Understanding Cost Patterns in Remittance Corridors of Sub-Saharan Africa: A Data-Driven Analysis of Infrastructure and Inclusion Gaps

R Srinivasan¹, Balakrishnan Mahadevan², Amar Saxena³

1. Introduction

Remittances represent a vital financial lifeline for millions of households across Sub-Saharan Africa (SSA). These flows play a crucial role in poverty reduction, education financing, health expenditures, and overall household consumption. In countries where other capital flows are volatile or inadequate, remittances often represent a more stable and counter-cyclical source of external financing. In 2024 alone, SSA expected to receive an estimated \$56 billion in formal remittances (Ratha et al 2024), although actual flows may be significantly higher when informal transfers are accounted for. In many economies, remittances constitute more than 10% of GDP; in countries like The Gambia, Comoros, Lesotho, and Cape Verde, the proportion exceeds 20%.

Despite this economic significance, SSA remains the most expensive region in the world to receive remittances. According to the World Bank's Remittance Prices Worldwide (RPW) report, the cost of sending \$200 to SSA in Q1 2025 averaged 8.78 % of the transaction value, while the global average cost was only 6.49%⁴. Please see the various indicators and regional comparison in the Table 1 below.

Table 1: Q1 2025 Remittance prices worldwide key indicators

	Q1 2025 (%)	Q1 2025 (%)
Indicator	(\$200)	(\$500)
Global average cost	6.49	4.26
Global weighted average	4.92	
SmaRT average	3.29	2.21
International MTO index	5.91	4.22
Digital remittances index	4.85	
Non-digital remittances index	7.16	
Digital-only MTO index	3.55	
Banks	14.55	
Post offices	7.71	
MTOs	5.04	
Mobile operators	4.97	

¹ Professor of Strategy, and Chairperson, Centre for Digital Public Goods (CDPG), Indian Institute of Management Bangalore INDIA.

² Post-Doctoral Research Fellow, Centre for Digital Public Goods (CDPG), Indian Institute of Management Bangalore. INDIA.

³ Independent Researcher and Academic.

⁴ Source: https://remittanceprices.worldbank.org/sites/default/files/rpw_main_report_and_annex_q125_1_0.pdf accessed on 25-Sep-2025

Mobile money		
(sending instrument)	3.63	
Debit card (receiving instrument)	3.44	
By region		
Sub-Saharan Africa	8.78	
Europe & Central Asia	7.94	
Middle East & North Africa	6.25	
East Asia & Pacific	5.76	
Latin America & Caribbean	5.72	
South Asia	4.80	

This figure stands in stark contrast to the Sustainable Development Goal (SDG) 10.c, which seeks to reduce the transaction costs of migrant remittances to less than 3% and eliminate corridors where costs exceed 5% by 2030. However, progress toward this target has been slow. In fact, the global average cost of sending \$200 remains above 6%. In the SSA region, it has remained persistently high over the past decade, despite multiple policy initiatives. As early as 2011, the G20 and the World Bank endorsed the "5x5 Objective" – to bring global remittance costs down to 5% within 5 years (World Bank report, 2011). Over a decade later, that target remains unmet in many key corridors, particularly SSA corridors. Further, previous efforts, such as the G8's "5x5" initiative launched in 2009, which aimed to reduce global remittance costs to 5% within five years, have not resulted in sustained reductions in the SSA region. Many structural issues remain unaddressed. These include limited competition among remittance service providers, heavy reliance on cash-based transfers, regulatory bottlenecks, lack of interoperability, and low financial inclusion.

By contrast, some countries and corridors outside Sub-Saharan Africa have demonstrated remarkable success in reducing remittance costs. For instance, the Singapore–Philippines corridor recorded an average cost of just 2.28% in Q1-2025, according to the World Bank's *Remittance Prices Worldwide* (RPW) database. Such low-cost corridors typically share enabling features: robust digital identity systems, mature instant payment infrastructures, and open API ecosystems that facilitate integration. They are also supported by inclusive digital financial services and regulatory frameworks that encourage competition, innovation, and transparency.

In many Sub-Saharan African (SSA) corridors, remittance services still rely on closed-loop systems, proprietary payment rails, and fragmented agent-based cash networks. These models are costly to operate, and the inefficiencies translate into higher fees that are ultimately borne by the customer.

The consequences of high remittance costs are both economic and social. For households, they act as a regressive burden, falling hardest on low-income migrants who send small amounts more frequently. At the macro level, high costs dilute the multiplier effect of remittance flows and constrain financial inclusion, especially when recipients remain dependent on cash or informal channels. The most vulnerable populations – such as low-

income migrants making small-value transfers – often face the highest effective fees. These dynamics raise urgent policy concerns about equity, efficiency, and access to digital channels.

1.1 Approach to the study

This study uses the Q1-2025 dataset from the World Bank's Remittance Prices Worldwide initiative to examine cost disparities across SSA corridors. It analyzes pricing structures for \$200 and \$500 transfers, explores the role of financial infrastructure and inclusion in shaping costs, and evaluates the potential of digital public infrastructure (DPI) to drive transformative change. The paper concludes with concrete policy recommendations informed by global best practices but tailored to SSA's regional realities.

The 48 countries in the SSA region are detailed below⁵. The trans-border payment costs have been analyzed for sending money to these countries, based on the corridor wise data available in the remittances price world wide database.

Angola	Cote d'Ivoire	Liberia	Senegal
Benin	Equatorial Guinea	Madagascar	Seychelles
Botswana	Eritrea	Malawi	Sierra Leone
Burkina Faso	Eswatini	Mali	Somalia
Burundi	Ethiopia	Mauritania	South Africa
Cabo Verde	Gabon	Mauritius	South Sudan
Cameroon	Gambia, The	Mozambique	Sudan
Central African Republic	Ghana	Namibia	Tanzania
Chad	Guinea	Niger	Togo
Comoros	Guinea-Bissau	Nigeria	Uganda
Congo, Dem. Rep.	Kenya	Rwanda	Zambia
Congo, Rep.	Lesotho	Sao Tome and Principe	Zimbabwe

In the next section we present the details of our methodology and the data preparation process. In the subsequent sections, we analyze the Q1-2025 RPW data. The 5 cheapest and costliest corridors into SSA have been identified. They have been compared to the 5 cheapest corridors globally (outside of SSA region). The costs over the past 36 quarters have been analyzed to understand the variations. Based on the corridor level analysis, we identify the low- and high- cost countries. We attempt to explain the variation using the country-level parameters: financial inclusion, access and infrastructures. We present our recommendations, based on these analyses. We conclude the paper with a summary of findings.

⁵ Source: https://data.worldbank.org/country/sub-saharan-africa accessed on 26-Sep-2025

2. Methodology and Data Overview

This study examines the costs of sending money to the Sub-Saharan Africa (SSA) region using the World Bank's Remittance Prices Worldwide (RPW) database⁶, the most comprehensive public source on international remittance pricing. The database tracks 367 country corridors, covering 48 sending countries and 105 receiving countries, and includes data on banks, money transfer operators (MTOs), mobile money providers, and digital platforms.

Costs are standardized across two common transfer amounts, \$200 and \$500, which reflect typical remittance behaviors. \$200 is considered a standard monthly transfer for low-income migrants, while \$500 allows for analysis of larger-value transactions. Each entry in the dataset records a price quote for a specific service provider and channel, including the underlying fee and foreign exchange margin.

This paper uses the Q1-2025 release of the RPW for analysis. It provides data for 36 quarters since 2016, enabling both a current snapshot and historical perspective.

2.1 Corridor Selection and Filtering

The dataset has a total of 1,97,999 observations for the 36 quarters. Of these, 6,647 observations were for Q1-2025. Our focus is on the SSA region, hence the corridors where the destination country is in Sub-Saharan Africa were selected. This includes flows from both high-income (e.g., UK to Nigeria) and regional sources (e.g. Tanzania to Rwanda). There were 1,490 observations where the destination region was Sub-Saharan Africa. These were for various provider types and transaction modes.

2.2 Data Cleaning and Exclusions

The RPW data was comprehensively cleaned before using it for analysis. It involved:

- Filtering duplicate firm listings to avoid overrepresenting any single provider.
- All observations where the cost for sending \$200 (cc1totalcost) () or cost for sending \$500 (cc2totalcost) were 0 or negative were dropped from the study.
- The main cost in the analysis was the cost of sending \$200. All the observations where this was missing were dropped from analysis.
- Implausibly high costs of remittance, defined conservatively as above 50% of the amount sent, were dropped from the analysis.
- Observations where the foreign exchange margin is negative, either for sending \$200 or for sending \$500 were dropped.

The stages of the data cleaning process and the records removed at each stage are detailed in Chart 1 below. The number of observations deleted at each stage of the cleaning

⁶ Source: https://remittanceprices.worldbank.org/data-download accessed on 25-Aug-2025

categories are detailed in table 2. A total of 6,160 observations were considered for analysis. These included all the corridors for Q1-2025. The region-wise split of these observations is detailed in chart 2.

Chart 1: Waterflow chart of the data cleaning process

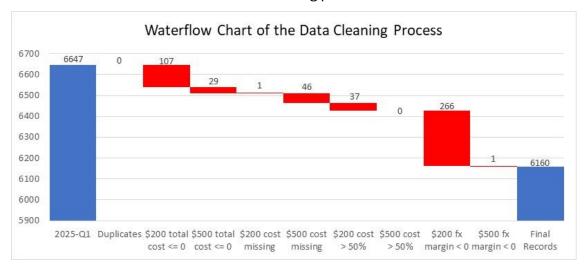
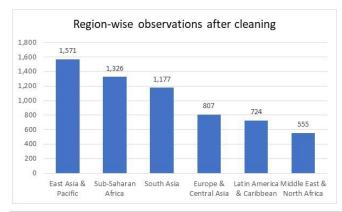


Table 2: Total number of observations in the dataset and observations cleaned

	Total	Observations	Observations
Cleaning Process	Observations	Removed	Remaining
2025-Q1	6,647	-	6,647
Duplicates	0	0	6,647
\$200 negative/ 0 total cost	107	107	6,540
\$500 negative/ 0 total cost	130	29	6,511
missing \$200 cost	1	1	6,510
missing \$500 cost	49	46	6,464
\$200 cost > 50%	37	37	6,427
\$500 cost > 50%	16	0	6,427
cc1 fx margin negative	380	266	6,161
cc2 fx margin negative	376	1	6,160

Chart 2: Destination Region split of the observations



A total of 1,326 corridor-level observations had SSA region as the destination. The focus in our analysis was the cost of sending \$200. Eight of the deleted observations had a missing cost for sending \$500, but had a cost for sending \$200. These observations were included in analysis for analyzing the cost of sending \$200. So, the analysis for \$200 had 1,334 observations.

2.3 Data for analysis

The primary variables of interest were total cost of sending ('cc1totalcost' and 'cc2totalcost'), representing the percentage cost of sending \$200 and \$500 respectively. These cost figures include both the transfer fee and the foreign exchange (FX) margin. All cost figures are expressed as a percentage of the principal amount sent. Most of the corridors had multiple observations. We also aggregated the data by corridor to compute average costs and ranked the corridors to identify the highest- and lowest-cost pathways.

Supplementary data sources were used to enrich the analysis. Financial inclusion data (account ownership) was drawn from the World Bank's Global Findex 2025 dataset. Information on the existence and scope of instant payment systems was sourced from central bank publications, regulatory filings, and reports by the World Bank (such as FAAST Payment Tool Kit), BIS and IMF. Where available, we also noted whether the countries had implemented digital identity programs and whether these were linked to financial access.

2.4 Statistics calculated for analysis

We estimated the following costs for our analysis: average cost percentage, country-level costs, and coefficient of variation in corridor-level costs.

- a) Corridor level average costs percentage Average cost of corridor was found by averaging the cost in all the observations for a particular corridor. This was done for both the denominations, receiving \$200 and \$500.
- b) Country level costs The destination country was selected from each corridor. The cost of receiving remittance in a particular country was found by averaging the cost for all the corridors where that country was the destination. The cost for receiving \$200 was used for this calculation.
- c) Coefficient of Variation: Data for 36 quarters allowed us to calculate the standard deviation of the costs for that corridor. For some corridors, data for all the 36 quarters was not available. In such cases, the available data was used to calculated standard deviation. This allowed us to calculate the coefficient of variation (CV) which helped us in understanding the cost variations. CV of less than 20% was considered stable. A value between 20% and 50% was considered moderately volatile. Any value higher than 50% was considered as highly volatile.

2.5 Limitations

While RPW data is among the best available, it has some limitations:

• It does not report the volume or market share of each provider or firm, so the average cost may not reflect what most migrants pay.

- It focuses on formal providers. Informal money transfers, still prevalent in some SSA corridors, are not captured.
- Cost data is collected quarterly, meaning it can miss intra-quarter price volatility especially where FX rates fluctuate.
- The RPW methodology includes FX margin estimates, but not always with transparency around benchmark rates used by providers.

Despite these caveats, the RPW database remains a reliable and widely cited source for understanding the structural dynamics of remittance pricing.

3. Statistical Analysis

Globally, the RPW data for Q1-2025 shows that while some progress has been made, especially in Asia and Latin America, many African corridors continue to fall behind. There has been a steady, albeit slow, decline in the proportion of corridors where it costs more than 10% to send \$200.

3.1 Overall Analysis of Corridors

Before getting into Q1-2025 SSA corridor analysis, the distribution of costs in terms of percentages across the years were analyzed globally as well as for SSA. The Chart 3 provides the distribution of the global corridors by cost for sending \$200.

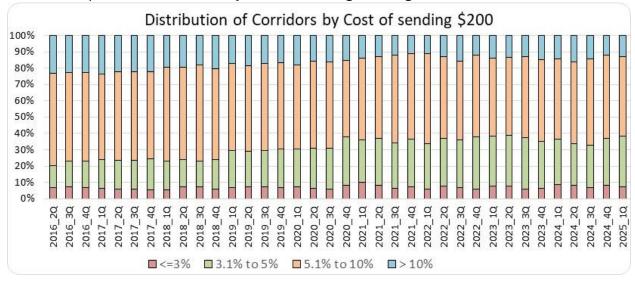


Chart 3: Proportion of Corridors by Cost of sending \$200 – global scenario

Of the 373 corridors tracked, only about 7% of the corridors met the SDG 3% target. Cost in more than 65% of corridors still exceeds the 5% threshold, with 14% topping 10%. There has been slow increase in the percentage of corridors in the lower cost brackets. This could be a possible indication of low variability in each corridor. This aspect is analyzed later in details.

The Sub-Saharan Africa (SSA) region presents a picture of even higher costs. Chart 4 presents the proportion of corridors for the four different cost brackets in the SSA region.

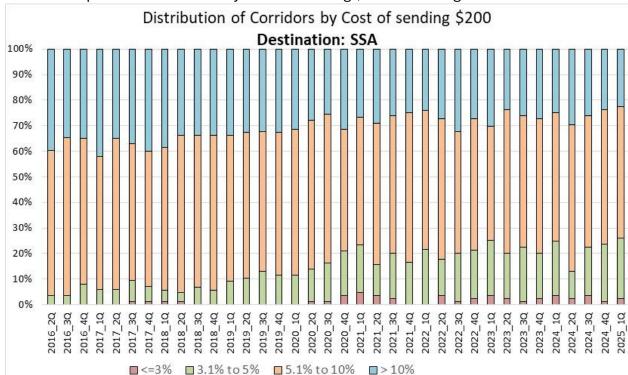


Chart 4: Proportion of Corridors by Cost of sending \$200 to SSA region

Comparing it to chart 1 shows a higher proportion of corridors in the higher cost brackets for SSA. The proportion of corridors with cost less than 10% is significantly lower than the global proportion. In Q1-2025, the cost of sending \$200 to SSA region was higher than 10% in 3 out of every 4 corridors. Comparatively, 59% of the global corridors (excluding SSA) had a cost higher than 10%. Significantly, the cost of sending money into SSA region was below the SDG target of 3% in just 2 of the SSA corridors, compared to 25 of the global corridors. On the positive side, the number of corridors in the cost range of 3 to 5% has shown a definite increasing trend over the last 36 quarters.

The factors underlying this disparity could include the limited presence of low-cost digital providers, bank-dominated remittance models, high FX spreads, and exclusive reliance on cash-based networks.

3.2 Comparison of the costs for sending \$200 and \$500

One of the most consistent findings in global remittance pricing literature is the non-linearity of transaction costs, i.e., the percentage cost of sending remittances declines with the size of the amount sent as we observed from Q1 2025 data as well. This pricing structure, common among banks and money transfer operators (MTOs), introduces a regressive bias: low-income migrants who send smaller amounts pay a higher proportion of their remittance in fees than wealthier migrants who send more.

To empirically test the costs for sending the two denominations in the SSA context, we compared the corridor-level averages of percentage costs for \$200 and \$500 by a paired t-

test. Corridor-specific features like provider mix, exchange controls, and delivery options were controlled by comparing the costs for the same corridor across the two transaction sizes. Data for Q1-2025 was used for this comparison. Details are in table 3.

Table 3: Comparison of the cost of sending \$200 and \$500 for the same corridor

t-Test: Paired Two Sample for Means

	Cost for se	nding	
	\$200	\$500	
Mean Cost	7.97%	5.68%	
Variance	46.52%	20.79%	
Observations	1,326	1,326	
Pearson Correlation	0.87		
Hypothesized Mean Difference		0	
Degrees of freedom (df)		1,325	
t Stat		23.23	
P(T<=t) one-tail	9.66	E-101	
t Critical one-tail	1.646		
P(T<=t) two-tail	1.932E-100		
t Critical two-tail		1.962	

The test confirms that we do not have sufficient evidence to accept the null hypotheses that the cost of sending \$200 is same as cost of sending \$500 into the SSA region. This result aligns with findings from previous RPW reports and research by the IMF and BIS, which observe that flat fee structures disproportionately burden small-value senders (Beck et al, 2022).

4. Corridor-Level Cost Patterns

Analyzing remittance costs at the corridor level reveals significant disparities across countries, regions, and provider ecosystems. Sub-Saharan Africa stands out because the average cost is high. Some corridors approach the SDG 3% target, while others remain five to six times more expensive.

4.1 Five Cheapest Corridors into SSA

The average cost of sending \$200 and \$500 for the various the corridors into SSA was calculated from the Q1-2025 dataset. Table 4 presents the five cheapest corridors.

Table 4: Cheapest Corridors – Destination: SSA region

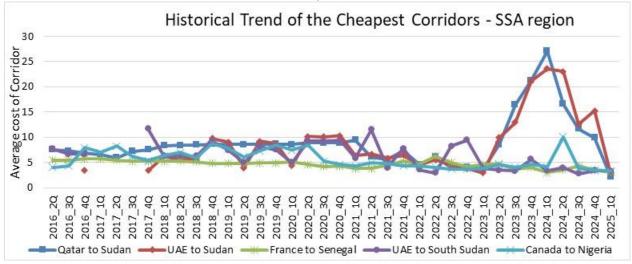
Rank Corridor		Cost of sending \$200		Cost of sending \$500	
		Average Cost	CV	Average Cost	CV
1	Qatar to Sudan	2.2%	55.6%	0.98%	66.5%
2	UAE to Sudan	3.0%	61.0%	3.12%	75.5%

3	France to Senegal	3.1%	16.8%	2.08%	17.5%
4	UAE to South Sudan	3.3%	40.8%	2.73%	47.5%
5	Canada to Nigeria	3.3%	33.1%	2.17%	40.6%

Please note: corridors have been arranged in ascending order of cost of sending \$200

Just two of the 85 corridors for the SSA region in the RPW database met the SDG benchmark of 3%. Data also that cost within a corridor has not been stable. Except for the France to Senegal corridor, all other corridors have moderate to high variation in their costs.

Chart 5: Historical trend of cost for the 5 cheapest corridors in table 4.



The two cheapest corridors in Q1-2025 present an interesting picture. They were low-cost corridors for 28 quarters. However, the cost started increasing significantly from Q2-2023 before starting to reduce from Q2-2024, becoming the lowest cost corridors by Q1-2025.

This time-period coincides with the unrest in the destination region, which could be a reason for the surge in cost due to higher uncertainty.

4.2 Cheapest Corridors outside of SSA

Table 5: Cheapest Corridors – Destination: non-SSA region

Rank	Corridor	Cost of sending \$200		Cost of sending \$500	
Nalik	Corridor	Average Cost	CV	Average Cost	CV
1	Kuwait to Pakistan	0.8%	42.8%	0.7%	46.5%
2	Bahrain to Pakistan	1.0%	35.6%	1.0%	34.8%
3	Malaysia to Myanmar	1.2%	79.1%	1.1%	93.6%
4	Great Britain to Pakistan	1.8%	27.3%	1.2%	23.5%

5	Qatar to Pakistan	1.8%	29.3%	1.0%	34.2%
---	-------------------	------	-------	------	-------

A significant point in this table is that all the 5 corridors have a cost significantly lower than 3%. This shows that the SDG target can be achieved. In fact it shows that costs significantly lower than the SDG target are also possible.

The table also shows that though the cost is low, there is a moderate to high quarter-toquarter variation.

Chart 6: Historical trend of cost for the 5 cheapest corridors in table 5

Malaysia to Myanmar corridor had a lot of fluctuations in 2023 and 2024, but has come back to its historical average in 2025. The plot of the other 4 corridors looks relatively stable. All the costs across the quarters are below the 5% line, barring two exceptions.

Several common features define these low-cost corridors:

- High remittance volume: For example, Nigeria receives over \$20 billion annually in remittances, mostly from the UK, USA, and the EU.
- Mature provider competition: In corridors like UK to Nigeria, digital-first providers such as Wise, Remitly, and Sendwave compete aggressively on pricing.
- Diaspora policy coordination: Italy and Spain have bilateral labor mobility agreements with Angola and Nigeria, respectively, which often include provisions for financial services.
- Digital rails: Countries like Nigeria have robust digital infrastructure, including realtime payments (NIP) and open banking APIs.

4.3 Top 5 Most Expensive Corridors into SSA

The average cost of corridors also helped us to the identify in the costliest one – presented in table 6.

Table 6: Most expensive corridors for remittances into SSA – based on sending \$200

Donk	Corridor	Cost of sending \$200		Cost of sending \$500	
Rank	Corridor	Average Cost	CV	Average Cost	CV
1	Senegal to Mali	25.7%	90.3%	10.5%	66.5%
2	South Africa to Malawi	19.4%	9.7%	17.2%	75.5%
3	Rwanda to Kenya	17.7%	41.5%	11.7%	17.5%
4	South Africa to Botswana	17.6%	10.4%	10.8%	47.5%
5	South Africa to Angola	16.4%	7.7%	8.4%	40.6%

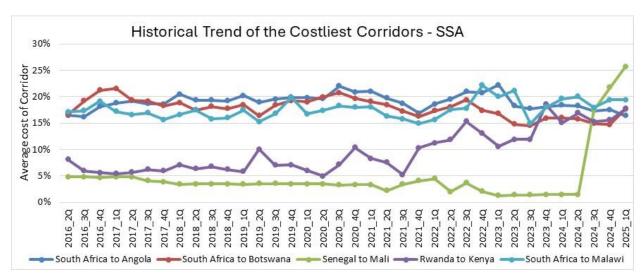
The costliest corridors have very high costs – 5 to 8 times of the SDG target. As observed earlier, the cost for sending \$500 is much lower than the cost of sending \$200 – there are just 4 corridors having costs higher than 10% for sending \$500.

Significantly, despite being intra-African corridors, these routes exhibit high costs. The reasons could include:

- Lack of interoperability: South Africa's PayShap system is domestic only. It is not linked to systems in Malawi, Angola, or Eswatini.
- Regulatory segmentation: There are no harmonized cross-border remittance standards within the Southern African Development Community (SADC).
- Cash dependence: In both sending and receiving countries, cash-based services dominate, requiring manual verification and branch visits.
- Limited competition: In many SSA corridors, a handful of legacy providers (e.g., Western Union, MoneyGram) dominate, leaving little pricing pressure.

One other possible reason for high cost could be the lack of robust infrastructure. Afreximbank has introduced PAPSS. By 2024, 144 commercial banks were participating in the payment system. However, the number or the value of the transactions has not been reported, which could possibly point to the challenges in scaling up the transactions.

Chart 7: Historical trend of cost for the 5 costliest corridors in table 6



Senegal to Mali corridor is interesting. It had a cost lower than 5% till 2Q-2024. Since Q3-2024, the cost has increased almost 7 times, and it is now the costliest corridor. Similarly, the Rwanda to Kenya corridor has also seen a significant increase in cost – it doubled in the Q4-2021 quarter, and has stayed high ever since. Cost in the other three corridors have remained persistently high, above 15%, across all the quarters.

This discussion raises the issue of cost stability in a corridor. For this, the coefficient of variation (CV) of the cost of sending \$200 across the different corridors was analyzed.

Three corridors (Nigeria to Benin, Nigeria to Mali and Nigeria to Togo) had very high cost (19.4%, 17.6% and 17.3% respectively). These corridors have not been reported in the RPW data after Q1 2021, and hence have not been analyzed here.

Overall, costs are stable in the corridor. CV is less than 20% for more than half of the corridors. Further, the overall coefficient of variation across all the corridors for the 36 quarters is 7%. As table 7 presents a detailed picture.

Table 7: Volatility in costs for the sending remittances of \$200 into SSA region, Q1-2025.

Range of CV	# of Corridors	Proportion	
<=20%	43	50.6%	
20% to 50%	38	45.9%	
50% to 75%	2	2.4%	
75% to 100%	1	1.2%	this is the Senegal to Mali corridor

This table shows the gravity of the situation. The costs of the SSA region corridors are high. And these costs have been stubbornly stable over the last 36 quarters.

4.4 Analyzing the cheapest and costliest corridors for sending \$500

Analysis in sections 4.2 and 4.3 used the cost of sending \$200 as the base. We now analyze by using cost of sending \$500 as the base, and reviewing the cheapest and the costliest corridors.

4.4.1 Cheapest Corridors for sending \$500 into the SSA region

Table 8 presents the 6 cheapest corridors for sending \$500 into the SSA region (based on Q1-2025 quarter). Again, 6 corridors have been presented here, as the cost for the 5th and the 6th corridor is almost the same. Chart 10 shows the historical trend of the costs in these corridors.

Table 8: Cheapest corridors for sending \$500 to the SSA region

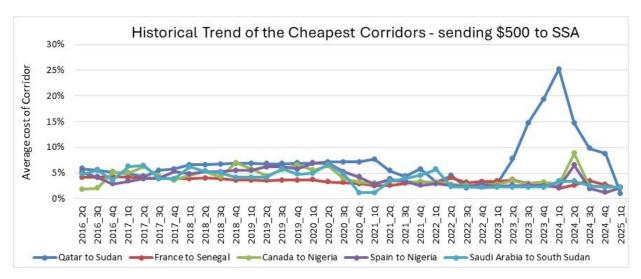
Rank	Corridor	Cost of sending \$500		Cost of sending \$200	
Nalik	Corridor	Average Cost	CV	Average Cost	CV
1	Qatar to Sudan	1.0%	66.5%	2.2%	55.6%
2	France to Senegal	2.1%	17.5%	3.1%	16.8%
3	Canada to Nigeria	2.2%	40.6%	3.3%	33.1%
4	Spain to Nigeria	2.2%	39.5%	4.3%	37.0%
5	Saudi Arabia to South Sudan	2.3%	36.2%	4.1%	45.1%
6	Netherlands to Nigeria	2.3%	48.9%	3.6%	44.3%

The Qatar to Sudan corridor has an extremely low cost. It was also the cheapest for sending \$200. This corridor could give insights into the reasons for low cost, especially given the not-so-favorable contextual factors in the destination country. It is even more interesting, as this corridor had high volatility in the last 2 years, and has now come back to being the cheapest corridor again. A possible reason could be that Sudan has multiple proprietary switches and national EBS switch primary. ACH support both credit and debit cards. It has electronic cheque clearance.

Nigeria also has low cost in sending money to. It has instant payment systems, NIP (NIBSS Instant Payment) retail system. Mobile money is also prevalent.

South Sudan is an interesting case as RTGS is under development. National Instant Payment System (NIPS) has been launched in 2025. It has very limited or no interoperable card switch. Yet the cost of sending money to South Sudan is low.

Chart 8: Historical trend of cost for corridors in table 8.



All the corridors were also analyzed for the relationship between the cost of sending \$200 and cost of sending \$500. There is a very high correlation between these two costs

- Correlation between cost of sending \$200 and sending \$500, 0.87.
- Spearman's Rank Correlation is even stronger, 0.93.

This possibly points to structural issues because of which the cost in certain corridors is higher. So, we find that the cost for sending \$200 is higher than the cost of sending \$500 – however they move together. The corridors having higher cost for \$200 have a higher cost for sending \$500 as well.

4.4.2 Most Expensive Corridors for sending \$500 into the SSA region

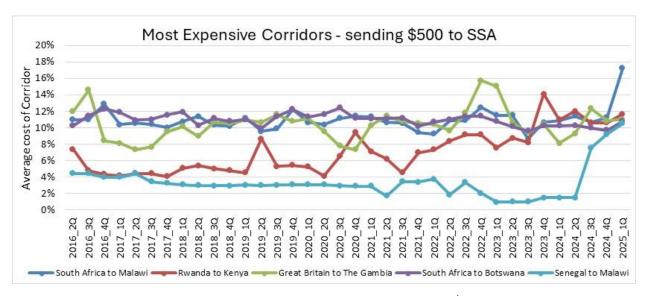
Table 9 presents the costliest corridors for sending \$500 into the SSA region (based on Q1-2025 quarter). There is a similarity to the corridors that are costly for sending \$200.Cost of sending \$200 is given as a reference. Historical trends are presented in chart 9.

Table 9: Most expensive corridors for sending \$500 to the SSA region

Rank	Corridor	Cost of sendir	ng \$500	Cost of sending \$200		
Nalik	Corridor	Average Cost	CV	Average Cost	CV	
1	South Africa to Malawi	17.2%	12.4%	19.4%	9.7%	
2	Rwanda to Kenya	11.7%	36.6%	17.7%	41.5%	
3	Great Britain to Gambia, The	11.0%	18.1%	12.3%	15.5%	
4	South Africa to Botswana	10.8%	6.7%	17.7%	10.4%	
5	Senegal to Mali	10.5%	52.2%	25.7%	90.3%	

It is interesting to note than 4 of these 5 corridors are intra-SSA remittances.

Chart 9: Historical trend of cost for corridors in table 9



Analysis across 36 quarters brings out a similar story as in case of \$200. The cost in the South Africa to Malawi corridor was below 5% till Q1-2024. However, it has gone up significantly in the last 3 quarters, to become the costliest corridor for sending \$500. This is interesting as Malawi has seen development in its financial infrastructure over the last couple of years.

4.5 Volume and Infrastructure Do Not Always Align

Interestingly, not all high-cost corridors are low-volume or underdeveloped. For example:

- Rwanda to Kenya: Both countries have relatively strong mobile ecosystems (M-Pesa, Airtel Money), yet interconnection is lacking. M-Pesa is not interoperable across borders despite being widely used regionally.
- Senegal to Mali: These countries share borders, currency (CFA Franc), and regional financial integration via WAEMU. However, remittances remain dominated by informal carriers or cash MTOs. Mobile money is widespread in Senegal. It also has early fast payments systems. On the other hand, retail real-time payments is limited in Mali.

This illustrates that shared geography or currency is not sufficient to guarantee lower costs. What matters more is the presence of integrated infrastructure, open-access payment systems, and inclusive regulatory frameworks.

4.6 Intra-African Remittances: A Paradox

While intra-African migration is high (about 21 million people live outside their country of birth within Africa), remittance costs between African countries remain the highest in the world (World Bank report, 2025). This is paradoxical, especially given that regional economic communities like ECOWAS are working to integrate the payment systems.

The reasons could include:

- Weak implementation of regional protocols
- National protectionism over payment systems
- Limited cross-licensing of non-bank providers

• Absence of real-time retail interlinkages (only trade RTGS systems are connected)
This strongly supports the argument that structural reform – not just commercial competition – is required to bring costs down.

5. Deeper analysis of the Corridors

One interesting insight from the RPW database is the time taken for sending the money. Interestingly, the cost is directly proportional to the time taken. So, it will cost less if the money has to be remitted within a day. The average cost of sending money in less than a day is cheaper by almost 60%. Table 10 has the details. One possible reason for this could be the FX uncertainty. A longer period to transfer funds will require higher fees to guard against adverse FX fluctuations.

Table 10: Time taken in sending \$200 into the SSA region

Cost of Sending \$200				
Less than one hour	7.3%			
Same day	7.8%			
Next day	9.3%			
2 days	11.8%			
3-5 days	13.3%			
6 days or more	13.0%			
Total	8.6%			

Analyzing these observations reveals that the firm type could be a possible reason. Here is the distribution of speed vs the cost of sending \$200 by Banks and MTOs.

Table 11: Comparison of the cost of sending \$200 through Banks and through MTOs

	Banl	(S	MTC)s
Speed	#	Average	#	Average
	Observations	Cost	Observations	Cost
Less than one hour	15%	9.4%	63%	7.3%
Same day	9%	14.7%	15%	7.0%
Next day	17%	16.4%	9%	7.2%
2 days	25%	18.9%	7%	8.2%
3-5 days	30%	19.5%	6%	10.1%
6 days or more	4%	15.4%	-	4.5%
Total	100%	16.7%	100%	7.5%

It shows the efficiency of MTOs. In 78% of the observations, MTOs transferred the money within a day. On the other hand, just one of the 4 observations saw the bank transferring money within a day. As MTOs have a lower cost, hence faster transfer of funds is costing less.

So, the paradoxical situation is that the banks cost more in sending money, and take more time to send the money. Yet more than 12% of the observations in the RPW dataset is for banks. This raises important questions about the possible changes required in the banks and its infrastructure to reduce the transactions costs.

6. Country level analysis

The preceding sections have presented the cost of remittances across corridors. It is important to analyze the costs from a country perspective. An analysis of the high cost and low-cost countries could give vital insights.

Destination country was used for finding the high- and low-cost countries. Cost for sending \$200 into a country through all the corridors was averaged to find out the average cost of sending \$200 into that country. This country-level cost, helped us to identify the high- and low-cost countries. The 5 cheapest countries in the SSA region are presented in the table 12.

Table 12: Cheapest countries for sending \$200

	#	# Cost of sending \$200			Cost of sending \$500			
Country	observations	Average	SD	CV	Average	SD	CV	
Sudan	4	3.2%	1.1%	34.0%	2.3%	1.2%	52.3%	
Côte d'Ivoire	19	4.4%	1.3%	30.0%	3.6%	1.7%	46.0%	
Comoros	14	4.7%	1.3%	28.5%	4.4%	2.2%	50.8%	
Togo	23	4.8%	1.5%	30.9%	4.0%	1.7%	43.0%	
Cameroon	22	4.8%	1.7%	35.3%	4.1%	1.8%	44.9%	

Countries presented in ascending of cost of sending \$200.

Costs are higher at a country level. So, while we had observed certain corridors having costs lower or equal to 3%, at a country level, all the costs are higher than 3%. The corresponding scenario, the costliest countries based on the cost of sending \$200, has been presented in table 13.

Table 13: Costliest countries to send remittance

# of		Cost of	sending	\$200	Cost of sending \$500		
Country	observations	Average	SD	CV	Average	SD	CV
Malawi	14	19.4	5.2%	27.0%	17.2	6.7%	38.9%
Botswana	21	17.7	9.4%	53.3%	10.8	3.8%	34.9%
Angola	15	16.4	7.5%	45.7%	8.4	3.0%	35.3%
Gambia, The	23	12.3	4.3%	34.9%	11.0	4.4%	40.3%
Eswatini	9	11.5	8.8%	76.6%	4.9	3.8%	76.5%
Lesotho	11	11.1	7.9%	71.0%	5.8	3.9%	67.0%

Countries presented in ascending of cost of sending \$200.

The table shows two important points:

- a. Cost of sending \$200 is significantly costlier than sending \$500. This has been observed earlier for corridors, and holds true for countries as well.
- b. High volatility in the remittance cost, for both sending \$200 or sending \$500. This is different from what was observed for corridors.

The Gambia has good financial infrastructure, however still has limited capability. The RTGS payment systems are limited to only working hours during weekdays. Mobile money is dominant; however, retail real-time payments is limited.

Botswana has an automated clearing house. However, it works only on the weekdays. RTGS enhancements are underway, which should create a robust infrastructure. Fintech real-time payment solutions are already present.

Volatility in the cost of remittance for countries is on the higher side, compared to corridors. Table 14 presents the coefficient of variation for these countries.

Table 14. Valetility	vin aandin	romittonoo	into the CCA regia	. .
Table 14: Volatility	v III Sellullis	z remnuance	; IIILU LIIE SSA TERIC	ווכ.

•		0				
	Receivi	Receiving \$200		Receiving \$500		
CV Range	Number	Percent	Number	Percent		
<=20%	0	0%	0	0%		
20% to 50%	13	41%	10	31%		
50% to 75%	11	34%	15	47%		
75% to 100%	5	16%	5	16%		
> 100%	3	9%	2	6%		
# of Countries:	32		32			

The table reveals that the costs are highly volatile for most of the countries. Further, cost of sending \$500 fluctuates more than that for sending \$200.

Cost for a country is the average of the cost of corridors for remittances into that country. High value of CV shows that for the same destination country; the cost varies widely for the different corridors. This is a possible indication of the importance of corridor level factors in determining the remittance cost.

7. Financial Infrastructure and Digital Public Infrastructure (DPI)

One of the most important determinants of remittance cost and accessibility could be the availability of robust financial infrastructure in both the sending and receiving countries. The recent shift in global policy discussions – from fintech-led innovation to systemic digital public infrastructure (DPI) – has created a new lens through which to view financial inclusion and cross-border affordability.

7.1 What Is Digital Public Infrastructure (DPI)?

According to the World Bank and IMF, DPI refers to a suite of foundational digital systems that are interoperable, open, and inclusive, and that enable innovation across the public and private sectors. DPI typically includes three layers:

- Digital Identity (e.g., Aadhaar in India, e-ID in Estonia): enables low-cost KYC, faster onboarding, and secure access to services.
- Digital Payments (e.g., UPI⁷, PIX⁸, NIP⁹): allows low-cost, instant transactions for individuals, businesses, and governments.
- Data Sharing Frameworks (e.g., Account Aggregators, open APIs): support transparency, consent-based financial access, and interoperability.

Together, these systems reduce the cost-to-serve, improve user trust, and support market entry and enhance efficiency for fin-techs and non-bank actors.

7.2 DPI and Remittance Costs: Theoretical Links

Each component of DPI plays a role in remittance cost reduction:

- Digital ID lowers the cost of customer acquisition and verification, especially across borders. Verifiable ID and e-KYC can help opening transaction account digitally in scale (as Indias PMJDY demonstrated). This may be sufficient for majority of the people.
- Instant payment systems reduce settlement risk and eliminate batch-based delays and makes funds available immediately.
- Open APIs and common standards allow comparison, multi-provider access, and greater competition among RSPs.

Where DPI is strong, remittance systems tend to be cheaper, faster, and more transparent.

7.3 Infrastructure Snapshot for High-Cost Countries

We mapped key indicators for select high-cost SSA countries using Global Findex (2025)¹⁰ and central bank data. Account ownership could be a critical variable here – without it, the only source for sending or receiving money would be the unorganized money transfer agents. Table 15 presents the proportion of the population having an account.

Table 15: Percent of population having an account

Country	Role	Account Ownership (%) ¹¹	Instant Payments	Notes
South Africa	Sender	81%	RTC, PayShap	Domestic only, limited to banks
Rwanda ¹²	Sender	56%	None	Clearing is still manual

⁷ NPCI. Unified Payments Interface (UPI). National Payments Corporation of India, 2024

⁸ Central Bank of Brazil. PIX: Instant Payment System. 2024. https://www.bcb.gov.br/

⁹ https://www.cbn.gov.ng/PaymentsSystem/modes.html

¹⁰ The Global Findex Database 2025 (2025). https://www.worldbank.org/en/publication/globalfindex

¹¹ Obtained from Findex 2025 database World Bank. *Global Findex Database 2025*. Washington, DC: World Bank, 2025 {{9}}

¹² Latest data available for Rwanda in the Findex 2025 database is for 2017.

Senegal	Sender	76%	No	Cash dominant, no DPI
Mali	Receiver	55%		
Malawi	Receiver	50%	No	No public DPI
Kenya	Receiver	90%	M-Pesa, IPSL	Domestic real-time works well
Botswana	Receiver	61%		
Angola ¹³	Receiver	29%		

The 2025 Findex data does not show clear evidence that proportion of account ownership in the population is different between the low- and high- cost countries.

7.4 Impact of Financial Inclusion and Access on remittances

Could financial inclusion and access have an impact on the cost of a corridor? This question was analyzed using the Global Findex data for 2025. It is one of the most authentic data sources, the only demand-side survey on financial inclusion and a leading source of data on how adults around the world access and use financial services.

Methodology:

Findex data is by country, hence the high-cost and low-cost countries have been compared for this analysis. There are 457 variables reported in the Findex database. 13 variables were considered relevant for this study, detailed in table 16.

Table 16: List of variables from Findex database selected for comparison

Variable	Definition
account.t.d	Account (%, age 15+)
fiaccount.t.d	Bank or similar financial institution account (%, age 15+)
fin13_1b	Have a mobile money account and would like to open a bank account (%, age 15+)
fin17a.17a1.d	Saved at a bank or similar financial institution or using a mobile money account (%, age 15+)
fin22a.22a1.22g.d	Borrowed any money from a formal bank or similar financial institution or using a mobile money account (%, age 15+)
fh1.fh2	Sent or received domestic remittances (%, age 15+)
g20.any	Made or received a digital payment (%, age 15+)
fh2a	Received international remittances (%, age 15+)
fin26b	Used a mobile phone or the internet to buy something online (%, age 15+)
fin2.t.d	Owns a debit card (%, age 15+)
fin10	Owns a credit card (%, age 15+)
dig.acc	Digitally enabled account (%, age 15+)
con26d	Daily internet use (%, age 15+)

¹³ Latest data available for Angola in the Findex 2025 database is for 2014.

The low-cost and the high-cost countries were tested for significant differences on these 13 variables. Table 17 has the low- and high- cost countries on the basis of the cost of receiving \$200.

Table 17: Low- and high- cost countries, based on receiving \$200

Low-Cost Countries	High-Cost Countries
Cameroon	Botswana
Comoros	Eswatini
Togo	Gambia, The
Senegal	Lesotho
Cote d'Ivoire	Malawi

Data for 2024 was used for significance testing.

The results show no significant difference on the 13 selected financial inclusion variables between these countries at 5% level of significance. Infact the p-values show that there is no significant difference even at 10% level of significance. The p-values were:

Table 18: Significance test between low- and high- cost countries on the select parameters

Veriable	Low-0	Cost Cou	ntries	High-Cost Countries			n value
Variable	Value	SD	CV	Value	SD	CV	p-value
account.t.d	59.6%	11.1%	18.7%	55.3%	11.1%	20.0%	0.56
fiaccount.t.d	31.8%	13.1%	41.2%	32.3%	12.3%	38.0%	0.95
fin13_1b	8.6%	4.3%	49.7%	10.2%	5.0%	49.2%	0.61
fin17a.17a1.d	35.5%	14.0%	39.4%	32.1%	5.7%	17.7%	0.63
fin22a.22a1.22g.d	12.6%	6.2%	48.9%	15.9%	7.8%	49.1%	0.48
fh1.fh2	61.6%	15.3%	24.9%	51.6%	5.0%	9.8%	0.20
g20.any	54.2%	16.4%	30.3%	50.6%	13.6%	26.9%	0.72
fh2a	26.8%	12.8%	47.7%	22.6%	11.2%	49.5%	0.59
fin26b	10.8%	6.5%	60.4%	5.3%	2.2%	40.9%	0.11
fin2.t.d	13.8%	10.7%	77.5%	18.3%	11.7%	64.0%	0.54
fin10	4.8%	2.6%	55.1%	3.8%	2.7%	69.6%	0.59
dig.acc	51.6%	18.2%	35.2%	47.9%	14.6%	30.4%	0.73
con26d	25.8%	11.2%	43.5%	24.9%	15.3%	61.5%	0.91

So, the financial inclusion variables do not discriminate between the low- and high-cost countries. This also means that sufficient evidence is not there to support our hypothesis that low-cost countries should have higher account ownership.

7.5 Financial infrastructure in the SSA countries

Financial inclusion parameters are not discriminating between the high- and low- cost countries, with no difference being observed on important parameters like % account ownership. The possible explanation could be that not everyone needs to have an account. Only that part of the population which is receiving remittances need to have an account.

If financial inclusion parameters are not important, then the payment systems might explain the high costs in some countries vis-à-vis others. SSA is a region where there has been significant focus over the past decade on developing this infrastructure. These developments are in various stages of becoming operational and getting adopted. Hence the situation can vary from country to country.

As an example, take the case of Fast Payment System (FPS). All the high-cost countries have either a domestic FPS or via regional FPS. The low-cost countries, like Sudan and Sierra Leone, also similar infrastructure. Togo, Cote d'Ivoire and Senegal are also low-cost countries, as they are part of WAEMU, one of the fully functional and operating monetary union (detailed later in the paper). This could explain the low-cost for these countries.

7.6 SSA's Partial DPI Landscape

Several SSA countries have made strides in one or more layers of DPI:

- Ghana: Launched Ghana Interbank Payment and Settlement System (GHIPSS) and national biometric ID
- Nigeria: Operates NIP for real-time transfers and has launched open banking APIs
- Kenya: Has M-Pesa and IPSL, though integration with banks and international providers is incomplete
- South Africa: Developed PayShap, but restricts access to banks only

Regional interlinking of these systems is minimal, and most countries exclude non-banks from national rails. As a result, domestic digital progress does not translate into cross-border cost reduction.

8. Incentive from Larger Transaction Sizes

One of the underutilized levers for reducing remittance cost burden is the economics of transaction size. Our earlier statistical analysis confirmed that, in percentage terms, sending \$200 is significantly more expensive than sending \$500. This means that sending larger amounts less frequently can be an incentive as it generates substantial cumulative savings, even without changing providers or delivery modes and with current level of infrastructure.

While not all migrants have the cash flow flexibility to alter their remittance patterns, this finding has important implications for:

- User awareness and education
- Remittance app design
- Policy nudges in high-cost corridors

User awareness and coaching is especially important as the cost for sending \$200 is always higher than the cost of sending \$500 on a per dollar basis.

8.1 Simulation: Annual Cost Savings by Batching Transfers

Assume a migrant currently sends \$200 monthly (12 times/year), and is considering shifting to a \$500 transfer. The migrant will need to transfer \$500 every 2.4 months (5 times/year). Using the corridor costs, we estimated the total cost of remittances in either case. The difference between the two costs is very significant – across all the types of corridors. Illustration of the savings is detailed for corridors at the two extreme – high-cost and low-cost in tables 19.

Table 19: Annual saving by sending a higher denomination for the highest cost corridor

Metric	Monthly (\$200 × 12)	Bimonthly (\$500 × 5)						
High-cost Corridor: Senegal to Mali								
Cost per transfer (%)	25.7%	10.54%						
Cost per transfer	\$51.39	\$52.7						
Total Annual Fees	\$616.72	\$236.5						
Annual Savings		\$353.22 (57.3%)						
Low-cost Corridor: Qatar	to Sudan							
Cost per transfer (%)	2.21%	0.98%						
Cost per transfer	\$4.42	\$4.9						
Total Annual Fees	\$53.04	\$24.50						
Annual Savings		\$28.54 (53.8%)						

8.2 Cost Saving across all the corridors

This simulation exercise was conducted for all the corridors. Table 20 presents the saving in cost for the corridors, if 5 transactions of \$500 were done, instead of 12 transactions of \$200.

Table 20: Saving in cost through higher denomination remittance

Coat Saving Banga	Destination S	SSA corridors	Other corridors		
Cost Saving Range	# of corridors	Proportion	# of corridors	Proportion	
Negative saving	3	4%	4	2%	
0 - 25% saving	43	52%	74	28%	
25 - 50% saving	33	40%	177	67%	
50 - 75% saving	4	5%	9	3%	

Average Saving 23.	4% -	31.3%	-
--------------------	------	-------	---

Negative saving is because the cost of sending \$500 is higher for the corridor.

Savings in the SSA region is lower than the global scenario. This could be possibly because of the higher cost for receiving \$500. For the SSA region, average saving across all the corridors is 23.4%. Almost 50% of the corridors will see a saving of more than 50%. Only 3 corridors will not save by sending a larger amount (UAE to Sudan, Cameroon to Nigeria and Angola to Namibia).

These examples reveal that:

- Savings are proportionally consistent across corridors (typically 35–40%)
- Absolute savings are highest in expensive corridors
- Even in low-cost corridors, users can cut annual fees by over one-third

8.3 Behavioral Barriers to Batching

Despite the financial upside, many migrants continue to send small amounts frequently. Reasons might include:

- Liquidity constraints: low-income workers may not have surplus funds to batch transfers.
- Recipient need: families at home may rely on regular, predictable cash flows.
- Lack of cost awareness: many users might be unaware of per-transfer fee structures or FX margins.

These factors suggest that batching strategies must be supported by infrastructure, not just awareness. For example:

- Remittance platforms could offer scheduling tools that simulate savings based on frequency.
- Micro-savings products (e.g., diaspora-linked digital wallets) could allow migrants to accumulate small balances for batched remittances.
- Employers and diaspora organizations could support joint remittance models for rent, school fees, or health costs.

8.4 Policy Implications

Governments and development partners should:

- Incorporate cost-comparison and frequency tools into consumer literacy campaigns.
- Support fintech experiments that allow flexible batching or shared-sending among trusted networks.

• Ensure RSPs display dynamic pricing dashboards, showing how changing amounts or frequency affects cost.

Designing for user agency – backed by real-time data – can empower migrants to optimize remittance flows, even in high-cost corridors.

9. Global Benchmark: The Cheapest Corridors (Expanded)

The earlier sections have looked at the cheapest corridors globally, as well as in the SSA region. The five cheapest remittance corridors globally (table 5) show an average cost well below 3% – with cost in two of the corridors being lower than even 1%. This proves that the remittance costs can be brought down to even less than 1 percent. This is not a wishful thinking, but a real possibility. These corridors share several structural and policy features, detailed in the next section.

9.1 Enabling Factors in Low-Cost Corridors

1. Digital Interoperability

India's UPI and Mexico's SPEI (Sistema de Pagos Electrónicos Interbancarios) are open-access, instant systems connected to banks and non-banks. Remittance service providers (RSPs) can access these systems through APIs, enabling real-time settlement without manual intervention.

2. Low-Cost Onboarding and KYC

In corridors like UAE to India and Singapore to Philippines, the availability of digital ID systems allows providers to verify customers quickly and remotely, reducing overhead and enabling fully digital channels.

3. FX Margin Transparency

In several corridors, like UK to Bangladesh, regulators cap or disclose FX spreads. This discourages providers from masking fees through currency conversion, increasing user trust and price discipline.

4. Provider Competition and Open Markets

Fintech-friendly jurisdictions (e.g., Singapore, UK, USA) allow non-bank providers to offer remittance services under light-touch, risk-based regulation. This encourages innovation and keeps prices low.

5. Remittance Corridor-Specific Reforms

For example, the UAE has signed bilateral MoUs with India, the Philippines, and Nepal to enable direct corridor integration via central banks, reducing dependence on intermediary correspondent banks.

9.2 How SSA Differs

By contrast, high-cost corridors into SSA suffer from the opposite conditions:

- Lack of interoperable infrastructure: Payment systems are not connected across countries, even within economic unions like ECOWAS or SADC.
- Exclusion of fin-techs and non-banks: Mobile money operators and e-wallets are often locked out of real-time rails.
- Cash-heavy delivery models: Manual processes increase cost and slow down service.
- Opaque FX practices: Without regulated transparency, FX margins add significantly to total cost.
- Weak bilateral cooperation: There is no equivalent of the UAE-India corridor agreements that directly link infrastructure.

9.3 Monetary Unions in SSA region

A few monetary unions are functioning in the SSA region. And a few more are aspirational.

East African Community (EAC) – this bloc consists of Burundi, Kenya, Rwanda, South Sudan, Tanzania, Uganda, and the Democratic Republic of Congo. With a combined population of over 300 million, the EAC has pursued deeper regional integration since its revival in 2000, aiming to create a customs union, common market, monetary union, and eventually a political federation. The East African Monetary Union (EAMU) Protocol was signed in 2013, setting a 10-year timeline to establish a single currency and an East African Central Bank. However, implementation has been repeatedly delayed.

Although a monetary union has not materialized and a single currency remains aspirational, the EAC has advanced in payment system integration. EAPS (East African Payment System) now links the national RTGS systems of Kenya, Uganda, Tanzania, Rwanda, and Burundi.

- Economic Community of West African States (ECOWAS): This monetary union consists of 15 countries, including Nigeria, Ghana, Sierra Leone, Liberia, Gambia, Guinea, Cape Verde, and the eight WAEMU states (which already share the CFA Franc XOF). ECOWAS represents more than 400 million people. The currency is pegged to euro with French treasury guarantee. It is a fully integrated monetary union with common monetary policy. It has the deepest level of monetary integration in SSA.

A single currency, the "ECO", was proposed with the aim of unifying the economies of West Africa. The original timeline targeted 2020, but repeated postponements have pushed the plan further into the future.

Issues in the Current Payment System Integration

- There is no unified regional RTGS or ACH for all of ECOWAS.
- Payment integration remains fragmented:
 - WAEMU already has STAR-UEMOA (RTGS) and SICA-UEMOA (ACH).
 - Non-WAEMU ECOWAS states operate their own national systems.

- Some cross-border settlement initiatives exist, but no regional-level FMI unites the bloc.
- Southern African Development Community (SADC) brings together 16 countries, including Angola, Botswana, Comoros, Congo Dem. Rep., Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia, Zimbabwe among others.

SADC has set out long-term plans for a monetary union and the creation of a SADC Central Bank. However, there is no fixed timeline, and progress remains slow due to divergent economic structures, political priorities, and capacity constraints. The most concrete achievement has been the establishment of the SADC-RTGS (also known as SIRESS) in 2013. SADC could be one of the most advanced cases of regional payment integration in SSA, thanks to the SADC-RTGS. However, the region has not moved toward a true monetary union, and reliance on the rand raises political sensitivities. The common currency project remains aspirational, with payment integration largely wholesale-focused.

There are other functioning monetary unions as well – like Central African Economic and Monetary Community (CEMAC) and Common Monetary Area (CMA).

CEMAC has a similar arrangement as WAEMU – pegged to Euro and French treasury support. Monetary policy and currency issuance is centralized.

CMA is dominated by South Africa with Lesotho, Eswatini, and Namibia being the other member-countries. South Africa drives monetary policy; smaller members retain limited sovereignty.

9.3.1 Cost implications of the Monetary Unions

All the countries of the SSA region in the RPW database are a part of one or more of the three monetary unions. Table 21 shows the membership of the SSA countries to the monetary unions. Two of these credit unions are aspirational (EAMU and SADC) – they are not yet operational. 9 of these 29 countries are members of at least two unions, with Tanzania being member of all the three main monetary unions.

Table 21: Membership of countries to the different monetary unions in Africa

		Country is a member of						
	ECOWAS	WAEMU	CEMAC	CMA	EAMU	SADC	EAPS	
Malawi						Yes		
Botswana						Yes		
Angola						Yes		
Gambia, The	Yes							
Eswatini				Yes		Yes		

Lesotho				Yes		Yes	
Tanzania				1.00	Yes	Yes	Yes
Zambia						Yes	100
Namibia				Yes		Yes	
South Sudan				100	Yes	100	
Mali	Yes	Yes			100		
Mozambique	100	100				Yes	
Zimbabwe						Yes	
Uganda					Yes	100	Yes
Cape Verde	Yes				100		100
Kenya	103				Yes		Yes
Rwanda					Yes		Yes
South Africa				Yes	163	Yes	163
	V			168		res	
Ghana	Yes						
Senegal	Yes	Yes					
Somalia					Yes		
Liberia	Yes						
Nigeria	Yes						
Congo, Dem. Rep.			Yes		Yes	Yes	
Madagascar						Yes	
Sierra Leone	Yes						
Togo	Yes	Yes					
Comoros						Yes	
Cote d'Ivoire	Yes	Yes					

^{&#}x27;Yes' implies that the country is a member of that particular monetary union.

EAMU and SADC monetary unions are not yet operational.

Details of the cost in receiving \$200 and \$500 are given in table 22 below. CEMAC and CMA have not been covered in this table – as there are very few countries in the RPW database.

Table 22: Comparison of the cost for members of the different monetary unions

	Receiving \$200		Receiv	ing \$500	C	ountry	is a me	ember c	of
	Avg Cost	Ratio to Overall Cost	Avg Cost	Ratio to Overall Cost	SADC	ECOWAS	WAEMU	ЕАМО	EAPS
Malawi	19.39	2.42	17.24	3.03	Υ				
Botswana	17.67	2.21	10.79	1.89	Υ				
Angola	16.40	2.05	8.37	1.47	Υ				
Gambia, The	12.27	1.53	11.02	1.93		Υ			
Eswatini	11.46	1.43	4.91	0.86	Υ				
Lesotho	11.11	1.39	5.75	1.01	Υ				
Tanzania	10.85	1.36	6.65	1.17	Υ			Υ	Υ
Zambia	10.47	1.31	7.32	1.28	Υ				
Namibia	10.47	1.31	10.47	1.84	Υ				

South Sudan	9.92	1.24	5.86	1.03				Υ	
Mali	9.56	1.20	4.71	0.83		Υ	Υ		
Mozambique	9.40	1.17	6.35	1.11	Υ				
Zimbabwe	8.54	1.07	6.29	1.10	Υ				
Uganda	8.12	1.02	5.26	0.92				Υ	Υ
Cape Verde	8.11	1.01	4.98	0.87		Υ			
Kenya	7.77	0.97	5.60	0.98				Υ	Υ
Rwanda	7.45	0.93	6.02	1.06				Υ	Υ
South Africa	6.95	0.87	5.13	0.90	Υ				
Ghana	6.87	0.86	5.86	1.03		Υ			
Senegal	6.38	0.80	3.25	0.57		Υ	Υ		
Somalia	6.18	0.77	5.63	0.99				Υ	
Liberia	6.10	0.76	3.62	0.63		Υ			
Nigeria	5.79	0.72	3.74	0.66		Υ			
Congo, Dem. Rep.	5.63	0.70	4.37	0.77	Υ			Υ	
Madagascar	5.17	0.65	4.31	0.76	Υ				
Sierra Leone	5.06	0.63	3.79	0.66		Υ			
Togo	4.80	0.60	3.95	0.69		Υ	Υ		
Comoros	4.71	0.59	4.40	0.77	Υ				
Cote d'Ivoire	4.35	0.54	3.60	0.63		Υ	Υ		

This table shows that just 30% of the ECOWAS member-countries have a cost higher than average for sending \$200. For WAEMU countries, this number is even lower, at 25%. The SADC member-countries currently have very high costs. For 71% of the SADC bloc countries, the cost of receiving \$200 is more than average cost. The situation is the same for sending \$500. Cost of the ECOWAS and WAEMU member countries are significantly lower than the SADC bloc countries. ECOWAS and WAEMU are functioning monetary unions, while SADC is still aspirational. This could be a possible reason for low cost of trans-border payments in the member-countries. Hopefully when SADC meets its goal, the cost for its member-countries will reduce.

Average cost of remittance for the different monetary union blocs is summarized in table 23. This was found by averaging the costs for all the corridors whose destination country was a member-country of that monetary union. So, a country will get counted in all the monetary unions that they are a part of.

Table 23: Cost of sending \$200 into the SSA region – averaged for the all countries who are member of that monetary union

		SADC	ECOWAS	WAEMU	EAMU	EAPS
A	verage cost	10.59	6.93	6.27	7.99	8.55

Cost of receiving \$200	% of countries having cost higher than average	71%	30%	25%	43%	50%
Cost of	Average cost	7.31	4.85	6.27	5.63	5.88
receiving \$500	% of countries having cost higher than average	64%	20%	0%	43%	50%

9.4 What SSA Can Learn

The benchmark corridors reveal a simple truth: remittance costs fall where infrastructure is digitized, open, and integrated. SSA must move beyond fragmented national reforms and toward a shared digital vision.

Specific areas of focus include:

- Establishing open-access API standards across the region.
- Granting non-banks access to core national payment switches.
- Creating regional public-private corridors with shared FX benchmarks.
- Leveraging diaspora ties to co-design products and trust mechanisms.

Monetary unions should immediately upgrade their ACH systems to include fast payments so that member countries can benefit from greater efficiency and lower costs. Countries should consider implementing fast payment systems in an optimal way, drawing on the extensive guidance already available in the World Bank's FAAST Toolkit.

Only by adopting a "corridor mindset" – seeing remittance systems as two-sided networks that must be integrated – SSA could try to replicate the success of low-cost global leaders.

10. Regional Payment Systems: PAPSS and Buna

In response to the fragmentation of payment systems across Africa and the Middle East, regional institutions have launched initiatives to facilitate cross-border payment interoperability. Two prominent systems are:

- PAPSS: Pan-African Payment and Settlement System, launched under the AfCFTA and managed by Afreximbank.
- Buna: The Arab Regional Payments Clearing and Settlement System, managed by the Arab Monetary Fund (AMF).

These platforms aim to reduce cost, delay, and FX dependency for cross-border transactions within their respective regions. However, their design and current usage raise critical questions about whether they are equipped to address remittance cost barriers at the retail level.

10.1 PAPSS: Ambition vs. Access

Launched in 2022, PAPSS¹⁴ is a settlement infrastructure that allows participating commercial banks and central banks to conduct cross-border transactions in local currencies, settled domestically. It is being piloted in the West African Monetary Zone (WAMZ) and is intended for eventual expansion across the African Continental Free Trade Area (AfCFTA). It is one of the most ambitious financial infrastructure projects in Africa.

Key Features

- Operates in local currencies, reducing need for USD/EUR intermediaries.
- Processes transactions via central bank accounts, minimizing settlement risk.
- Provides real-time transaction confirmations for participating institutions.

Current Limitations

- 1. Access is restricted to commercial banks mobile money providers, fintechs, credit unions, and cooperatives cannot currently connect to PAPSS directly.
- 2. Few national payment systems are integrated PAPSS does not yet connect to domestic retail rails like Ghana's GHIPSS, Nigeria's NIP, or Kenya's IPSL, meaning that even when a cross-border transaction is settled centrally, it may not reach the end user quickly or digitally.

Impact So Far

Although PAPSS has processed pilot transactions and signed agreements with several central banks, its actual remittance volume remains negligible. Without last-mile infrastructure, cost-saving benefits will remain theoretical.

10.2 Buna: Interlinking RTGS Systems

Buna, launched in 2020, is a payment platform operated by the Arab Monetary Fund and designed to interlink national RTGS systems across the Arab region.

Key Features

- Supports payments in multiple currencies, including USD, EUR, and Arab national currencies.
- Connects central banks and licensed financial institutions for high-value trade settlement.
- Emphasizes FX netting and compliance checks as part of transaction flow.

Limitations

1. Retail remittances are not supported – Buna is strictly an RTGS system; it is not designed for low-value, high-frequency retail transactions.

_

¹⁴ https://papss.com/

- 2. Buna is fully owned and managed by the Arab Monetary Fund. Participation is only open to Arab central banks, commercial banks, and other financial institutions that meet eligibility and compliance requirements¹⁵. So this is not a Pan-Africa infrastructure.
- 3. Fintech exclusion Only licensed commercial banks can participate; mobile money and digital-first RSPs are excluded.
- 4. Lack of integration with instant payment platforms There is no seamless handoff between Buna and retail payment rails in receiving countries like Egypt or Sudan.

Implications for SSA

Some SSA countries with Arab ties (e.g., Sudan, Somalia, Djibouti) are part of Buna's ecosystem. However, without retail integration and inclusive access, Buna remains irrelevant for remittance affordability.

10.3 Structural Barriers in Both Systems

Even in the two main systems, PAPSS and Buna, there are significant barriers, as presented in table 24.

Table 24: Structural	harriers in the PAPS	SS and Buna systems
Table 24. Siluctulai	. Dailleis III uie I Ai •	55 and Duna Systems

Feature	PAPSS	Buna	
Primary Objective	Trade payment settlement	RTGS interlinking	
Access Model	Bank-only	Bank-only	
Retail Payment Support	Limited (future roadmap)	None	
Non-Bank Participation	Not available	Not available	
Integration with DPI	Minimal	None	
Settlement Currency Local currencies		Multicurrency (USD, EUR, etc.)	

Despite bold goals, neither platform currently provides the **three essential components** required for inclusive remittance cost reduction:

- Open access for non-banks
- Instant transaction routing
- Retail-grade interoperability

In conclusion, both Buna and PAPSS are ambitious regional efforts to provide alternatives to correspondent banking and lower cross-border costs. Yet neither has, as of now, materially reduced the cost of remittances into Sub-Saharan Africa. Buna, despite connecting 116 institutions and processing USD 3.2 billion in 2024, remains confined to

¹⁵ Buna. About Buna [Internet]. Available from: https://one.buna.co/

Arab and North African markets, with no significant presence in Sub-Saharan jurisdictions. PAPSS, by contrast, is operational in several SSA countries and has built a wide institutional base of 144 commercial banks and 15 central banks. However, Afreximbank does not disclose PAPSS transaction volumes, strongly suggesting that usage remains modest.

To deliver real impact, it is not enough to simply increase the number of participating banks. PAPSS must broaden its reach into retail channels, making it easier for consumers and SMEs to use the system directly. It has to be extended to mobile money systems, real-time retail payment networks, and wallet providers and agent networks. One promising pathway would be the introduction of a Pan-African PAPSS Card, enabling card-to-card transfers across borders. This would integrate PAPSS into everyday financial behavior, reduce reliance on money transfer operators, and finally begin to lower the cost of remittances into Sub-Saharan Africa. Until such retail adoption is achieved, the promise of both systems will remain largely unrealized.

Their evolution into full-fledged cross-border DPI systems will require:

- Central banks to redefine access rules
- Technical upgrades to support API-based routing
- Shared standards for compliance and customer due diligence

This remains a major gap – and a lost opportunity – until addressed.

10.4 Payment System Infrastructures in SSA: Evidence from GPSS 2023

The World Bank's Global Payment Systems Survey (GPSS)¹⁶ 2023 provides a clear benchmark for assessing the state of payment infrastructures in Sub-Saharan Africa (SSA). The findings show that SSA has broadly achieved parity with global averages in the adoption of Real-Time Gross Settlement (RTGS) systems but lags in Automated Clearing Houses (ACH), faster payments, and card switches.

RTGS

RTGS systems are nearly universal in SSA, consistent with the global average. However, while a growing share of global RTGS systems now operate on a 24/7 basis, almost all SSA RTGS remain restricted to business hours. This suggests that SSA has caught up in coverage but not in the flexibility and availability of operations.

ACH

ACH coverage in SSA is weaker than the global average, with only about one-third of economies reporting such systems. At the same time, SSA's ACHs are more likely to be operated by central banks, and uniquely, the region includes multi-country ACHs:

 SICA-UEMOA (WAEMU: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo)

¹⁶ https://www.worldbank.org/en/topic/financialinclusion/brief/gpss accessed on 26th Sep, 2025

• SYSTAC (CEMAC: Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, Gabon)

These shared ACHs connect all banks in their respective monetary unions, providing a strong foundation for collective modernization.

Faster Payments

SSA has one of the lowest adoption rates of faster payment systems globally, with less than four in ten economies operating one, compared to more than six in ten globally. However, GPSS highlights that most faster payment systems worldwide (59%) were launched by upgrading existing ACHs rather than building entirely new infrastructures. This pathway is particularly relevant for SSA, where upgrading SICA and SYSTAC could deliver faster payments across 14 countries simultaneously.

Card Switches

Card switch infrastructure is less developed in SSA compared to global averages, with just under three-quarters of economies reporting a domestic switch. This leaves SSA reliant on international schemes, raising costs and limiting local sovereignty. Strengthening domestic switches could help, but account- and ACH-based infrastructures are likely to remain more critical for retail payments in the region.

Summary Table

Table 25 below consolidates SSA's position relative to global averages across RTGS, ACH, faster payments, and card switches, highlighting the distinctive characteristics of SSA's infrastructures.

Table 25: Comparison of SSA region to global scenario on financial payment infrastructure

Infrastructure	Global (share of economies)	SSA (share of economies)	Notes on SSA
RTGS coverage	97% (of 94 economies)	98% (almost all economies)	Near universal RTGS, but limited to business hours (no 24/7)
ACH coverage	42% (82 economies)	31% (15 economies)	Includes regional ACHs: SICA- UEMOA (WAEMU: Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo) and SYSTAC (CEMAC: Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, Gabon)
Faster Payments coverage	61% (57 of 93 economies)	38%	One of the lowest FPS adoption rates globally; ACH upgrades represent opportunity

Conclusion

The GPSS 2023 shows that SSA's payment system landscape is both underdeveloped in coverage and unique in design. RTGS systems are in place almost everywhere, but ACH and faster payment coverage lags behind global peers. Yet the presence of regional ACHs offers SSA a structural advantage: by upgrading these systems into instant payment platforms, entire monetary unions could adopt faster payments simultaneously.

This approach would not only accelerate domestic and regional integration but also provide a pathway for SSA to eventually connect with global faster payment networks, making remittances into the region faster, cheaper, and more efficient.

11. Policy Recommendations

Our analysis of Q1-2025 remittance data into Sub-Saharan Africa reveals a persistent and troubling truth: structural bottlenecks, and not just pricing behavior, continue to drive high remittance costs. Solving this problem requires a systemic, multi-pronged approach – one that focuses on digital public infrastructure, financial education, and inclusive regulation.

We propose four core policy pillars:

11.1 Build Inclusive Digital Public Infrastructure (DPI)

Why It Matters

At the heart of remittance inefficiencies lies the absence of inclusive, interoperable, and API-accessible infrastructure. Without digital rails that allow low-cost onboarding, real-time processing, and open provider access, no amount of private competition will sustainably reduce costs.

Policy Action

- Invest in DPI that includes:
 - Digital ID systems for low-cost, inclusive KYC
 - Real-time payment systems (RTPS) that are retail-grade and operate 24x7
 - Data-sharing frameworks (e.g., account aggregators, open APIs) to improve price transparency and portability
- Make core infrastructure open to non-bank actors mobile money providers, wallets, and credit unions through light-touch licensing and sandbox models.
- Incentivize cross-border DPI integration (e.g., linking Ghana's GHIPSS with Nigeria's NIP or Kenya's IPSL).

Global Models

- India's DPI Stack (Aadhaar, UPI, Account Aggregator) reduced onboarding and transaction costs, resulting in a real-time, low-cost digital economy accessible to all.
- Brazil's PIX, a central bank-run instant payment system, supports hundreds of millions of low-value transactions monthly at negligible cost.

SSA can build similar frameworks tailored to its own mobile-first realities.

11.2 Expand Access Beyond Banks

Current scenario

If the RPW database reflects the market scenario, then the Money Transfer Operators (MTOs) dominate the money transfer domain, with an 84% market share. Banks are a distant second with 12.3% share. These proportions have remained stable across the 36 quarters.

Why It Matters

Both PAPSS and Buna currently restrict access to licensed banks. This mirrors older paradigms of financial control that hinder innovation and inclusion. Yet, in many African countries, non-bank providers dominate remittance delivery, especially in rural and low-income communities.

Policy Action

- Allow non-bank RSPs to access core real-time rails directly or through sponsored access.
- Regulate wallets and e-money providers as system participants, not fringe actors.
- Expand agent banking and tiered KYC rules to ensure last-mile access, even in fragile states or conflict zones.

What to Avoid

- Closed-loop systems like PayShap in South Africa, where interoperability with fintechs is not yet allowed, are unsuitable for inclusive remittance ecosystems.
- High compliance burdens that prevent smaller RSPs from scaling across borders.

An inclusive ecosystem is one where any safe, compliant actor can plug into public rails and compete.

11.3 Promote Consumer Awareness and Literacy

Why It Matters

Even the best infrastructure remains underutilized if consumers lack trust, transparency, or awareness. Migrants and recipients often have little information about fee structures, FX

margins, or digital alternatives, leading to habitual reliance on expensive, cash-based channels.

Policy Action

- Launch public platforms that allow cost comparison across RSPs, modeled after the RPW site.
- Embed financial education into migration orientation programs, consulates, and diaspora associations.
- Incentivize RSPs to disclose FX margins, total costs, and batching savings through mobile interfaces.

Impact Potential

Behavioral shifts – such as switching from 12 transfers of \$200 to 5 of \$500 – can reduce annual costs by up to 40% even without switching providers. Migrants must be made aware of the cost savings.

11.4 Harmonize Regulation and Enable Regional Corridors

Why It Matters

A major source of cost in intra-African remittances is regulatory fragmentation. Different KYC standards, licensing regimes, and payment rules create silos that prevent integration – even within monetary unions like WAEMU or SADC.

Policy Action

- Develop regional regulatory passports for RSPs, modeled on the EU's SEPA framework.
- Harmonize electronic money laws, data sharing rules, and FX reporting requirements.
- Use platforms like the African Union and AfCFTA to develop corridor-specific interoperability standards.

Tools

- AU's Digital Transformation Strategy
- World Bank/IMF Fintech RegHub
- BIS Innovation Hub's Project Nexus for multilateral linkages

If regional bodies focus on corridor-by-corridor integration – starting with high-cost routes like South Africa to Malawi – costs can drop sharply.

Together, these four pillars offer a roadmap toward systemic, sustainable reductions in remittance costs. The goal is not merely to lower prices – but to create a remittance ecosystem that is digital, inclusive, and resilient by design.

12. Conclusion

Sub-Saharan Africa continues to face the highest remittance costs in the world, with average prices hovering near **8**% in Q1-2025 – more than double the SDG target of **3**%. Our analysis of 1,326 observations in the World Bank's RPW database reveals that high costs are not random, but correlated with structural gaps in financial infrastructure, regulatory fragmentation, and limited consumer empowerment.

While remittances are often described as a lifeline, for millions of migrants and their families, that lifeline comes at a steep price. In high-cost corridors such as South Africa to Malawi or Senegal to Mali, remitters routinely lose more than 15% of their transfers to fees and FX margins. Even low-cost corridors, like **UK to Nigeria**, exhibit a regressivity in pricing, disproportionately penalizing senders of small amounts.

The study demonstrates that remittance costs fall when digital public infrastructure is present, non-bank access is allowed, and regulatory frameworks are harmonized. Countries such as India and Brazil have shown how integrated DPI – including digital IDs, real-time payments, and open APIs – can dramatically reduce transaction costs while expanding access. By contrast, PAPSS and Buna, while technically robust, currently lack the inclusivity and reach required to impact retail remittance flows.

Critically, we also show that user behavior – such as sending larger amounts less frequently – can yield meaningful savings. In high-cost corridors, a switch from twelve \$200 transfers to five \$500 ones can save a migrant over \$160 annually, reinforcing the need for targeted financial education campaigns alongside system reform.

As Africa advances toward regional economic integration under AfCFTA, remittances must be treated not just as financial inflows, but as infrastructure challenges. Reducing their cost is essential for inclusive growth, diaspora engagement, and the resilience of household economies.

To achieve this, SSA needs to shift from fragmented, legacy models to a future of open, digital, and interoperable public infrastructure. If done right, this transformation can help SSA move from being the most expensive region for remittances to one of the most innovative.

Recent initiatives such as Buna and PAPSS have not solved the problem of high remittance costs and limited efficiency in cross-border payments. Buna remains marginal in SSA, with low volumes even within the Arab region. PAPSS has visibility but discloses no usage data, and its design limits systemic coverage.

The right path forward for SSA lies in leveraging and modernizing existing infrastructures, particularly ACH systems:

 Regional opportunity: SICA-UEMOA and SYSTAC already connect all banks in WAEMU and CEMAC, respectively. Upgrading them into faster payment systems would immediately provide instant payment functionality across 14 countries.

- National opportunity: Every SSA country should review its domestic ACH.
 - If an ACH exists, it should be quickly upgraded to include faster payments, as has been done in many countries worldwide.
 - If an ACH does not exist, countries should consider implementing a new faster payment system directly, leapfrogging older designs.
- Interconnection: Over time, these systems should be linked regionally and globally. The BIS Project Nexus offers a model for interlinking instant payment systems across borders, which SSA could leverage to reduce the costs of remittances.

In short: SSA does not need to wait for external initiatives to deliver efficiency. By upgrading ACH systems into faster payments and interlinking them, the region can build scalable, low-cost, and inclusive payment infrastructures that directly reduce the cost of sending money into and within Africa.

References

- 1. Ratha, Dilip, Sonia Plaza, Eung Ju Kim (2024). In 2024, remittance flows to low- and middle-income countries are expected to reach \$685 billion, larger than FDI and ODA combined. Accessed online at https://blogs.worldbank.org/en/peoplemove/in-2024-remittance-flows-to-low--and-middle-income-countries-ar on 25-Sep-2025
- 2. Remittance Prices Worldwide: Q1-2025. (2025). Washington, DC: World Bank, 2025.
- 3. The 5x5 Objective: Achieving Five Percent Remittance Costs in Five Years. (2011). World Bank report.
- 4. What Explains Remittance Fees? Panel Evidence. (2022) Beck, Thorsten, Mathilde Janfils and Kangni Kpodar. IMF Working Paper No. WP/22/63. Washington, DC: International Monetary Fund.
- 5. Enhancing Cross-Border Payments: Building Blocks of a Global Roadmap. (2020) Bank for International Settlements. Basel: BIS Committee on Payments and Market Infrastructures, 2020.
- 6. Financial Stability Board. *G20 Roadmap for Enhancing Cross-Border Payments: 2024 Progress Report*. October 2024.
- 7. BIS Innovation Hub. *Project Nexus: Connecting Instant Payment Systems across Borders*. Basel: Bank for International Settlements, 2023.