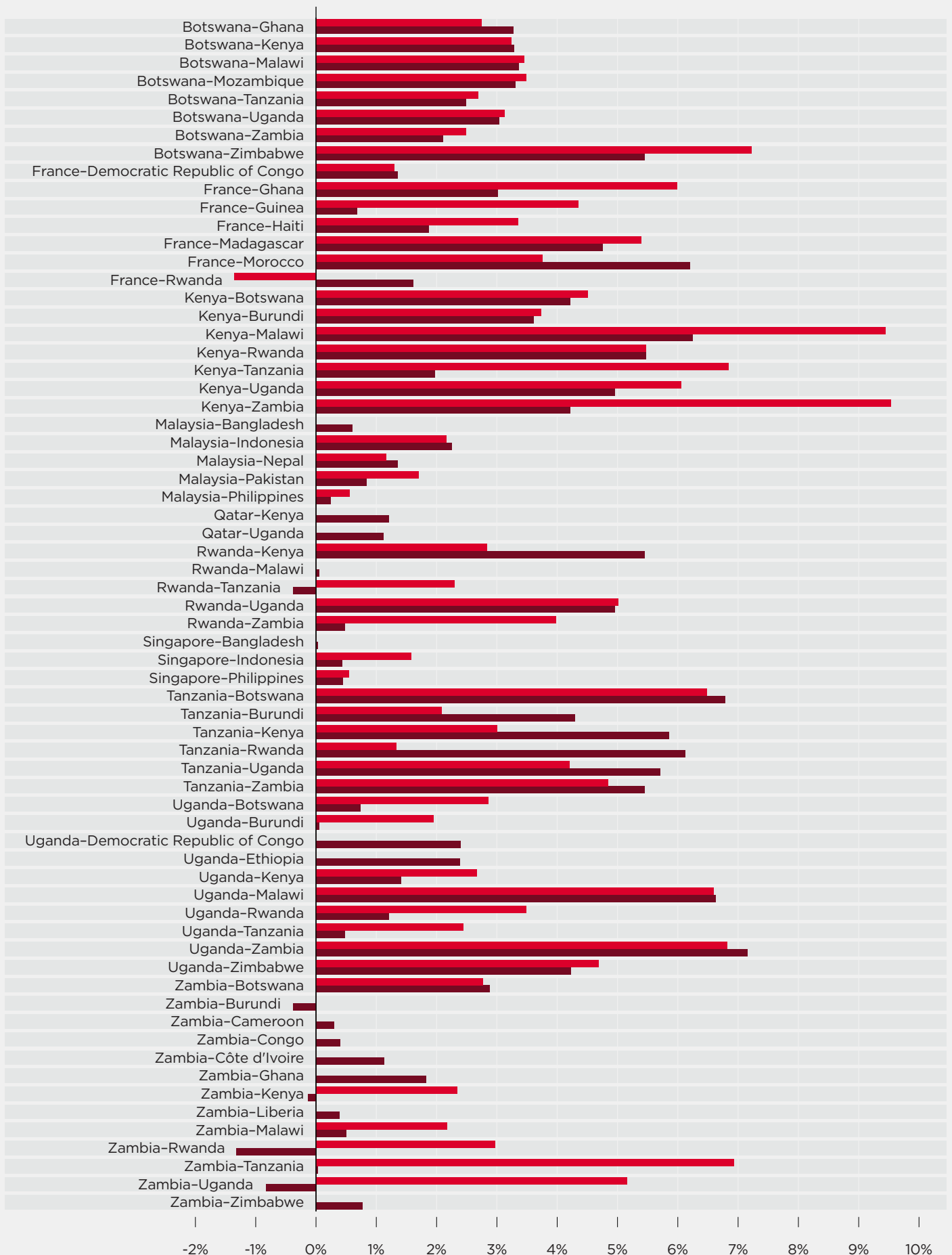


Figure 7

FX margin by corridor in 2022 and 2024 - \$50

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2022 ■ 2024



Cash-out fees

Figure 8 shows that cash-out fees experienced a decline in 2022 but have risen again in 2024, though they remain below 2020 levels. These fluctuations are the result of three factors: inflationary pressures on agents in some markets that have necessitated fee increases, changing competitive conditions in local markets and a change in corridor mix (some of the newer corridors have higher cash-out fees). From a regional perspective, cash-out fees have increased in West Africa, Central Africa and Middle Africa. Since none of these regions have an FX margin, cross-border mobile money remittance prices are lower overall for these regions. It is possible that MMPs are making up for revenue shortfalls by increasing cash-out fees. Figure 9 depicts fluctuations in cash-out fees globally and regionally in 2020, 2022 and 2024.

Figure 8

Average cash-out fees in 2020, 2022 and 2024

% of sending amount

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2020 ■ 2022 ■ 2024

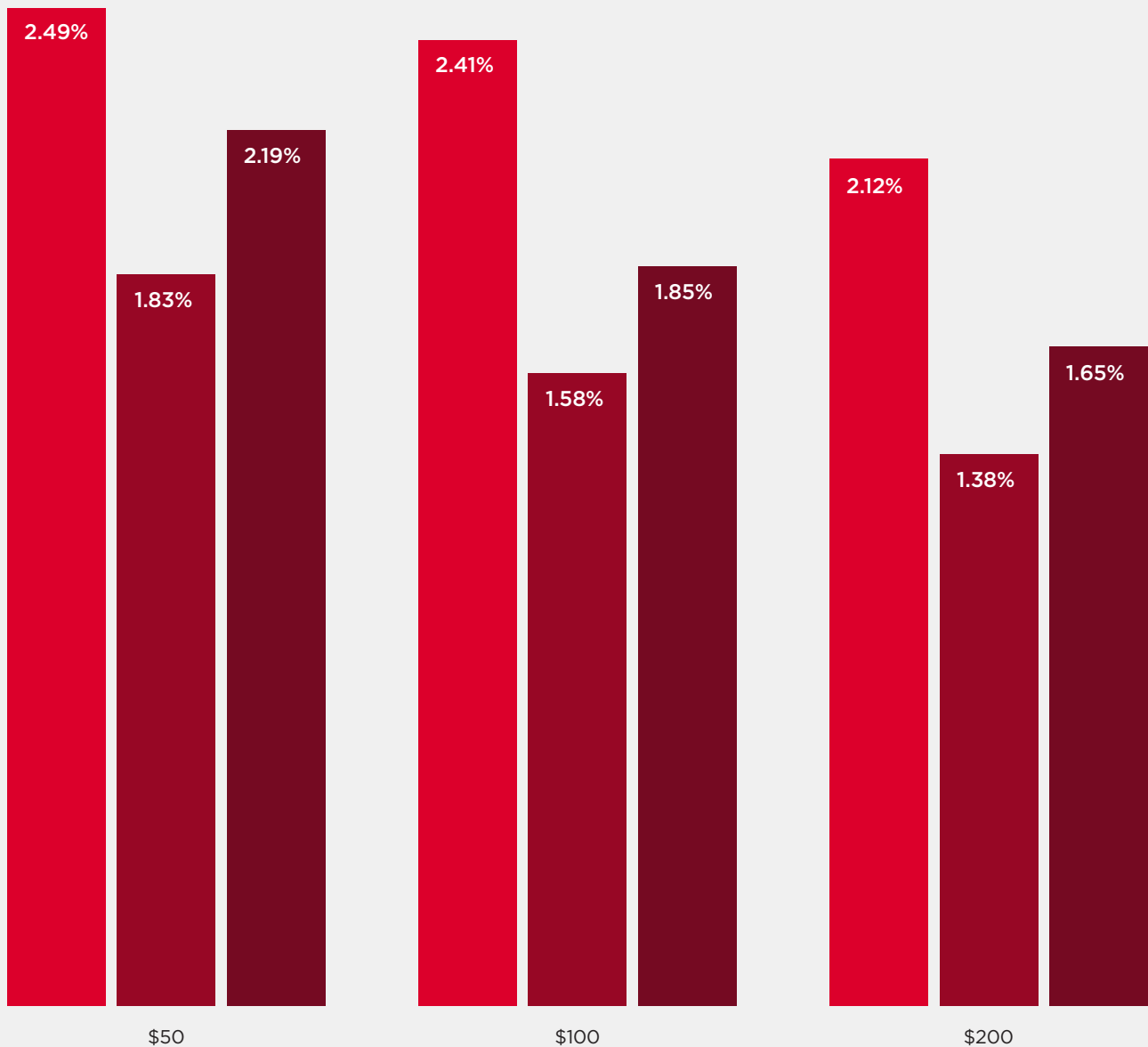
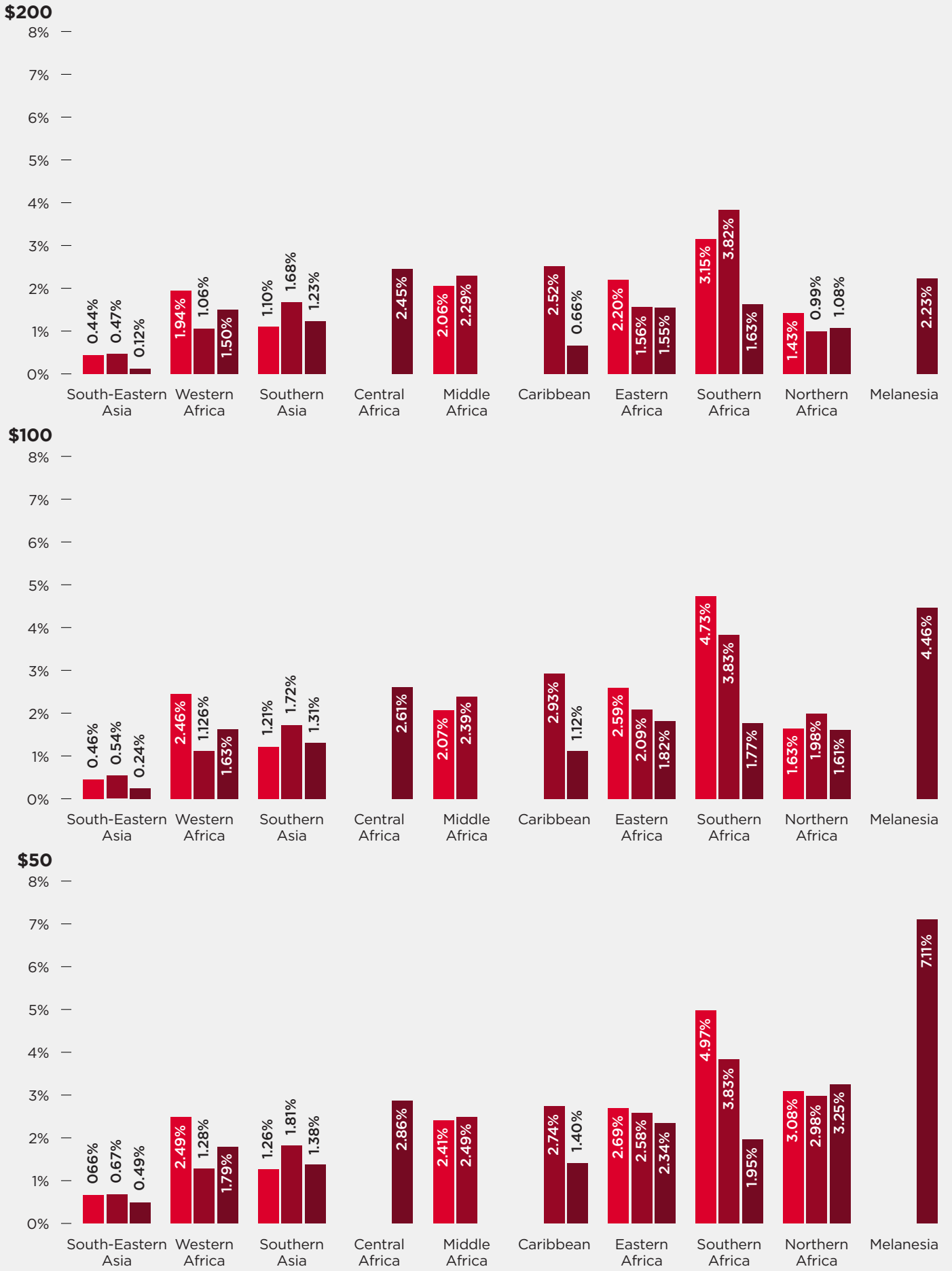


Figure 9

Average cash-out fees in 2020, 2022 and 2024, by region

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ 2020 ■ 2022 ■ 2024



1.3 Regional pricing analysis

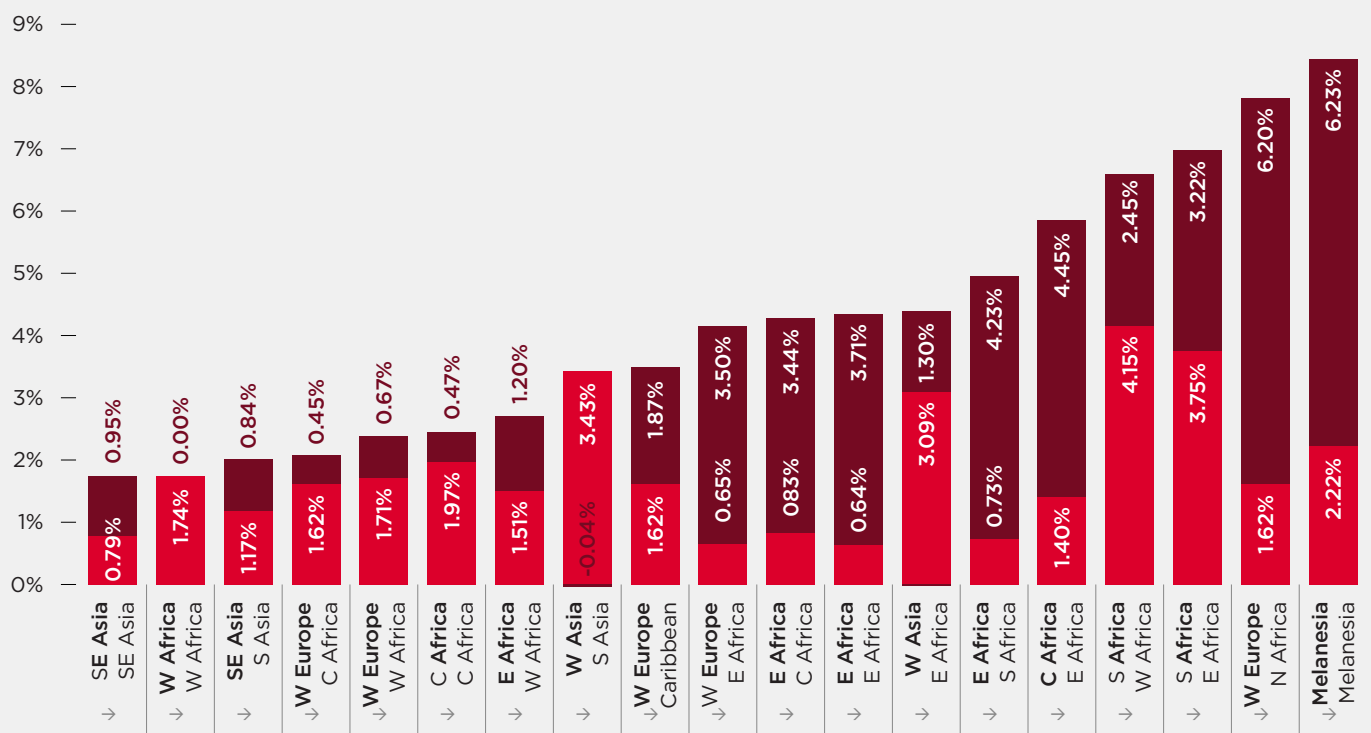
Figure 10 shows the average cost of sending a cross-border mobile money remittance by regional corridor.² Transactions are most expensive within the Pacific while transfers sent between Southeast Asia and Africa are lowest depending on the amount sent. Many local factors affect the cost, particularly whether there is an FX margin.

Figure 10

Average cost of sending \$200 cross-border mobile money remittance, by region

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ Average service provider fee (%) ■ FX margin (%)



² For the cost of receiving a cross-border mobile money remittance for each country in the survey, see Annex 1.

Figure 11

Average cost of sending \$100 cross-border mobile money remittance, by region

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ Average service provider fee (%) ■ FX margin (%)

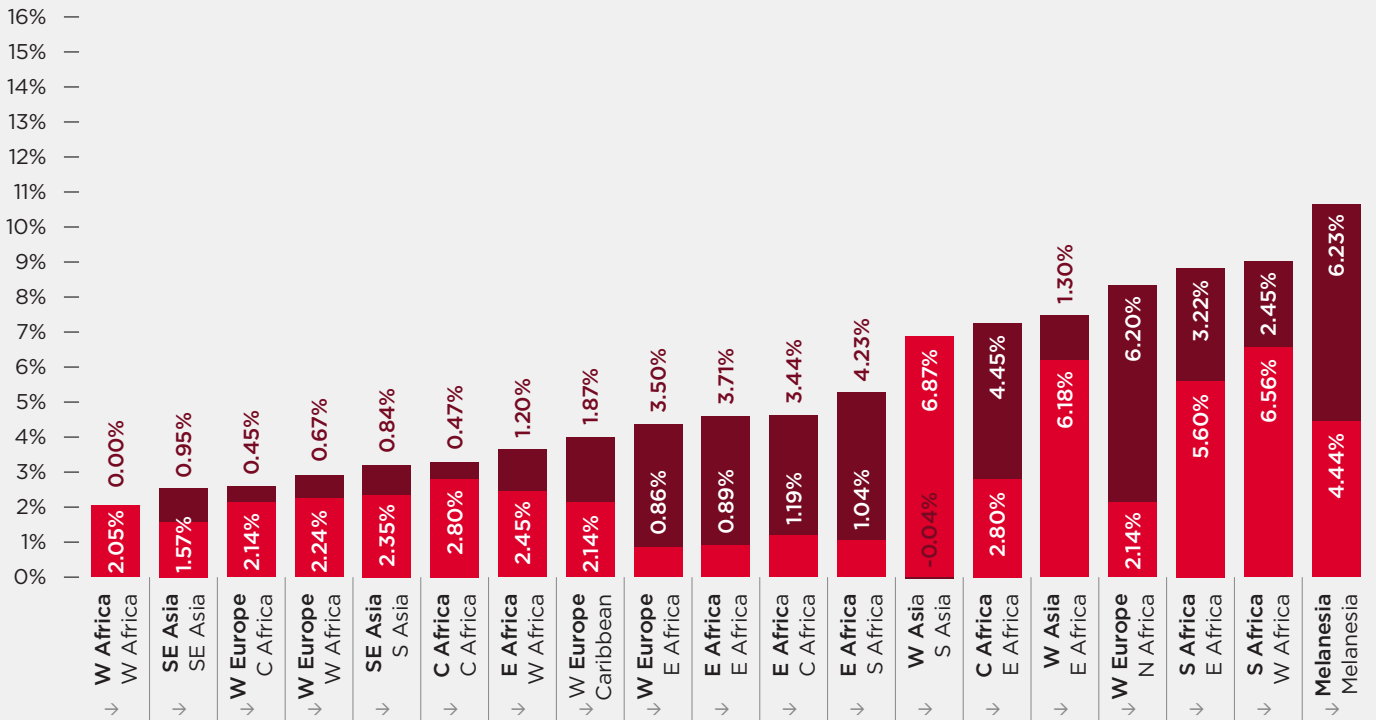
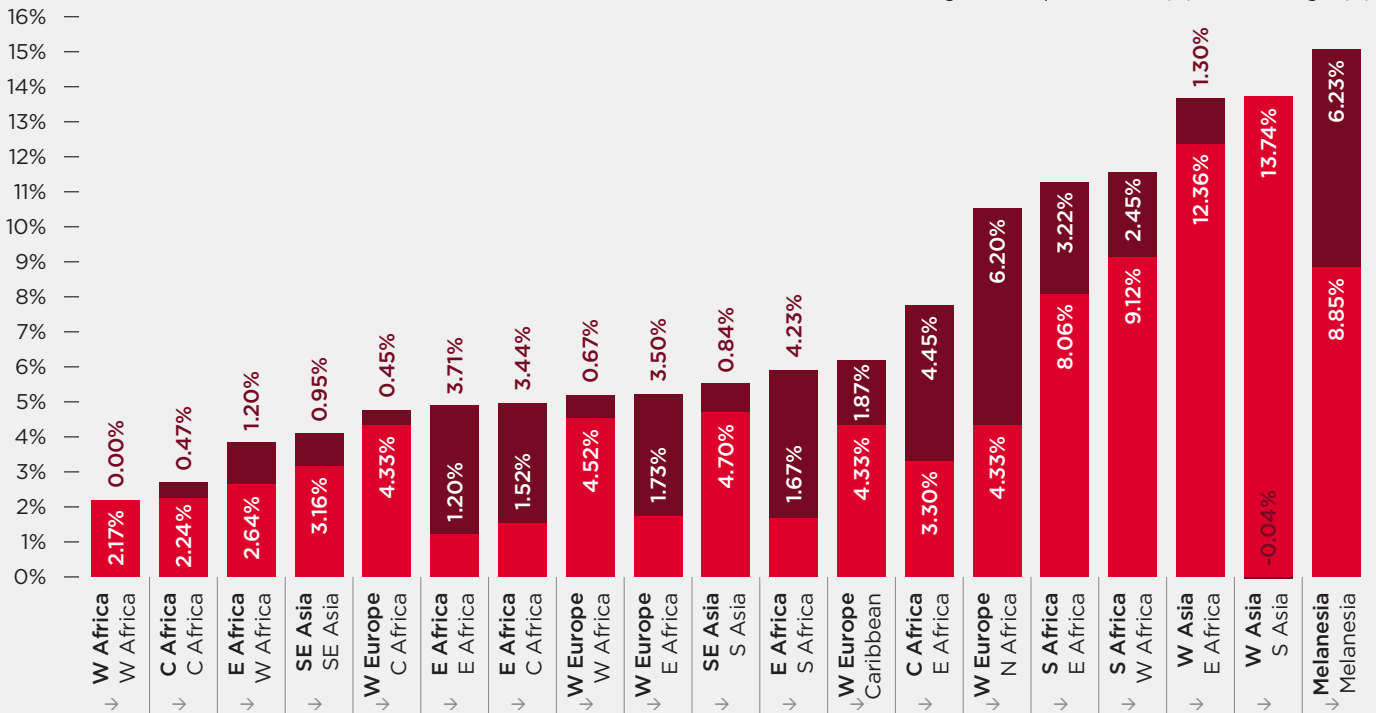


Figure 12

Average cost of sending \$50 cross-border mobile money remittance, by region

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

■ Average service provider fee (%) ■ FX margin (%)



Note: The Ooredoo service from Qatar to Cameroon has not been included in these figures. The service is priced very high (22.66% to send \$200) and, while the information has been checked, it is unlikely the service would see much use.

Mobile money remittances are cheapest when corridors are located within the same region. The two lowest cost regions to send cross-border mobile money remittances are Southeast Asia and West Africa, where fees are 1.74% on average to send \$200. The low cost in West Africa is due to the absence of an FX margin since all countries use the West African franc (CFA). In Southeast Asia, prices are low due to a combination of low fees and very low FX margins. These are seen in remittances sent from Singapore and Malaysia to Indonesia and the Philippines. Mobile money remittances to the Philippines have the lowest prices across the entire survey, with an average price of 1.17% and notably lower than the next lowest, Mali in West Africa, where it costs 1.5% of the sending value of a \$200 remittance. Countries with higher prices – more than 5% of the sending value of a \$200 transfer³ – are in East Africa and North Africa, and the most expensive corridor (8.44%) is Fiji to Vanuatu, the only Pacific corridor in the survey.

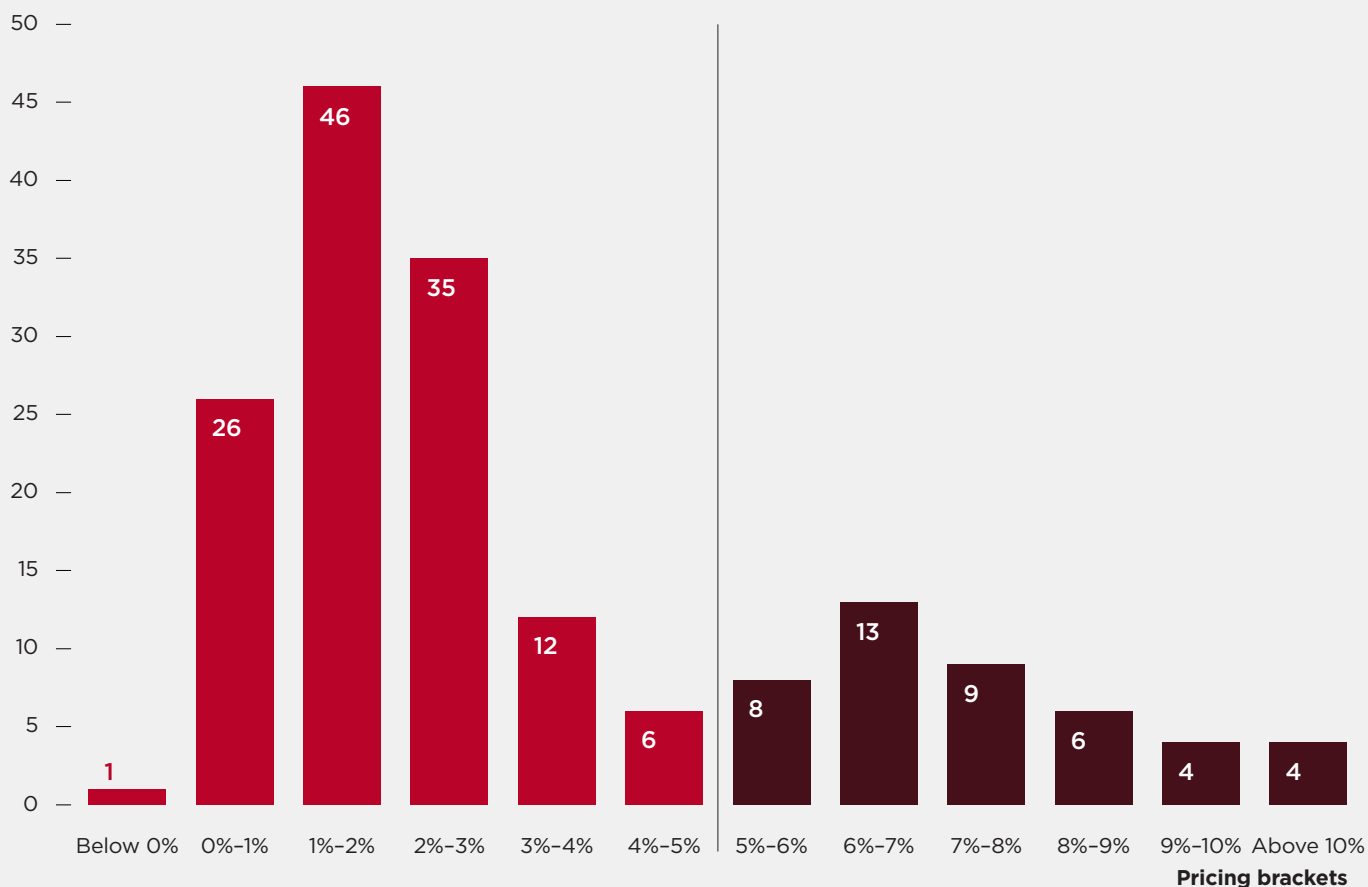
SDG 10.c aims to reduce remittance fees to less than 3% of the transaction cost by 2030 and eliminate remittance corridors with fees higher than 5% (SDG indicator 10.c.1). The prices across this survey show 74% of mobile money corridors now have fees of 5% on average or lower for a \$200 transfer, and 64% have average prices of 3% or lower. Yet, this means that fees are still higher than 5% in 26% of corridors. Figure 8 shows the spread of corridors in each pricing bracket, with 46 recording an average price of 1% to 2% of the sending value of a \$200 remittance.

Figure 13

Distribution of corridors across pricing brackets for sending \$200

Number of corridors

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3



³ For a list of remittance corridors with total prices higher than 5%, see Annex 4.

02 Key trends in cross-border mobile money remittances



The landscape of cross-border mobile money remittances is undergoing rapid transformation, driven by several key trends. Mobile money continues to expand globally, significantly contributing to financial inclusion, particularly in regions with limited traditional banking infrastructure.

Africa remains a pivotal region, leading in transaction volumes and showcasing the potential of mobile money to serve underserved communities. However, other regions like South Asia and East Asia are catching up, with increasing adoption rates and innovative mobile money solutions tailored to local needs.

Cross-border mobile money remittances are a vitally important payment option for many of the world's most vulnerable people. The use of mobile money remittances has grown rapidly to \$29 billion in 2023, a 33% increase from 2022.⁴ This is due to improved infrastructure, higher consumer awareness of mobile money and a better understanding of its potential. However, there is still a long way to go to maximise the potential of mobile money remittances and provide services throughout the world.

01

Key trends in cross-border mobile money remittances

- Mobile money continues to grow around the world.
- USSD is still at the core of mobile money.
- Smartphones are more available and widely used than ever before.
- Commercial mobile money partnerships are expanding.
- New mobile money partnerships are emerging in every region.
- Partnerships between MMPs and money transfer operators (MTOs) have increased significantly in recent years.
- Mobile money operating models have expanded to include new options, such as QR codes.
- Interoperability is attractive for customers but challenging to implement, both at the MNO level and with other payment operators and systems.
- Aggregators and consolidators are playing a larger role in mobile money markets.
- Regulations continue to have a major impact on mobile money.
- Consumers are facing major risks that require more protection.
- There is growing awareness of the benefits of financial literacy, particularly digital learning tools and incentives.
- Cash-out is still important, but other initiatives are encouraging people to keep money in their mobile wallets.

4 GSMA. (2024). *The State of the Industry Report on Mobile Money 2024*.

Mobile money continues to grow, Africa dominates, Asia rises

The expansion of mobile money services globally reflects varying adoption rates across regions, with Africa remaining a dominant hub due to its extensive remittance corridors. Mobile money has significantly increased financial inclusion on the continent, facilitating transactions in areas with limited banking infrastructure. Meanwhile, recent surveys, including the 2024 findings, indicate rising mobile money







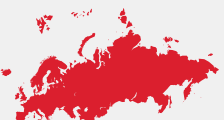
penetration in Asia and the Pacific, highlighting a growing trend in these regions toward digital financial solutions in areas traditionally underbanked.

As Figure 14 shows, Africa leads the world in mobile money transaction volumes, but South Asia and East Asia and the Pacific are showing strong signs of growth.

Figure 14

Regional mobile money growth in 2023

Source: GSMA. (2024). State of the Industry Report on Mobile Money 2024.

Region		Live services	Registered accounts	Active (30-day) accounts	Transaction volume	Transaction value (\$)
Global		310	1.75bn +12%	435m +9%	85bn +23%	1.4tn +14%
Sub-Saharan Africa		156	835m +19%	234m +12%	62bn +28%	912bn +12%
South Asia		36	401m +11%	89m +8%	12bn +13%	214bn +17%
East Asia and Pacific		52	374m +3%	77m +6%	6bn +10%	196bn +14%
Latin America and the Caribbean		29	48m -13%	19m -13%	1bn +6%	38bn +11%
Middle East and North Africa		30	71m +10%	9m +41%	719m +57%	30bn +40%
Europe and Central Asia		7	26m +8%	6m +11%	391m +13%	7bn +14%

Mobile money remittances evolve with new compliance, education, innovation and infrastructure demands.

Encouragingly, significant progress is being made. Mobile money remittances are a financial service typically offered by an MNO, which are accustomed to operating on a multi-local basis. However, offering mobile money remittance services introduces new elements to their operations, such as compliance with financial regulations, new service models and ongoing reliance on reliable infrastructure (such as electricity, telecoms coverage and internet), especially in rural areas. Appropriate products need to be developed, consumers need to be educated and delivering high-volume, low-value payments in multiple jurisdictions is essential. Since the COVID-19 pandemic in 2020, there have been major advances in mobile money remittance services.

USSD bridges the digital divide, ensuring mobile money accessibility for users in low-connectivity environments.

The use of lower cost USSD systems is as relevant and important to mobile money as ever, particularly in Africa. Despite the expansion of internet access globally and the development of smartphone apps by MMPs, USSD remains vital for customers with little access to internet and those using feature phones. Where internet connections are unreliable or expensive, a USSD system provides a simple, low-cost way for customers with all types of mobile phones to connect to their mobile service provider and mobile money account.

Higher smartphone penetration is driving growth in mobile money app-based services

This has made it easier to increase mobile money use via apps. Research shows that mobile phone use is increasing rapidly around the world, and the availability of low-cost smartphones in fast-growing emerging markets, such as Africa, has enabled the development of more app-based services.⁵ Apps are not only used for mobile money remittances and

payments, but also for digital financial education, financial accounts and many other functions. According to recent data, worldwide smartphone shipments grew 11% year on year in the first quarter of 2024, recovering to the all-time high in 2017. Lower cost Android devices have helped increase access to technology and the internet by offering more affordable options. Smartphone penetration is expected to increase across emerging markets in Latin America and Southeast Asia where middle classes are flourishing.⁶

Mobile money evolves beyond P2P, with MNOs collaborating with banks and Fintechs to drive innovation.

Due to the complex multi-jurisdictional nature of the mobile money flows, it has always been necessary to create commercial partnerships. Often, regulations have mandated that MNOs work with banks to protect customer funds and other financial aspects of mobile money transactions. In recent years, partnerships have been forged in other areas as well, including network expansion to increase the reach of services and consumer choices. Mobile money has moved far beyond its early offerings of simple P2P and bill payment services. The recent explosion of financial technology (fintech) mobile banking products have seen MNOs partnering with banks and nonbank institutions globally in the search for safe, simple financial products to increase financial inclusion. Information on partnerships can be found in the GSMA Mobile Money Deployment Tracker.⁷

New partnerships are emerging, such as between Mastercard and two global MMPs Airtel and MTN (Airtel in August 2023; MTN in February 2024). Mastercard Cross-Border Services will support the outward transfer of funds from Airtel Money users across 14 countries, including Chad, the Republic of the Congo, the DRC, Gabon, Kenya, Madagascar, Malawi, Niger, Nigeria, Rwanda, Seychelles, Tanzania, Uganda and Zambia to connect with wallets in more than 145 markets.⁸

For MTN's MoMo users, payment options will be enhanced in 13 countries, including Benin, Cameroon, the Republic of the Congo, Côte d'Ivoire, Eswatini, Ghana, Guinea, Liberia, Nigeria, Rwanda, South Africa, Uganda and Zambia. MoMo customers will have access to a virtual prepaid Mastercard, enabling them to use their mobile money account at points of sale globally. Cross-border money transfer services will also be enhanced as MoMo merchants will be able to accept card payments.⁹

5 GSMA. (2024). *The Mobile Economy 2024*.

6 Canalys. (15 April 2024). "Global smartphone market starts 2024 strongly with 11% growth in Q1".

7 See: *GSMA Mobile Money Deployment Tracker*.

8 Mastercard. (9 August 2023). Press release. "Airtel Africa and Mastercard strengthens partnership with launch of new remittance transfer service to benefit 100 million mobile phone users across the continent".

9 MTN (29 February 2024). Media release. "Mastercard and MTN Group Fintech partner to drive acceleration of mobile money ecosystem in Africa across 13 markets".

Partnerships with aggregators and MTOs allow MMPs to offer flexible payout options

With MMPs in sending countries actively expanding digital service options to meet rising customer demand. Most sending MMPs now offer app and online services, with customers increasingly seeking payouts into mobile money and bank accounts, or cash. In many corridors, connections between traditional remittance providers and MMPs are strengthening, often facilitated by aggregators or consolidators. MTOs like Western Union, MoneyGram, Ria, Remitly and WorldRemit/Wave have formed direct partnerships with MMPs such as M-Pesa, or through aggregators like OnAfrique, to enable mobile money payouts.

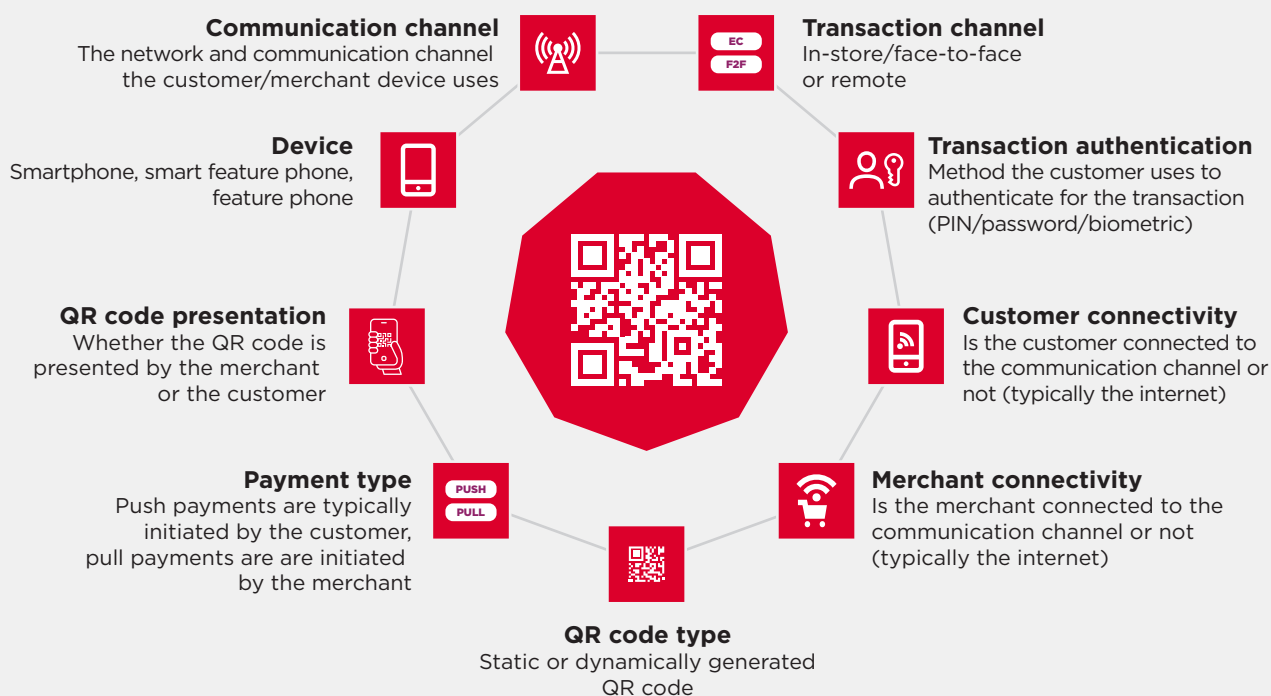
Mobile money operating models have expanded to include new options, such as QR codes.

Driven by local market conditions, innovations such as QR codes have been incorporated in the mobile money operating model. Similar, locally relevant solutions have emerged in many countries. This customisation is essential to ensure customers use mobile money services. However, this requires ongoing investment and development, for which the costs will need to be recovered. Payment using QR codes has increased rapidly in popularity since 2020 when the COVID-19 pandemic created the need for contactless, secure payments. Since then, they have become a convenient and relatively low-cost payment solution for mobile money. Despite the built-in security, there is a risk of fraud from fake QR codes being installed over the genuine code, directing funds to a scammer's account.

Figure 15

QR code payment solution is a combination of nine interdependent elements

Source: GSMA. QR Code Merchant Payments.



Interoperable payment systems, like GIMACPAY in CEMAC, are advancing regional cross-border payments.

The ability for a customer to send money from an account on one network to another is clearly desirable for account holders. However, this requires system integration and the willingness of MNOs and MMPs to work together, which is not always the case. It would be highly beneficial for MMPs to have access to local and regional payment systems rather than relying on third parties to handle payments on their behalf. Recently, in the Economic and Monetary Community of Central Africa (CEMAC), the GIMACPAY system (see Box 2) has created an interoperable environment for cross-border payments that could significantly improve the payments ecosystem.

Aggregators and consolidators are playing a greater role in mobile money.

Their numbers have grown in recent years as companies such as Onafriq, Terrapay, Thunes and others act as intermediaries for mobile money remittances. These specialised companies form agreements with RSPs and MNOs in sending markets and connect or direct transactions to payout networks, especially mobile money networks, in receiving countries. This enables sending and receiving entities to operate in new corridors without having to tailor their systems and form partnership agreements with each of the payout networks available through the consolidators. This enhances their ability to rapidly expand distribution. Although per transaction costs may be higher compared to direct deals with an individual partner, the overall costs of running networks and meeting ongoing regulatory requirements are minimised. The presence of aggregators saves MMPs an estimated \$15,000–\$30,000 in individual tie-ups and four to six months' work to put an agreement in place. It also dispenses of overhead for customer support and troubleshooting technical challenges.¹⁰

02

GIMACPAY

The Economic and Monetary Community of Central Africa (CEMAC) includes Cameroon, the Central African Republic, Chad, the Republic of the Congo, Equatorial Guinea and Gabon. GIMACPAY is an integrated electronic retail payment system that facilitates intra-CEMAC payment transfers, both domestically and cross-border within the monetary union. Interoperable payment services are provided to payment service providers (PSPs) in the six CEMAC member countries. The PSPs include commercial banks, MMOs, microfinance institutions (MFIs), service aggregators, postal administrations and national treasuries.

At the end of 2022, GIMACPAY had 91 participants, including 53 commercial banks, 11 MFIs, 11 MMPs, 13 aggregators, one central bank, one public treasury and one post office. Commercial banks provide settlement services. Nonbank participants are required to have a sponsor bank to settle transactions (indirect participants in the system). Transactions clear in real time using the common currency (XAF) and settlement is conducted via SYGMA, a regional real-time gross settlement (RTGS) platform* housed within the Banque des États de l'Afrique Centrale (BEAC). Settlement occurs once a

day on a net basis. Given the single currency regime in place, GIMACPAY treats domestic and cross-border transactions within CEMAC equally.

It is too early for definitive results, especially at the PSP level, but since 2018, GIMACPAY has seen increased uptake by end users. Between 2018 and 2022, transaction volumes had compound annual growth rate (CAGR) of 117% while transaction values posted a 93% CAGR. Average annual transaction values declined from XAF 45,168 (\$75) to XAF 39,444 (\$64) in 2022, an indication that end users are increasingly using the system for lower-value transactions.

Undoubtedly, the GIMACPAY system has great potential for mobile money players as it enables them to be integrated in the payment system and make instant payments throughout the region. This is a major milestone, as not being reliant on third parties to manage payments will enable customer-friendly improvements and greater efficiency. This, in turn, should have a positive impact on both pricing and profitability.

* See Agence Ecofin. (2020).

10 McKay, C. and Pillai, R. (27 January 2016). "Aggregators: The Secret Sauce to Digital Financial Expansion". CGAP Blog.

Pricing information provided by MMPs varies.

Anecdotal feedback from researchers suggests that accessing pricing for cross-border mobile money remittances is becoming more difficult. In most cases, it is now necessary to have funds in a mobile money account to obtain prices for sending money to another country, and the mobile phone number and name of the beneficiary is also often needed. Even then, it is not easy to obtain indicative pricing. Visits to agents or phone calls to customer service may also be necessary. Transparency is still an issue in some markets, but a few MMPs have addressed this by, for instance, providing the receiver with a notification from both the sending and receiving operator for a transaction.

Regulations continue to have a major impact on mobile money.

Regulations have always played a key role in creating an enabling environment for mobile money by authorising, supervising and protecting stakeholders. In many countries, significant progress has been made in authorising service providers and, while there is still room for improvement, countries like Kenya have created a more even playing field. Know Your Customer (KYC) and AML/CFT requirements are having a bigger impact on remittances, which for many has created additional barriers to accessing and using mobile money services. Regulators have identified the benefits of mobile money and attempted to tax transactions in some countries. This has often had the opposite effect, causing mobile money usage to decline or customers to shift to informal methods to reduce costs. Further details on regulations can be found in the numerous sources provided in the GSMA Mobile Money Regulatory Index.¹¹

Consumers are facing major risks that require more protection.

This is not unique to mobile money or MNOs, but major improvements are needed from the financial service industry. Helping customers minimise the risk of fraud, protecting their data and identification and covering them if something goes wrong are all important.

There is growing awareness of the benefits of financial literacy, particularly digital learning tools and incentives.

Providing users of financial services with the information they need to understand the options available to them and make appropriate choices is recognised as one of the most valuable tools to increase financial inclusion and empower individuals to overcome poverty. Educating users, and potential users, of mobile money is receiving more attention. As global access to digital apps grows, there are now app-based services like SaverLearning that allow individuals and families to benefit from a tailored financial literacy training programme that they can follow at their own pace and receive rewards as they do so. Such learning incentives are boosting service usage and increasing financial inclusion.

Cash-out is still important but other initiatives are encouraging customers to keep money in their mobile wallets.

One example is in Kenya, where the Central Bank of Kenya's National Payments Strategy 2022–25 outlined the collaborative efforts required by industry players to ensure seamless mobile money interoperability. Airtel Money Kenya dropped a prohibitive code in February 2024 that required customers to make a cash withdrawal within seven days of receipt of a money transfer from other networks or the transfer would be reverted.¹² Airtel customers can now leave transfers in their mobile money account. There are many more examples of account holders being encouraged to increase their usage and not withdraw cash as soon as funds arrive. Aside from the benefits for users, including building digital financial profiles and transaction histories, MNOs benefit from lower demand for physical agent locations, which in turn reduces costs.

¹¹ See: [GSMA Mobile Money Regulatory Index](#).

¹² Mburu, P. (9 February 2024). "Airtels clears restrictive code for cash transactions across networks". Business Daily Africa.

03 Challenges



Establishing viable cross-border mobile money remittance services is not straightforward. The mobile money industry faces numerous challenges, including difficulties in providing transparent pricing information, managing cash-out fees, and navigating diverse financial regulations across countries. Infrastructure gaps, including electricity, internet, and mobile penetration in rural areas, hinder adoption. Additionally, costs like data charges and handsets, coupled with limited access to digital financial literacy, impede broader financial inclusion efforts. Potential solutions to address these challenges are explored in the next section.

03

Challenges for the mobile money industry

- Providing customers with transparent pricing information prior to activating a mobile money remittance is difficult for many MMPs.
- There is typically a fee for cashing out a transaction.
- Mobile money is subject to financial regulations that can affect the cost of remittances and ease of use.
- Regulations governing mobile money vary from country to country.
- The regulatory environment for mobile money has become better understood but is still challenging.
- Many countries have inadequate consumer protection measures.
- Digital payment fraud, particularly via mobile money, is a major concern for mobile money users.
- Customer privacy and data protection are two areas in which proportionate measures are needed.
- Some countries recognise mobile money as an opportunity to raise government revenue through taxation.
- Access to foreign exchange (FX) is not always easy for MNOs providing mobile money services.
- MMPs need to form partnerships to manage and grow their businesses.
- Interoperability is improving but still limited in many countries.
- Despite progress with digital services, there is still strong demand for cash services and agent networks.
- Agents provide a valuable role and need to be rewarded for their efforts.
- Access to electricity, the internet and mobile penetration has improved in recent years but is still lacking in some countries, especially in rural areas.
- Although mobile money is cheaper than other remittance services, prices are still above the target set by SDG 10.c.
- In addition to the cost of the service, mobile money users also need to pay for data charges and a handset.
- Access to digital financial literacy services is universally limited.

3.1 Transparency

Exchange rate opacity often leads to upfront pricing transparency challenges.

This research illustrated how challenging it can be for consumers to determine the true cost of sending a cross-border mobile money remittance. The price is determined by two (and sometimes three) elements: the fee to send the money, the FX margin (present in many cases) and the cash-out fee (present in some cases). Providing this information in advance is not only good practice, but also a legal requirement in some markets (for instance, the United States and European Union (EU)).

There is a general lack of transparency on exchange rates in many financial transactions, making it challenging for consumers to determine the true cost compared to the mid-market rate. This lack of clarity can lead to higher than expected costs for consumers.

Cash-out fees in some regions undermines the cost-effectiveness of mobile money.

When mobile money is received into an account, in some markets the receiver can use it for multiple purposes, including to purchase goods, pay bills or send P2P payments. However, these types of transactions are often not possible as the services are simply not available. In those instances, the customer is required to collect funds in cash at an agent. The agent will levy a standard cash withdrawal fee, in effect an additional cost for the customer. When calculating the total cost of a remittance, it is important to take this fee into account. There is no cost if the money is not withdrawn as cash but used as a mobile payment instead. This situation is handled differently by different MMPs. A few include this information as a disclaimer in their terms and conditions but, in most cases, nothing is advised. For MMPs, the transaction is complete when the funds arrive in a mobile wallet/account. It is then up to the customer to decide what to do with the funds. If the customer chooses to cash out, this is a separate transaction. This is not customer-friendly and does not make it easy to compare the true end-to-end costs.

3.2 Regulatory concerns

Harmonised mobile money regulations are needed to address complexities in cross-border operations.

The GSMA has made significant efforts to raise awareness and assess the extent to which regulatory frameworks enable mobile money services. Key areas in which regulation can affect cross-border mobile money remittances have been identified.^{13,14} Regulators need to address each of these areas and provide clear regulation and guidance.

Box 4 outlines key regulatory areas relevant to cross-border mobile money remittances. Both domestic and international remittances generally adhere to similar considerations, although cross-border mobile money remittances are more complex as they involve currency exchange and at least two regulatory jurisdictions.

Lack of dedicated mobile money regulations complicates regulatory compliance.

Many countries do not have specific mobile money regulations but ensure that services are covered by existing financial regulations, such as foreign exchange regulations, payments regulations, AML/CFT requirements and banking laws. Complying with relevant legislation is vital for all MMPs and requires investment in appropriate systems and staff, all of which adds to the cost of a transaction.

Challenges remain in optimising mobile money regulation post-pandemic.

The COVID-19 pandemic was a catalyst for regulators to gain a better understanding of mobile money and its potential. In some cases, this led to changes in how certain restrictions were interpreted, including transaction limits and the need for identification. These changes helped increase the number of users globally. However, MMPs and regulators still face numerous challenges in how to create the most effective legal environment for mobile money.



Many countries **still** have inadequate consumer protection measures.

Trust is a major factor in a consumer's choice of service method and provider. A key question is, "What happens if there is a problem with my payment?" Having strong regulations that protect customers if their funds do not arrive, if funds are sent to the wrong place or if the wrong amount is received, are all important. Consumer protection is addressed by regulators in the US and EU, but needs more attention in many LMICs. Good business practices can also be introduced by companies to provide a similar level of consumer protection.

¹³ GSMA. (2024). *Evolution of the Mobile Money Regulatory Index: Enhanced methodology*.

¹⁴ GSMA. (2018). *Mobile Money Policy and Regulatory Handbook*.

Regulatory areas for cross-border mobile money remittances

-  Authorisation
-  Storage and safeguarding of customer funds
-  Capital requirements
-  AML/CFT requirements
-  KYC requirements
-  Agent networks and supervision
-  Consumer protection
-  Interoperability
-  International remittances
-  Taxation



3.3 Fraud and data protection concerns

Digital payment fraud, via mobile money in particular, is a major concern for users.

Surveys have continually shown that consumers are concerned about the danger of fraud with all forms of digital payments. It is increasingly important that mobile money users are safeguarded from the danger and understand how to protect themselves. The 2024 GSMA report, *Mobile Money Fraud Typologies and Mitigation Strategies*¹⁵ addresses the challenges posed by fraudulent activities in mobile money systems and the need for increased consumer protection.

Customer privacy and data protection are two areas in which proportionate measures are needed.

For most mobile money users, concerns only arise if their information is stolen or misused. Otherwise, they may not be aware of the risks until something goes wrong. Awareness of identity theft and misuse of data has become a bigger issue for regulators, and some have introduced significant controls for how and where data is stored. This can be problematic for global companies if they are required to hold all relevant data in the country where the transaction occurs, as this can add costs of establishing and maintaining data centres. These costs are invariably passed on to consumers. With cloud computing solutions, it is possible to protect data anywhere within the cloud without needing to rely on physical data centres.

Some countries see mobile money as an opportunity to raise government revenue through taxation.

This has led to vigorous political debates in countries where mobile money is becoming part of the mainstream payment system. Mobile money users have been affected, in many cases changing their usage behaviour and moving to services that are considered unregulated or informal. This ultimately leads to governments not raising as much revenue as anticipated, and to consumers becoming exposed to less secure methods of sending money. In extreme cases, it can threaten the viability of mobile money in a market.



¹⁵ GSMA. (2024). *Mobile Money Fraud Typologies and Mitigation Strategies*.

3.5 Limited network of partners for cross-border operations

Mobile money providers need to form partnerships to manage and grow their businesses.

MMPs can rely on partners to cover areas from which they are excluded or are not a natural fit, for example, banks can provide services that MNOs are not allowed to provide. Likewise, MNOs can provide services that may be of interest to banks, such as those that are accessible to the unbanked. There are at least three areas in which partnerships can be forged:



- 1 Regulatory partnerships:** Financial regulations often prohibit nonbanks from offering financial services, forcing MMPs to form partnerships with banks. This is beneficial as it enables them to obtain permission to offer a service by using the bank's licence, but there are additional costs attached to it. In many cases, there is no way for an MMP to offer a money transfer service without a partnership.
- 2 Agent networks:** MMPs often need to be able to offer financial services through networks of businesses that are already permitted to offer financial services. This is especially the case for agents that are required to collect or pay out cross-border mobile money remittances. In some countries, MMPs are allowed to create and operate agent networks that cash out mobile money. In countries that do not, there is a need to partner with a licensed organisation. In many countries, it is not possible to offer cross-border mobile money remittances without these partnerships.
- 3 International partners:** MMPs are continually looking to increase transaction volumes moving through their networks, especially from international partners. These partnerships can increase volumes and revenues, but have associated acquisition and management costs. Increasing the number of international partners in a cost-effective way is often achieved by working with an aggregator that takes on all onboarding activities and can provide a turnkey solution. This enables the MMP to reduce the due diligence and system integration efforts typically required when adding a new partner. The recent partnership between MTN and Flutterwave or the one between Airtel and Mukuru are both good examples.

3.6 Limited interoperability

Interoperability is improving but still limited in many countries.

Having the opportunity to participate in the main payment systems of a country or region – and being able to send money transfers from one mobile network – helps to improve coverage, increase efficiency and reduce costs. However, there are still many countries where this is not possible, hindering development.

3.7 Customer demand for cash and agents

Despite progress with digital services, there is still strong demand for cash services and agent networks.

Cash is still the most common method for receivers to collect their money. It is estimated¹⁶ that cash transactions account for at least 60% of all cross-border remittance transactions. This figure has dropped from around 80% before the COVID-19 pandemic – an encouraging trend, but it will take time for it to fall in areas where cross-border mobile money remittances are needed most. Popular demand for cash requires an agent network to be in place.

Agents play a valuable role and need to be rewarded for their efforts.

This increases the cost of operating the service. Ensuring that agents have sufficient stocks of cash at the right time, are well trained, can follow AML/CFT guidance and meet other requirements, all make agent networks challenging to manage.

¹⁶ Author's estimates.

3.8

Other challenges

Lack of enabling infrastructure

Access to electricity, the internet and mobile penetration has improved in recent years but is still lacking in some countries, especially in rural areas. The potential of mobile money cannot be realised as rapidly as possible due to a lack of enabling infrastructure. This includes the lack of electricity to charge mobile phones and computers and operate agent locations; lack of internet, which means people cannot use mobile money apps; low smartphone penetration, which means people only have access to USSD on feature phones that have more limited options; the cost of data, which can be expensive in low-income countries; and a significant disparity between urban and rural areas, with services often not being available in rural areas where they are needed most.

Affordability of services

Although mobile money is cheaper than other remittance services, prices are still above the target set by SDG 10.c. At 3.54%, the cost of sending a mobile money remittance is lower than the global average for a remittance (6.35%), but can still be barrier to usage and make a service less attractive to users. Where there is no FX component, cross-border mobile money remittances are low-cost options. However, where FX is involved, services become more expensive. It is often a challenge for senders to cover the cost of a transaction in these instances. Consumer surveys continually show that price, alongside trust and convenience, is always among the top-three reasons for choosing a remittance service. Unfortunately, many of the countries where mobile money is most commonly accepted are also those where liquidity of local currencies is limited. However, if MMPs can source

and design effective FX solutions, this can lower overall costs for users. Ultimately, achieving the SDG 10.c target will require digitalisation and greater efficiencies throughout the value chain.

In addition to the cost of the service, mobile money users also need to pay for data charges and a handset. Both are basic costs of using mobile money. However, for many potential customers, they can be too expensive and a significant barrier to increased usage in many markets. If MMPs can find ways to subsidise or reduce costs, this will help encourage usage.

Digital financial literacy

Access to digital financial literacy services is universally limited. Digital services, including mobile money, encounter challenges such as users not understanding how they work, how to mitigate challenges such as fraud and potential users not understanding the benefits. These challenges can be addressed in several ways, with financial literacy one of the best. However, financial literacy is often delivered in classrooms as a one-off training that can be forgotten quickly. Using digital financial literacy training can enable users to benefit from interactive learning at their own pace, using approaches they may already be familiar with, such as gamified approaches that reward progress. Addressing this need would enhance understanding and support changes in consumer behaviour. For international mobile money services specifically, there are concerns for both senders and receivers about how they work, understanding exchange rates, how to collect funds, online security, fraud and so on. Training modules that address these concerns would help to build confidence in mobile money services and increase usage.

04 Opportunities



Despite the many challenges associated with cross-border mobile money remittances, there are also many opportunities that make it an attractive business proposition. While some opportunities will arise once challenges are resolved, others will be the result of market conditions. Some of the opportunities are outlined in this section.

05

Opportunities for the mobile industry

- Supportive regulatory environments are building the confidence of cross-border mobile money remittance providers.
- Regulatory environments cover multiple areas.
- Evolving regulatory frameworks are putting a greater focus on anti-fraud measures.
- Countries are strengthening data protection legislation as this becomes a more important issue.
- The introduction of hubs, or aggregators, has made it easier to increase access to services.
- Specialist currency and settlement services are helping MMPs.
- MNOs are becoming adept at working with partners to solve challenges related to regulation, agents and increasing transaction volumes.
- Interoperability expands options for mobile money customers.
- Interoperability between mobile networks is increasing in some countries.
- Instant payment systems that support cross-border payments are becoming more prevalent.
- As digital services become more widely used, there will be less demand for cash.
- Despite progress with digital services, there is still strong demand for physical cash-receiving services and agent networks.
- Agents provide a valuable role and need to be rewarded for their efforts.
- The growing use of smartphones, especially in LMICs, presents multiple opportunities to increase the use of mobile money and associated services.
- Educating users about financial services can bring long-term customer benefits and generate loyalty to service providers.
- Informal money transfer methods are prevalent in many countries, especially in rural areas.
- The more consumers that are financially included and have easy access to services, the more aware they become of the benefits of mobile money.
- Training and recruitment can increase MNOs' understanding of cross-border mobile money remittances.

4.1 Standard display of transaction costs and real-time pricing

There are at least three solutions that would help address transparency concerns:

- 1 All MMPs agree on a standard method for showing exchange rates to consumers. An example is shown in Figure 10 below. The advantages for the consumer would be transparency, certainty and greater confidence in the service. It would require MMPs to work together for the common good. Figure 16 illustrates how different pricing could be displayed to senders, with the green box the preferred and simplest presentation method.
- 2 MMPs link the screens of customers to their own real-time pricing engine so that the customer can automatically see the rate that will be used for the transaction.
- 3 In cases where MMPs receive their own exchange rate that is constant for a certain period, this can be easily integrated in their operating system and provided to the customer.

Figure 16

Pricing display options

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

Bad

Industry today

Your total	200 USD
Fee	0.00 USD
Transferred	200 USD
Exchange rate 1 USD → 19.5120 MXN	
They receive → 3,902.40 MXN	

Provider also makes money by marking up the exchange rate.

Better

Transparent

Your total	200 USD
Total cost	22.09 USD
Transferred	177.91 USD
Exchange rate 1 USD → 21.8712 MXN	
They receive → 3,902.40 MXN	

Transfer converted using benchmark exchange rate (via reputable independent source or central bank) with no mark-up, as required by regulation.

Best

Transparent and simplified

Your total	200 USD
Total costs (subtracted)	22.09 USD
They receive	3,902.40 MXN

Transfer converted using benchmark exchange rate (via reputable independent source or central bank) with no mark-up, as required by regulation. Live exchange rate was 1 USD = 21.8712 MXN at time of transfer.

4.2 Regulatory enhancements

Supportive regulatory environments are building the confidence of cross-border mobile money remittance providers.

As more is understood about the opportunities presented by mobile money, governments are looking to create more conducive regulatory frameworks. This requires a variety of actions, such as ensuring that exclusivity clauses (that prohibit businesses from working with more than one MMP or agent) are banned, which has happened in countries such as Pakistan, Russia, Uganda and many others; that supervision is proportionate to the risk involved (this is particularly important for mobile money as the face value of payments is often smaller than the type of payments the regulations were designed for); that an appropriate range of businesses can be licensed to provide payments; that consumer protection is present and enforced; and that MMPs provide transparent services.

Regulatory environments cover multiple areas.

In addition to those mentioned above, they also cover the storage and safeguarding of customer funds; capital requirements; AML/CFT; KYC requirements; agent networks and supervision; interoperability; interest-bearing mobile money accounts; and taxation.¹⁷ Addressing all these areas properly will create a level playing field that is understood by all and enables MMPs to operate with confidence.

Evolving regulatory frameworks are putting a greater focus on anti-fraud measures.

These can include periodic fraud risk assessments, mandating specific procedures or legislating specific compensation to be provided to customers who have lost money through fraud.

Governments are prioritizing the implementation or enhancement of data protection legislations to safeguard customers' privacy.

As mobile money services expand, the volume of sensitive personal and financial data being processed has grown exponentially, necessitating robust measures to protect this information from misuse or breaches. Strengthened data protection frameworks address issues such as unauthorized data access, ensuring compliance with international best practices, and empowering consumers with greater control over their data. These efforts not only mitigate risks of fraud and identity theft but also foster trust in mobile money services by reassuring users that their personal information is handled responsibly.

¹⁷ GSMA. (2018). *Mobile Money Policy and Regulatory Handbook*.

4.3 Hubs, aggregators and partnerships

The introduction of hubs, or aggregators, has made it easier to increase access to mobile money services.

Hubs make it faster and easier to establish large networks. They also enable businesses to send money transfers not only to MMPs but to bank accounts and, sometimes, to cash collection services. They obviate the need for individual MNOs and other providers to create their own networks, manage regulations, develop specific policies, source FX and so on. This new operating model can lead to fundamental change in cross-border mobile money remittance models.

Specialist currency and settlement services are also helping MMPs.

Many LMIC currencies have limited liquidity, which not only makes them expensive but also difficult to obtain. There are now a number of companies that specialise in sourcing hard-to-obtain currencies and assisting with settlement. These services have been built on strong local connections and significant experience in managing FX. Some MMPs are using cryptocurrencies as an alternative medium of exchange and settlement for these services. It is embryonic but has enabled some providers to access currencies and settlement services they would not be able to do otherwise. Regulators have taken a close interest in these developments, which will affect how they unfold.

4.4 Partnerships

MNOs are becoming adept at working with partners to solve challenges with regulation, agents and increasing transaction volumes

MNOs have traditionally used partnerships to solve some difficult operational challenges, and most have developed strong skills in working with others to overcome challenges. For example, MNOs have partnered with banks to use their licences to operate or provide specific services, such as holding balances. These partnerships have created more robust and diversified financial ecosystems, ultimately benefiting consumers through better services and lower costs. Good examples include partnerships between Equity Bank and Airtel in East Africa and between Standard Bank and MTN in Southern Africa. Partnerships can also help banks expand their reach and enter new markets, as seen in the recently announced partnerships between Revolut and Airtel and MTN and Orange Money, or the one between Onafriq and Safaricom in Ethiopia.

4.5 Interoperability and payment systems

Interoperability – the ability to make payments to other MMPs and other payment provider networks – expands options for customers.

Recent developments in domestic and regional payment systems have, in some cases, provided MMPs with direct access. Traditionally, payment systems were only available to banks, but innovative new systems are opening access to other types of businesses, such as nonbank financial institutions and MNOs. These innovations enable MMPs to offer a broader range of services, such as direct credits to accounts or bill payments. However, access to these systems for MMPs is still limited in many markets, and regulatory frameworks around interoperability often remain bank-centric. Expanding access to MMPs could drive significant improvements in transaction efficiency, affordability and the overall user experience across mobile money services.

Interoperability between mobile networks is increasing in some countries.

The ability to send funds from one mobile network to another is key to expanding access for consumers, but it also ensures that sending MMPs have more options. Partnering with an MNO that can transfer funds to other MNOs in a market can make it easier for consumers to send money as they do not need to have accounts with multiple mobile providers. Interoperability is increasing and sometimes legislated by regulators, which is an extremely positive sign. Examples of interoperable MNOs include MTN, AirtelTigo and Vodafone in Ghana, Safaricom, Airtel and Telkom in Kenya, MTN and Airtel in Rwanda and Vodacom, Airtel, Tigo, Halotel, TTCL and Zantel in Tanzania.¹⁸

Instant payment systems that support cross-border payments are becoming more prevalent.¹⁹

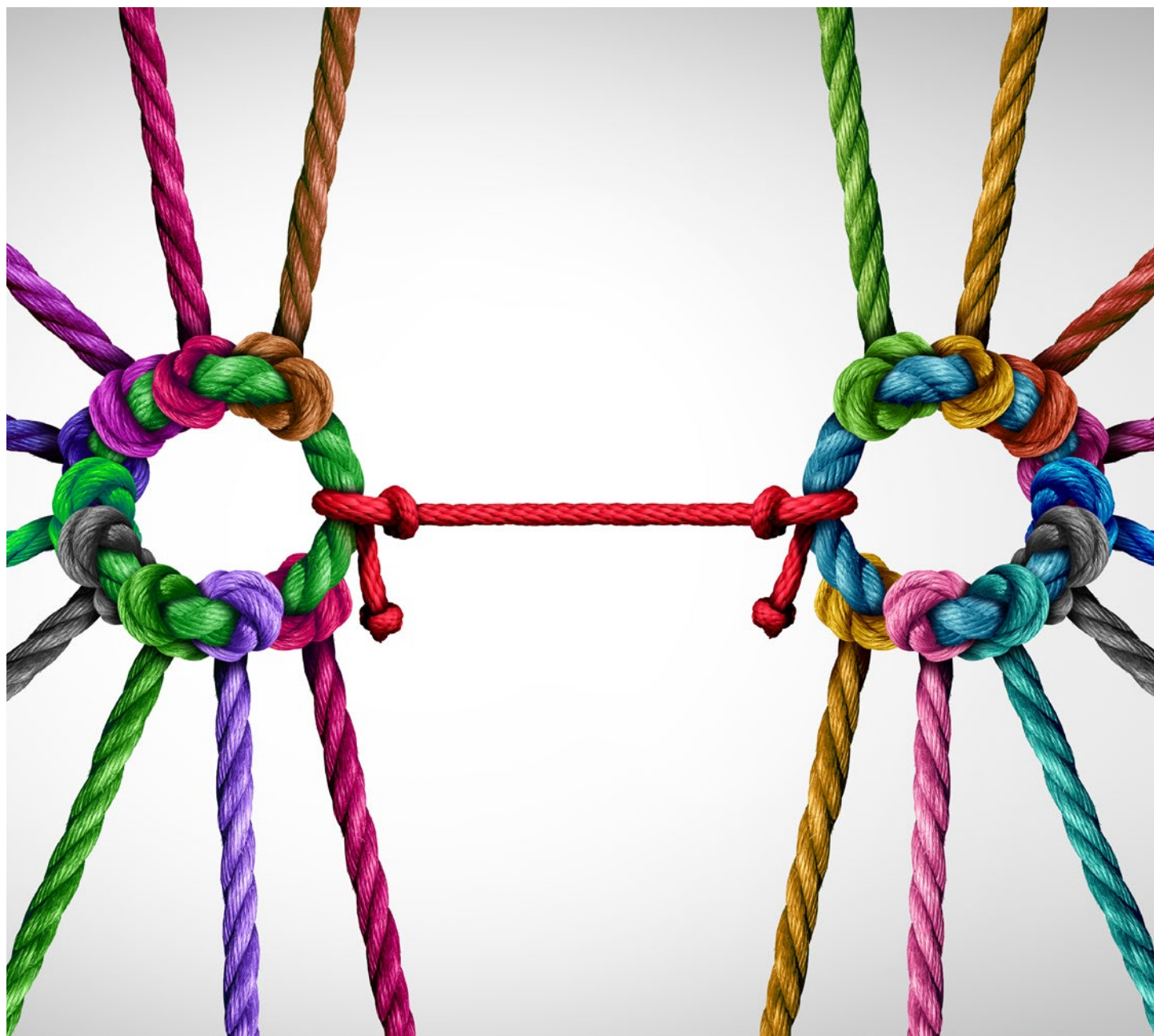
Linking payment systems enables payments to be made internationally the same way they are made domestically. When well designed, these systems are open to all kinds of financial service providers (FSPs), including MMPs. In Africa, for example, instant payment systems are already available across 34 countries. Systems for instant cross-border payments include GIMACPAY in the CEMAC region of Central Africa (see Box 2), the Pan-African Payment and Settlement System (PAPSS), Transactions Cleared on an Immediate Basis (TCIB)

¹⁸ GSMA. (2024). *The Impact of Mobile Money Interoperability on Financial Inclusion: Evidence from five country case studies.*

¹⁹ Mensah, S. and Wiegand, M. (27 May 2024). "How instant payment systems across Africa can be the role model for the world". CNBC Africa.

in the Southern African Development Community (SADC) and Buna in the Gulf and Arab region, all of which are operating today. Systems are also being developed in the West African Economic and Monetary Union (WAEMU), Common Market for Eastern and Southern Africa (COMESA), Economic Community of West African States (ECOWAS) and East African Community (EAC) regions of Africa, while in Asia, Singapore and India have established a linkage between their instant payment systems, PayNow and Unified Payments Interface (UPI), respectively. Building on this foundation, Project Nexus, an initiative by the Bank for International Settlements (BIS), aims to connect multiple domestic instant payment systems globally. In

July 2024, the BIS announced that central banks from India, Malaysia, Thailand, Singapore and the Philippines are collaborating to launch an instant cross-border retail payments platform by 2026. Cross-border mobile money remittances services can benefit from the growth of instant payment systems in two key ways. First, by accessing the main systems, MMPs can send and receive funds to and from a much larger pool of customers. It will be possible to send and receive money from banks, MFIs, payment service providers (PSPs) and other market players. Second, direct access means that MMPs do not need to rely on a payment system participant to offer services, which will lower their operating costs.



4.6 Growing digital adoption

The shift from cash to digital services is transforming consumer behavior in remittances.

Increasing the use and applications of domestic mobile money will also reduce demand for cash. Kenya and India are examples of countries where the use of cash in cross-border mobile money remittances is declining. As these developments take hold in other markets, consumers will increasingly retain funds in their mobile wallets and use cash less. This will reduce costs for MMPs as fewer agents will be required and revenue opportunities will open via new products.

Agent roles are evolving as digitalisation decreases the need for cash-out services.

The nature of agent services will change and cash-out of remittances will decline. This will, in turn, increase the use of digital services and change the role that agents can play. Close relationships with fewer agents are most likely in this scenario.

The growing use of smartphones, especially in LMICs, presents multiple opportunities to increase the use of mobile money and associated services.

Feature phones have been the most commonly used tool for mobile money in LMICs as they are relatively low cost and simple to operate. Yet, they create challenges in how products are designed and used. Although smartphones have been expensive to purchase and operate, they offer greater flexibility and sophistication in the range of products available. Apps enable users to make payments and access a range of training options. The cost of smartphones is coming down, however, and the more people that have access to them, the greater the penetration of mobile money.

As mobile network connectivity increases, so does the potential for mobile money.

Increased network availability, especially in rural areas, means that more people can potentially use the services. Combined with better access to reliable electricity, there is an opportunity to reach even the remotest areas. Improving infrastructure is one of the most obvious steps to increase the use of cross-border mobile money remittances.

4.7 Other opportunities

Mobile money is well-suited to replace informal transfers in hard-to-reach and underserved areas.

Informal money transfer methods are prevalent in many countries, especially in rural areas. A lack of infrastructure and limited formal remittance services still characterise a number of LMICs, yet people still need to move money and make payments. They often use informal methods, such as carrying cash by hand, sending money via trusted contacts and sometimes informal money transfer services. The size of the informal market varies from country to country, but can be significant. When people use informal services, they will often not receive the full amount and there is no protection available. Mobile money is an ideal solution to the challenges of informal methods due to the ability to operate in hard-to-reach areas, the ease with which people can use it and the relatively low cost. Anecdotally, COVID-19 restrictions led to a significant increase in the use of mobile money as people were forced to isolate and could not transport cash by hand. For market players, this highlights the potential of mobile money to fill the space where informal transfers are prevalent.

Mobile money unlocks opportunities to introduce newer innovative products to further boost financial inclusion

The more that consumers are financially included and have easy access to services, the more aware they become of the benefits of mobile money. As traditionally unbanked populations open and use formal financial accounts, the more confident they become about the various products available to them. Mobile money is a key tool for financial inclusion. As financial inclusion increases, the greater the opportunity for MMPs to build customer loyalty, introduce new products to users and generate revenues from new sources.

Educating users about financial services can bring long-term benefits to customers and generate loyalty to service providers.

As well as using products, it is vital that users understand how they operate, what the risks are and the benefits they offer. Financial literacy is an underresourced area, with many people not receiving any formal training in money management. It is rare for financial literacy to be part of formal education, and training is only occasionally provided to adults, most often in the form of predeparture training in overseas worker schemes. There is an opportunity for MMPs to offer their own courses, especially digital ones, to existing and potential customers. The use of digital courses reinforces the value of digital payments as a product, enables courses to be tailored to the individual, customised for each country, gamified and completed at the learner's own pace. Furthermore, being associated with a life skill helps build customer loyalty. This is equally relevant for cross-border mobile money remittances as other types of mobile money services.

Knowledge gaps in FX management can be bridged through targeted recruitment and training.

Training and recruitment can increase MNOs' understanding of cross-border mobile money remittances. Most MNOs run large operations with a range of services, of which mobile money is just one. The addition of cross-border remittances adds dimensions that are not always well understood within the organisation, such as foreign exchange. Recruitment and training in these areas can increase their expertise and enable them to increase efficiencies in FX management, transparency and communication. The GSMA offers a number of relevant training courses for MMPs, such as the GSMA Mobile Money Certification, which builds trust with regulators and other stakeholders who can have confidence in the abilities of a MMP to deliver secure and reliable services.²⁰

20 See: GSMA Capacity Building, "Our Courses".

05 Scope, methodology and researcher feedback



5.1 Sample size and researcher feedback

The 2024 Cross-Border Mobile Money Remittance Price Survey is the largest to date, covering 353 services from 178 corridors. Prices were collected from 30 sending countries to 41 receiving countries. Seventeen sending MMPs are included in the survey (a full list can be found in Annex 2). The analysis relies on transparent services only – those that provided information on both their transfer fee and FX margin.

Nearly all survey researchers reported difficulty in conducting the research, more so than in previous surveys. To simulate a transfer and obtain fee and FX margin information using both USSD and the MMP's app, researchers were required to have in their wallet, at minimum, the value of the funds they were enquiring about – the equivalent of up to \$200. They also needed contact details of the recipient in the destination country, most often their mobile phone number, but in one or two instances, the person's name needed to be identified. This was only to look up fees and exchange rates. Without these details, the simulator would not show researchers the prices of a transaction. As a result, data was collected through a combination of looking up information and speaking with a customer services representative. Often, the researcher was required to visit agents in person to collect information.

The level of detail required to obtain a quote calls into question the transparency of the mobile money services. Systems that require the sender to preload funds into their wallet to find out how prices compare to other sending methods are inconvenient for the sender, as they must transfer funds in and out of their accounts. These requirements may be due to new security and anti-money laundering/combating the financing of terrorism (AML/CFT) regulations that require remittances to contain all the proper details, such as a recipient's contact name and phone number. However, it is preventing casual enquiries by consumers who want to compare prices between remittance service providers (RSPs).

5.2 Country-specific observations



Democratic Republic of the Congo (DRC)

Several researchers reported that remittance services to the DRC now offered a CDF service (the local currency), whereas previously all remittances to the country could only be sent in USD. The researcher in the DRC confirmed that remittances sent from the DRC are now available in either USD or CDF. The researcher also confirmed that only Airtel is currently offering cross-border remittances, but that Vodacom M-Pesa is expected to launch a cross-border service later in 2024.



Ethiopia

A new addition to the survey was the M-Pesa Ethiopia service, which launched in 2023. The signing of an agreement with Onafriq in March 2024 enables customers to receive cross-border remittances. Services from Uganda and Rwanda were included in the 2024 survey. Although the option to send cross-border funds was visible to the researcher in Kenya, the service had not been initiated at the time of data collection.



Uganda

The researcher noted that the Bank of Uganda sets uniform exchange rates for all telecoms, with identical rates observed across MTN and Airtel. The sending fees are also uniform across both networks, whereas in the 2022 survey there was a small variation. The Bank of Uganda also released a directive in April 2024 (with immediate effect) requiring all mobile money agents in the country to request that customers present a valid identity card (ID) before they can transact more than UGX 1 million (about \$265). This precaution is intended to reduce the number of fraudulent mobile money transactions.



Zambia

The corridors available to send mobile money remittances from Zambia have changed since the last survey in 2022. The researcher reported that not all corridors were available on the app/USSD and, as such, were not included in the survey. Some new corridors were available, but since these remittances were to bank accounts or accounts outside a mobile network receiver, they have not been added. These services included remittances to India, South Africa and Nigeria. The expansion of services from Zambia is a welcome development and continued innovation and fintech development will likely lead to more of these types of tie ups to enable cross-border remittances.

06 Conclusion



The potential of mobile money has been demonstrated, offering a cost-effective, accessible way to send funds globally. With an average transfer fee of 3.54%, mobile money is the cheapest option for cross-border remittances, and usage continues to grow rapidly. While mobile money currently makes up about 4% of global transfers, this represents only a fraction of its potential reach. The opportunity to expand these services is immense, especially as mobile networks and digital infrastructure extend into more regions, creating new avenues for affordable financial transactions worldwide.

To fully unlock this potential, the industry must focus on creating a level regulatory playing field, enhancing financial education, streamlining product development, creating innovative foreign currency exchange solutions and building robust local infrastructure and ecosystems. Fair and balanced regulatory policies can foster competition while protecting consumers, allowing MMPs to operate more effectively. Financial education empowers users, enabling them to make informed financial decisions and encouraging regular engagement with mobile money platforms. Streamlined product development can lead to tailored solutions for diverse needs, from microsavings to credit access, while innovative currency management can enhance remittances by reducing costs. Finally, strong local infrastructure and ecosystems can support accessible and resilient mobile money networks, reaching underserved communities even in remote areas.

Aside from the direct opportunities for individual users and their families, mobile money can also increase financial inclusion and address access challenges in rural areas. There are significant opportunities and major challenges associated with cross-border mobile money remittances, but if stakeholders work together in a coherent and organised way, solutions that address many of the SDGs can be delivered through this exciting, versatile and cost-effective tool.

07 Annexes



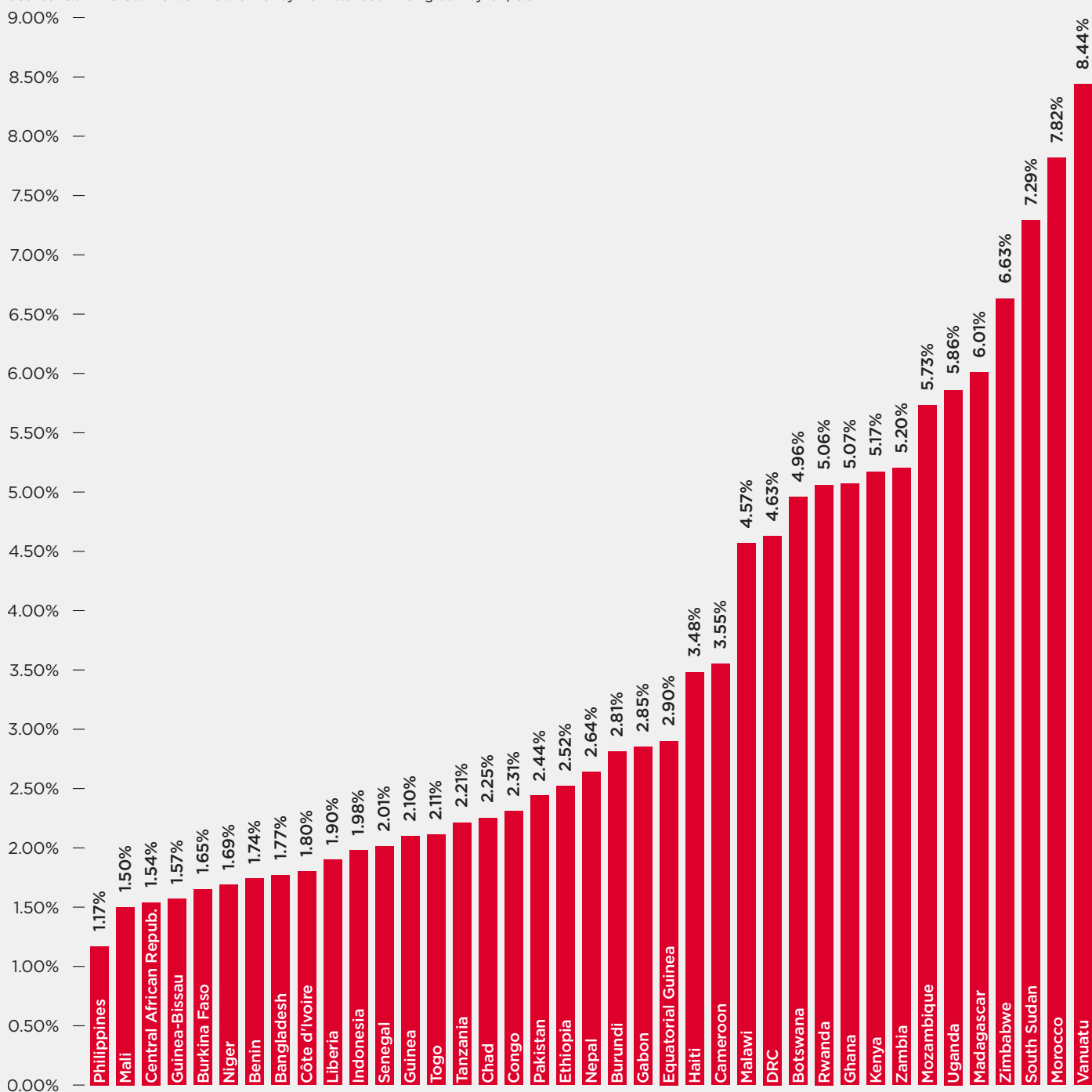
Annex 1:

Cost of receiving a cross-border mobile money remittance, by country (\$200)

Figure 17

Cost of receiving a cross-border mobile money remittance, by country (\$200)

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3



Annex 2:

Full list of sending MMPs in the 2024 price survey

Table 1
Sending MMPs

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

Airtel Money	MTN Mobile Money	SMEGA Mobile Money
EcoCash (SASAI)	MyZaka	Tigo Pesa
Free Money	Ooredoo Money	True Money
m-GURUSH	Orange Money	Valyou Wallet
M-PAISA	Safaricom M-Pesa	Vodacom M-Pesa
Moov Money	Singtel Dash	



Annex 3:

Full list of corridors in the 2024 price survey

Table 2

Corridors

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

Benin →

Burkina Faso
Côte d'Ivoire
Guinea Bissau
Mali
Niger
Togo

Botswana →

Ghana
Kenya
Malawi
Mozambique
Tanzania
Uganda
Zambia
Zimbabwe

Burkina Faso →

Benin
Côte d'Ivoire
Guinea Bissau
Mali
Senegal
Togo

Cameroon →

Central African Republic
Chad
Congo
Equatorial Guinea
Gabon

Central African Republic →

Cameroon
Chad
Congo
Gabon

Chad →

Cameroon
Central African Republic
Congo
Gabon

Congo, the Republic of →

Cameroon
Central African Republic
Chad
DRC
Equatorial Guinea
Gabon

Côte d'Ivoire →

Benin
Burkina Faso
France
Guinea Bissau
Mali
Niger
Senegal
Togo

DRC →

Cameroon
Congo
Madagascar
Malawi
Rwanda
Tanzania
Gabon
Uganda
Zambia

Fiji →

Vanuatu

France →

Burkina Faso
Cameroon
Congo
Côte d'Ivoire
DRC
Ghana
Guinea
Haiti
Madagascar
Mali
Morocco
Rwanda
Senegal

Gabon →

Cameroon
Central African Republic
Chad
Congo
Mali

Guinea Bissau →

Burkina Faso
Côte d'Ivoire
Mali
Niger
Senegal

Kenya →

Botswana
Burundi
Malawi
Rwanda
Tanzania
Uganda
Zambia

Malawi →

Kenya
Rwanda
Uganda
Bangladesh
Indonesia
Nepal
Pakistan
Philippines

Mali →

Benin
Burkina Faso
Côte d'Ivoire
Niger
Senegal
Togo

Niger →

Benin
Burkina Faso
Côte d'Ivoire
Mali
Senegal
Togo

Qatar →

Bangladesh
Burundi
Cameroon
Kenya
Uganda

Rwanda →

Burundi
DRC
Ethiopia
Kenya
Malawi
Tanzania
Uganda
Zambia
Zimbabwe

Senegal →

Benin
Burkina Faso
Côte d'Ivoire
Mali

Singapore →

Bangladesh
Indonesia
Philippines

South Africa →

Zimbabwe
Kenya
Rwanda
Tanzania
Uganda

Tanzania →

Botswana
Burundi
DRC
Kenya
Madagascar
Malawi
Mozambique
Rwanda
South Sudan
Uganda
Zambia
Zimbabwe

Thailand →

Myanmar

Togo →

Benin
Burkina Faso
Côte d'Ivoire
Guinea Bissau
Mali
Niger

Uganda →

Botswana
Burundi
DRC
Ethiopia
Kenya
Malawi
Rwanda
Tanzania
Zambia
Zimbabwe

Zambia →

Botswana
Burundi
Cameroon
Congo
Côte d'Ivoire
DRC
Ghana
Guinea
Kenya
Liberia
Malawi
Mozambique
Rwanda
Tanzania
Uganda
Zimbabwe

Annex 4:

Corridors with total remittance prices over 5% in 2024

Table 3

Corridors with total remittance prices over 5% in 2024

Source: GSMA Cross-Border Mobile Money Remittances Pricing Survey Q2/Q3

Corridor	Total cost % (\$200)	Corridor	Total cost % (\$200)
Tanzania → Burundi	5.02%	Tanzania → DRC	7.29%
South Africa → Zimbabwe	5.15%	Tanzania → South Sudan	7.29%
Qatar → Burundi	5.18%	Tanzania → Zimbabwe	7.29%
Kenya → Uganda	5.30%	Uganda → Zambia	7.35%
Kenya → Botswana	5.59%	Botswana → Malawi	7.38%
Kenya → Rwanda	5.61%	Tanzania → Botswana	7.41%
Rwanda → Uganda	5.83%	France → Morocco	7.82%
Botswana → Uganda	5.96%	Botswana → Mozambique	7.86%
Rwanda → Kenya	6.06%	DRC → Tanzania	8.21%
Botswana → Zambia	6.12%	Fiji → Vanuatu	8.44%
Tanzania → Madagascar	6.12%	DRC → Cameroon	8.45%
Tanzania → Malawi	6.21%	DRC → Congo	8.45%
Tanzania → Uganda	6.26%	DRC → Gabon	8.45%
Tanzania → Mozambique	6.37%	DRC → Uganda	8.57%
Tanzania → Kenya	6.45%	DRC → Madagascar	9.34%
Botswana → Tanzania	6.50%	Botswana → Zimbabwe	9.40%
Tanzania → Zambia	6.53%	DRC → Rwanda	9.42%
Botswana → Ghana	6.60%	Rwanda → Zimbabwe	9.69%
Tanzania → Rwanda	6.66%	Malawi → Kenya	12.51%
Kenya → Malawi	6.66%	Malawi → Rwanda	14.15%
Uganda → Malawi	6.82%	Malawi → Uganda	15.54%
Botswana → Kenya	7.02%	Qatar → Cameroon	22.66%

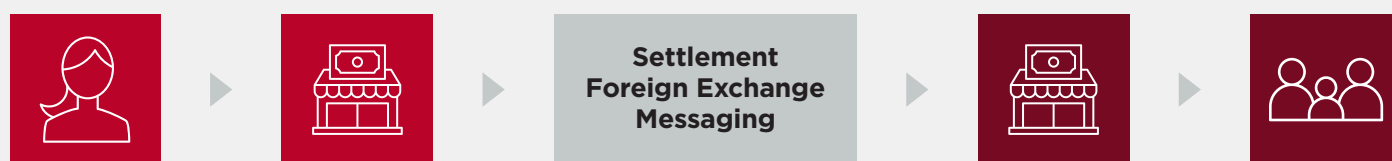
Annex 5:

Transaction flow of a cross-border mobile money remittance

This short section outlines the transaction flow of a cross-border mobile money remittance, including the foreign exchange (FX) element.

Figure 18

Transaction flow of a cross-border mobile money remittance



A cross-border mobile money remittance transaction typically follows a series of simple steps:

- 1** The sender has a mobile money account that is loaded with funds.
- 2** The sender contacts an MMP via a smartphone or USSD to obtain a quote for a mobile money transaction.
- 3** A quote is provided by the MMP. This will include a fee and, where a currency exchange takes place, an FX rate. This rate is determined by the sending MMP.
- 4** If the customer decides to proceed, instructions are provided.
 - a** The sender provides the details of the beneficiary. The details they are required to provide vary by country depending on national (and receiving side) regulation. Information typically includes the name and address of the receiver, as well as their mobile money account number. (Processes should be in place to save this data to make future transactions easier.)
 - b** The MMP debits the sender wallet and credits its settlement account. The amount to be settled will be the total amount to be credited to the receiver's account.
 - c** Funds are credited to the receiver's wallet.
- 5** The funds are transferred by the sending MMP settlement account to the receiving MMP settlement account, together with payment instructions.
- 6** The MMP in the receiving country receives the money, conducts appropriate compliance checks and credits the recipient's account.
- 7** The recipient should receive a message advising that funds have been credited to their mobile money account.

There can be variations, especially with KYC and FX settlement requirements between markets, but the process is typically straightforward.

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