

Cross-Border Payments in Africa: Challenges and Emerging Models

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Abstract: This paper examines cross-border payment challenges across Africa's 54 countries, analyzing why average transaction costs (7.4-8.3%) remain 2.5x above G20 targets despite significant fintech innovation. Through comparative analysis of two representative platforms, Flutterwave Send (traditional infrastructure model) and Kredete (blockchain-stablecoin model), plus evaluation of emerging Pan-African Payment and Settlement System (PAPSS) infrastructure, we identify four core barriers: fragmented regulatory frameworks requiring separate licenses across 54 jurisdictions, limited currency pair liquidity forcing USD/EUR intermediation, high intermediation costs averaging 7.4-8.3%, and KYC fragmentation with no continental data protection baseline. Research reveals that \$54 billion in annual remittances supports economies where fees can reach 12.7% in certain corridors. Findings suggest that optimal solutions require hybrid architectures that combine PAPSS for intra-African transfers (17 countries, 115+ banks), stablecoin rails for diaspora corridors (transaction costs <\$1), and API aggregation for last-mile delivery. However, I identify institutional adoption speed as PAPSS's critical constraint, contradicting technology-centric narratives. Expert interviews reveal that infrastructure availability is insufficient without investment capacity and political will. This research contributes practical frameworks for fintech developers, policymakers, and financial institutions navigating Africa's evolving payment landscape, demonstrating that sustainable competitive advantage requires architectural hybridity rather than technological purity.

Index Terms- Cross-Border Payments, Financial Technology, PAPSS, Remittances, Stablecoins

I. INTRODUCTION

I've traveled across Africa. Every trip comes with the same frustrations: my card chooses where & when to work due to FX limitations, I can't sign up for local apps because of KYC rules or missing documents, and I end up converting USD before every trip just to feel safe. With so many fintech solutions across the continent, why does moving money between African countries still feel this hard? This research addresses that question through a systematic analysis of cross-border payment

infrastructure in Africa. I examine the current state of intra-African transfers through research and comparative analysis of two platforms: Flutterwave Send and Kredete. The selection criteria focused on platforms that represent distinct strategic approaches, traditional infrastructure versus blockchain innovation, rather than on market comprehensiveness.

The magnitude of the problem is substantial. Sub-Saharan Africa received approximately \$54 billion in remittances during 2023 [1], yet transaction costs average 7.4-8.3%, more than double the G20 Roadmap target of 3% [2]. Some corridors experience costs as high as 12.7% [3]. This cost burden disproportionately affects economies where remittances constitute a significant share of GDP (e.g., Zimbabwe at 9.6% of GDP).

This paper targets three audiences: fintech teams developing cross-border payment products, policymakers drafting regulatory frameworks, and financial institutions investing in infrastructure. The analysis provides evidence-based frameworks for strategic decision-making in Africa's evolving payment landscape.

II. CORE CHALLENGES IN AFRICAN CROSS-BORDER PAYMENTS

A. Regulatory Fragmentation and Local Presence Requirements

Africa's 54 countries operate independent payment systems with limited interoperability [4]. Each market requires separate licenses, banking relationships, and regulatory compliance. Businesses navigate multiple regulatory frameworks, obtain jurisdiction-specific licenses, and establish country-by-country banking relationships [5]. This dramatically increases operational costs and extends time-to-market, with licensing processes typically requiring 12-24 months per country.

B. Currency Conversion Complexity

Limited liquidity in African currency pairs necessitates routing through reserve currencies (USD/EUR), introducing additional conversion layers and exchange rate exposure [6]. Direct trading between many African currency pairs lacks sufficient volume. For example, cross-border transactions between Uganda and Rwanda face currency demand imbalances, forcing USD intermediation [7]. This structural constraint adds cost and complexity to transactions that should be direct.

C. High Transaction Costs

Cross-border payments in Africa incur fees of 7.4% to 8.3%, exceeding the G20 Roadmap's 3% target [8]. The South Africa-Zimbabwe corridor demonstrates extreme cases at 12.7%, particularly burdensome given Zimbabwe's 9.6% GDP dependence on remittances [9]. Sub-Saharan Africa remains the world's most expensive remittance region, driven by USD cash dependence, weak competition, the exclusion of non-bank providers from payment infrastructure, and burdensome reporting requirements [10].

D. Multi-Application Fragmentation and KYC Inconsistency

Users must download multiple local financial applications for each destination country. KYC standards vary dramatically across countries, some lax, others stringent, creating friction for cross-border payments [11]. Africa lacks minimum data protection or privacy standards, forcing users to navigate disparate compliance requirements across jurisdictions. This fragmentation creates both technical and user experience barriers to seamless money movement.

III. MARKET CONTEXT

A. Remittance Market Scale

Sub-Saharan Africa received approximately \$54 billion in remittances during 2023, representing a 0.3% decline from 2022 [12]. Top recipients include Nigeria (~\$20.5 billion), Ghana (\$4.8 billion, 6.0% of GDP), and Kenya (\$4.2 billion, 3.6% of GDP). These three countries account for over half of Sub-Saharan Africa's total remittance inflows [13].

B. The Intra-African Trade Gap

Despite Africa's leadership in mobile money, intra-African trade accounts for only 15% of total trade volume, compared to 60% in Asia and 70% in Europe [14]. This disparity stems not from technological capability; Nigeria's payment infrastructure ranks among the world's most advanced [15], but from structural constraints: regulatory fragmentation, absence of direct payment rails between countries, and overreliance on USD-denominated offshore intermediaries.

IV. COMPARATIVE ANALYSIS OF CURRENT SOLUTIONS

A. Case Study: Flutterwave Send (Traditional Infrastructure Model)

Flutterwave Send represents the traditional licensing approach to cross-border payments. Founded in 2016 and valued at \$3 billion by 2022, Flutterwave has processed over 200 million transactions [16]. The platform maintains licenses across 34 countries (Africa, Europe, the UK, US, Canada), including 34 Money Transmitter Licenses in the US and International Money Transfer Operator licenses throughout Africa [17]. Their business model centers on a unified API connecting businesses to local payment infrastructure across 20+ markets.

Performance metrics demonstrate efficacy: European fintech Norafirst achieved 300% growth in transactions within 6 months of integration, while FuturePay saw a 60% increase in cart completion [18]. In H1 2025, Flutterwave processed \$1 billion for East Asian merchants, with 198% year-over-year growth in virtual account volume [19].

The platform addresses identified challenges through comprehensive licensing (providing local presence), traditional FX infrastructure with transparent daily rates (partially addressing currency conversion), flat-fee structures leveraging scale (managing costs), and a unified platform serving 34 countries with bank transfer, mobile money, and cash pickup options (solving multi-app fragmentation).

B. Case Study: Kredete (Blockchain-Stablecoin Model)

Kredete represents a fundamentally different approach, combining stablecoin-powered remittances with credit building for African

immigrants. Founded in 2023 by Adeola Adedewe, the company raised \$24.75 million in total funding, including a \$22 million Series A in September 2025 [20]. The platform processes remittances via USDC stablecoin rails, reducing transaction fees to below \$1 per transaction [21].

In January 2026, Kredete launched Africa's first stablecoin-backed credit card in partnership with Visa, Stellar, and Rain, enabling users across 41+ African countries to spend digital assets at 150 million+ merchants globally [22]. The card links directly to digital wallets and settles in USDC near-instantly, with real-time FX conversion at the point of purchase.

Performance data shows 700,000 monthly active users, \$500 million in processed remittances, and average US credit score improvements of 58 points [23]. The platform addresses challenges through API aggregation connecting to 41+ countries' existing infrastructure (avoiding per-country licensing), USDC as an intermediate currency with real-time FX conversion (eliminating traditional currency routing), sub-dollar transaction costs via blockchain settlement (dramatically reducing fees), and single-platform access with stablecoin-backed cards (solving multi-app issues).

V. EMERGING INFRASTRUCTURE: PAPSS ANALYSIS

A. Technical Architecture and Governance

The Pan-African Payment and Settlement System (PAPSS), launched January 13, 2022, represents the most significant infrastructure development in African cross-border payments. Backed by the African Union and African Export-Import Bank, PAPSS provides real-time gross settlement for cross-border payments in local currencies [24]. The system connects individual African Central Banks' RTGS systems, using multilateral net settlement to consolidate payments and settle only net balances [25].

Transaction flow operates through five steps:

1. The originator issues a payment instruction in local currency to their bank,
2. The bank forwards it to the Central Bank, which routes it to PAPSS.
3. PAPSS validates and forwards to the beneficiary's Central Bank,

4. The local bank pays in local currency to the beneficiary
5. At 11:00 UTC daily, PAPSS settles net positions using Afreximbank as settlement agent [26].

B. Current Coverage and Adoption Metrics

By early 2025, PAPSS achieved: 10+ participating central banks including Nigeria, Ghana, Kenya, Zimbabwe, Zambia, Rwanda, Malawi, Liberia, Gambia, Guinea, Sierra Leone, and Djibouti; 115+ connected commercial banks including major institutions (Ecobank, Zenith Bank, Standard Bank, Access Bank, UBA); real-time cross-border payments across 17 countries linking 14 national switches and 150+ commercial banks; settlement speed of 120 seconds (instant/near-instant) [27].

C. Economic Impact and Critical Adoption Constraints

PAPSS projects annual savings of \$5 billion for African businesses by eliminating offshore intermediaries and USD/EUR conversion requirements [28]. However, research reveals significant barriers to adoption. Many small and mid-sized enterprises lack awareness of PAPSS. Banks require technical upgrades and staff retraining. Implementation demands workshops and pilot programs to demonstrate value propositions [29].

Critically, banks require compelling incentives to prioritize PAPSS integration over competing pressures. As Kwame Oppong, Director of Fintech and Innovation at Bank of Ghana, states: "Infrastructure has never been the problem. It is about investment capacity and political will" [30]. This insight contradicts technology-centric narratives, revealing institutional coordination as the binding constraint rather than technical capability.

VI. STRATEGIC IMPLICATIONS AND RECOMMENDATIONS

A. Comparative Strategic Analysis

Analysis reveals three viable strategic approaches, each with distinct advantages and constraints:

1. Traditional Infrastructure (Flutterwave model): Advantages include proven regulatory pathways, end-to-end control over payment flows, established trust, and direct relationships with central banks. Disadvantages include high capital requirements (licensing costs), extended

time-to-market (12-24 months per country), cost ceiling imposed by traditional banking rails, and ongoing per-market compliance overhead.

2. Blockchain-Stablecoin Infrastructure (Kredete model): Advantages include dramatically reduced costs (<\$1 vs. an average of 7-8%), faster settlement, the ability to aggregate existing infrastructure without direct licensing, and the capacity to add value-added features (credit building, yield accounts). Disadvantages include regulatory uncertainty in most African markets regarding stablecoins, user education requirements, reliance on stablecoin issuers (e.g., Circle for USDC), and liquidity constraints at on- and off-ramps.
3. PAPSS Integration: Advantages include direct local-currency settlement, eliminating USD/EUR intermediation; real-time processing (<120 seconds); central bank backing that provides regulatory cover; and single integration, enabling access to 115+ banks across 17 countries. Disadvantages include limited current coverage (17 of 54 countries), restrictions on intra-African transfers (excluding diaspora corridors), a bank-centric model that may limit fintech innovation, and adoption dependent on sustained political will and central bank coordination.

B. Optimal Hybrid Architecture

Evidence suggests sustainable competitive advantage requires architectural hybridity rather than technological purity. Optimal architecture combines:

- I. PAPSS integration for intra-African transfers where available, providing the lowest-cost option for B2B and large-value transfers;
- II. Stablecoin rails (USDC/USDT) for diaspora-to-Africa corridors, minimizing fees and enabling instant settlement;
- III. API aggregation layer connecting to existing banks and mobile money operators for last-mile delivery, avoiding per-country licensing;
- IV. Value-add features (credit reporting, expense tracking, invoice management) for differentiation beyond pure money movement.

Implementation principles include: abstracting complexity from users (the system automatically routes via the optimal path); transparent all-in pricing with no hidden fees; multiple payout options (bank transfer, mobile money, cash pickup); a single

platform experience where recipients need no additional apps; and real-time tracking throughout the transfer lifecycle.

VII. CONCLUSION

This research reveals that sustainable competitive advantage in African cross-border payments requires architectural hybridity rather than technological purity. Analysis of \$54 billion in annual remittance flows demonstrates that platforms combining PAPSS integration (where available), stablecoin rails (for diaspora corridors), and API aggregation (for last-mile delivery) will capture disproportionate market share over the next 3-5 years.

However, this conclusion requires a critical caveat: PAPSS adoption will proceed more slowly than technology-centric forecasts predict, constrained not by infrastructure capability but by institutional coordination challenges. Expert interviews confirm that infrastructure availability proves insufficient without investment capacity and political will. Strategic positioning should therefore account for extended parallel operation of multiple systems rather than rapid infrastructure convergence.

The evidence contradicts both pure licensing approaches (capital-intensive, slow scaling) and pure blockchain approaches (regulatory uncertainty). Success requires intelligent system layering: PAPSS for intra-African corridors where live, stablecoins for diaspora corridors, API aggregation for the last mile, and value-add features for differentiation. As regulatory harmonization progresses (as evidenced by the February 2025 Ghana-Rwanda fintech passport), PAPSS coverage expands, and blockchain infrastructure matures, barriers to seamless African money movement will diminish, but at an institutional rather than a technological pace.

REFERENCES

- [1] UseAccrue, "The Future of Cross-African Payments: Opportunities and Regulatory Pinch Points," February 5, 2026. Available: <https://blog.useaccrue.com/the-future-of-cross-african-payments>
- [2] TryDuplo, "Cross-border Payments in Africa: The Complete Guide to International

- Payments, Challenges, and Solutions in 2025," December 9, 2025. Available: <https://tryduplo.com/blog/cross-border-payments-in-africa>
- [3] International Monetary Fund and World Bank, "South Africa: Technical Assistance Report-Cross-Border Payments: South Africa-Zimbabwe Corridor Diagnostic Report," Technical Assistance Reports 2025, 093, 2025.
- [4] TryDuplo, "Cross-border Payments in Africa," December 9, 2025.
- [5] Financier Worldwide, "Cash no longer king: cross-border payments in Africa," 2025. Available: <https://www.financierworldwide.com/cash-no-longer-king-cross-border-payments-in-africa>
- [6] TryDuplo, "Cross-Border Payments for CFOs in 2026: Compliance, FX, and Cash Flow Explained," February 13, 2026.
- [7] Techpoint Africa, "The problem with instant cross-border payments in Africa is deeper than technology — central bank executives," September 30, 2025.
- [8] Financial Stability Board, "G20 Roadmap for Enhancing Cross-border Payments," 2025.
- [9] IMF and World Bank, Technical Assistance Reports 2025, op. cit.
- [10] Financial Stability Board, op. cit.
- [11] Techpoint Africa, op. cit.
- [12] UseAccrue, op. cit.
- [13] UseAccrue, op. cit.
- [14] TryDuplo, "Cross-Border Payments for CFOs in 2026," op. cit.
- [15] TryDuplo, "Cross-Border Payments for CFOs in 2026," op. cit.
- [16] TechCabal, "How Flutterwave is powering the future of cross-border payments," October 16, 2025.
- [17] Flutterwave Blog, "Send App by Flutterwave Relaunches in the US with Expanded Money Transfer to Africa," July 3, 2025.
- [18] TechCabal, op. cit.
- [19] TechCabal, op. cit.
- [20] Partech Partners, "Kredete Raises \$22M Series A," September 15, 2025.
- [21] Tech In Africa, "Kredete Secures \$22M in Series A Funding," September 15, 2025.
- [22] Kredete, "Kredete Launches Africa's First Stablecoin-Backed Credit Card," May 23, 2025.
- [23] TechCabal, "Kredete raises \$22M to launch Africa's first stablecoin-backed credit card," September 15, 2025.
- [24] Wikipedia, "Pan-African Payment and Settlement System," January 13, 2026.
- [25] Mobile Ecosystem Forum, "Pan-African Payment and Settlement System (PAPSS), the revolution of cross-border payments in Africa," February 19, 2025.
- [26] PAPSS, "How it works," October 20, 2021. Available: <https://papss.com/how-it-works>
- [27] International Trade Administration, "Ghana Pan African Payments Settlement System (PAPSS) Update," 2024.
- [28] International Trade Administration, "Pan-African Payment and Settlement System," 2025.
- [29] Mobile Ecosystem Forum, op. cit.
- [30] Techpoint Africa, op. cit.