Competing Rails for Cross-Border Payments: Banks, Fintechs and Stablecoins

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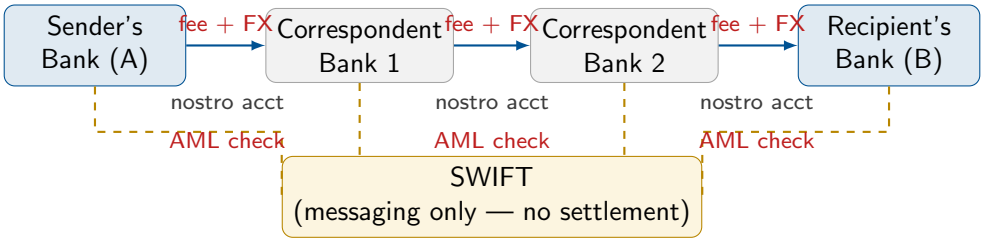
The presentation draws materials from Du, Scharfstein and Huang (2026).

Background on Cross-Border Payments

- Overal size of cross-border payments is estimated to be **$200 trillion per year** (UBS, 2025).
- Remittances exceed **$700 billion per year** to developing countries — larger than FDI for many nations
- Global average cost of sending $200 remittances is **6.36 percent**, well above the G20/SDG target of 3%. Payments can take several days to arrive.
- Meanwhile, FX turnover is **$9.6 trillion per day**, and average bid-ask spreads at **a few basis points**.
- High costs of cross-border payments cannot be explained by liquidity of the FX market.
- **Can new payment rails increase speed and reduce payment costs?**

Can Stablecoins Solve the Problem?

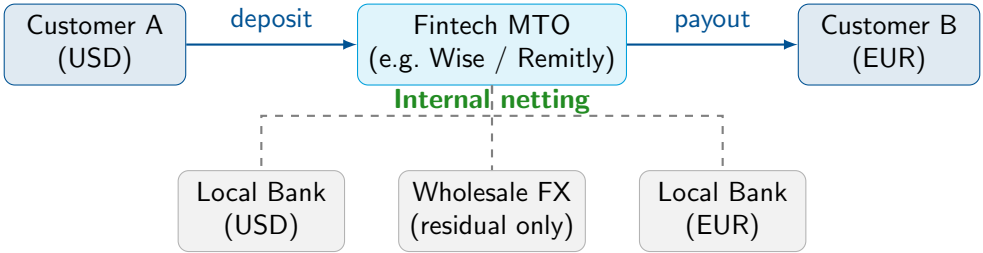
Architecture 1: Correspondent Banking & SWIFT



Reasons for Costs and Delays:

1. Multi-hop fees and FX markups accumulate at every intermediary
2. Nostro balance costs: pre-funded balances in multiple currencies
3. Duplicated AML/CFT compliance: each hop screens independently, causing delays

Architecture 2: Non-Bank Fintech MTOs



- **How do MTOs compress costs and increase speed?**
  - Pre-funded local accounts, instant payout
  - internally net flows in opposite directions; only residual imbalances settled via wholesale FX.
  - Digitized KYC/AML reduces marginal cost per transaction.
  - Transparent upfront pricing.

Architecture 3: The Stablecoin Sandwich

Single-layer sandwich:

$$\underbrace{\text{Fiat}_A}_{\text{on-ramp via CEX}} \longrightarrow \text{USDC/USDT} \xrightarrow{\text{on-chain}} \text{USDC/USDT} \longrightarrow \underbrace{\text{Fiat}_B}_{\text{off-ramp via CEX}}$$

Double-decker sandwich (DeFi on-chain FX):

$$\text{USD} \longrightarrow \text{USDC} \xrightarrow{\text{DEX swap (e.g. Uniswap) or CEX}} \text{EURC} \longrightarrow \text{EUR}$$

Four cost components:

1. **FX cost** on CEX or DEX (stablecoin–fiat or stablecoin–stablecoin spread)
2. **Exchange trading fees** (0–100 bps depending on platform and volume tier)
3. **Blockchain gas fees** (negligible: \$0.001–\$0.53 per transaction)
4. **Fiat on/off-ramp fees** (fixed charges)

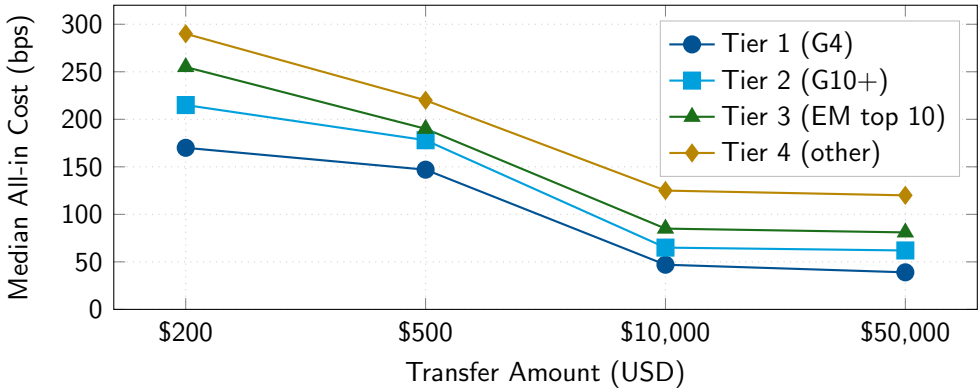
Retail FX Wires sent by Global Banks (Personal transactions)

Date	Send	Receive	Sending Bank	Receiving Bank	FX Cost
11/18/24	EUR	USD	Large German Bank	Large U.S. Bank	365.5
6/26/25	USD	EUR	Large U.S. Bank	Regional French Bank	230.2
7/22/25	EUR	SEK	Large U.S. Bank	Large Scandinavian Bank	198.6
8/1/25	EUR	USD	Large French Bank	Large U.S. Bank	457.8
8/1/25	EUR	USD	Large French Bank	Large U.S. Bank	467.8
11/28/25	CHF	USD	Large Swiss Bank	Large U.S. Bank	309.2
1/6/26	USD	EUR	Large U.S. Bank	Regional German Bank	299.5
1/16/26	SGD	USD	Large Singaporean Bank	Large U.S. Bank	313.7

- FX cost only; international wire fees ($25–$45) add further.
- These banks have 5–10 bps wholesale FX access and have branches/subsidiaries globally.

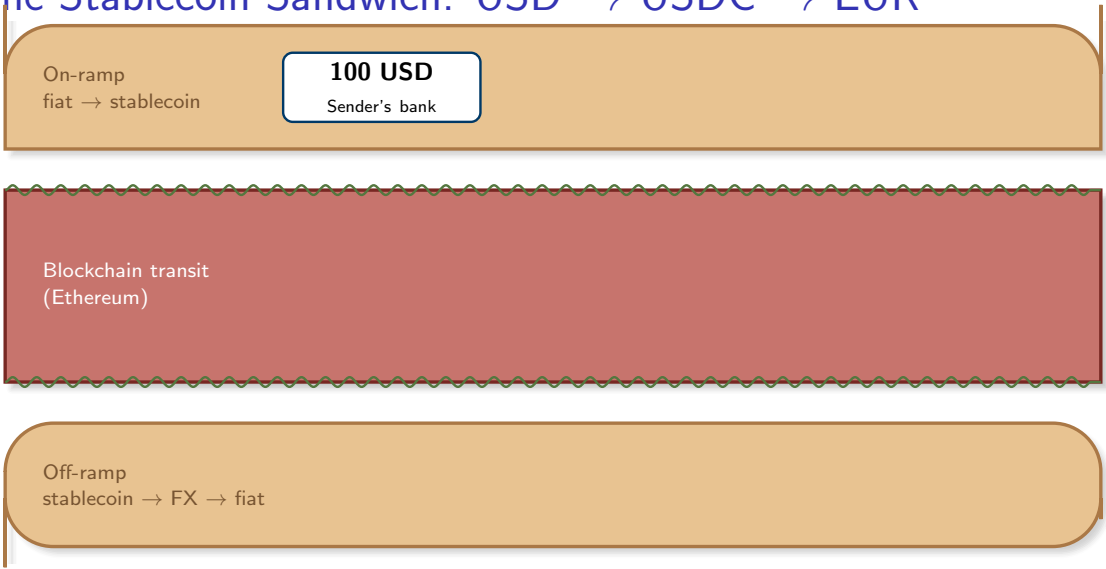
Fintech MTO Costs Across Transfer Sizes and Currency Tiers

Data: three major MTOs, intraday quotes, January 2026. Lowest all-in cost method per corridor.



- Fintech MTOs cut down the costs significantly relative to bank SWIFT wire costs.
- Scale economies — costs fall sharply from \$200 to \$10K. At \$10K: Tier 1/2 converge to 40–65 bps; Tier 3/4 remain 80–130 bps. Gap persists at \$50K.

The Stablecoin Sandwich: USD → USDC → EUR



Fiat ramps (banks, exchanges, KYC/AML, FX) | **On-chain rail** (blockchain transit) | **Costs** accumulate at each layer

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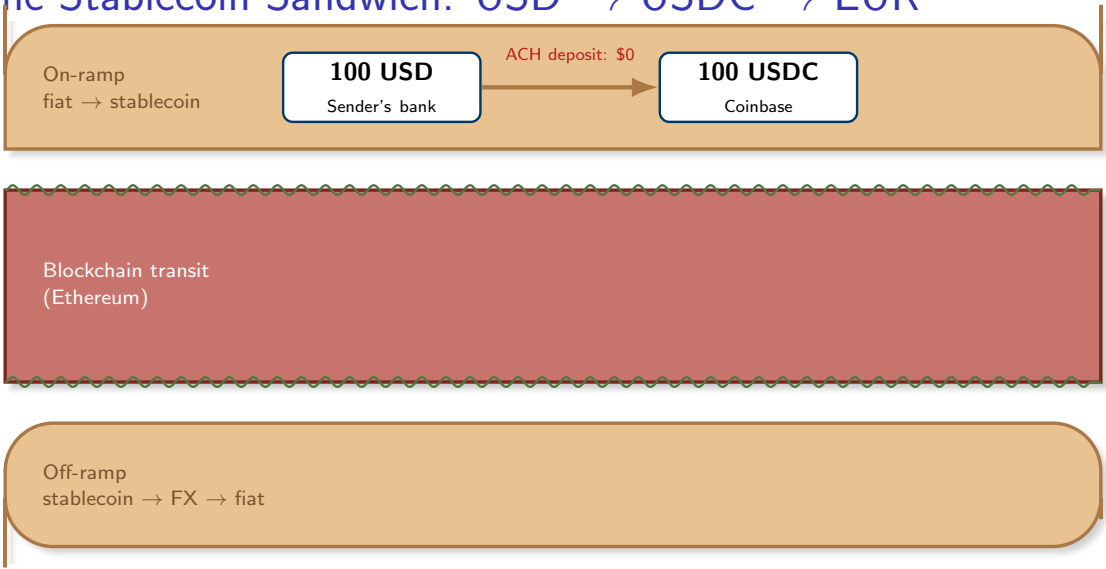

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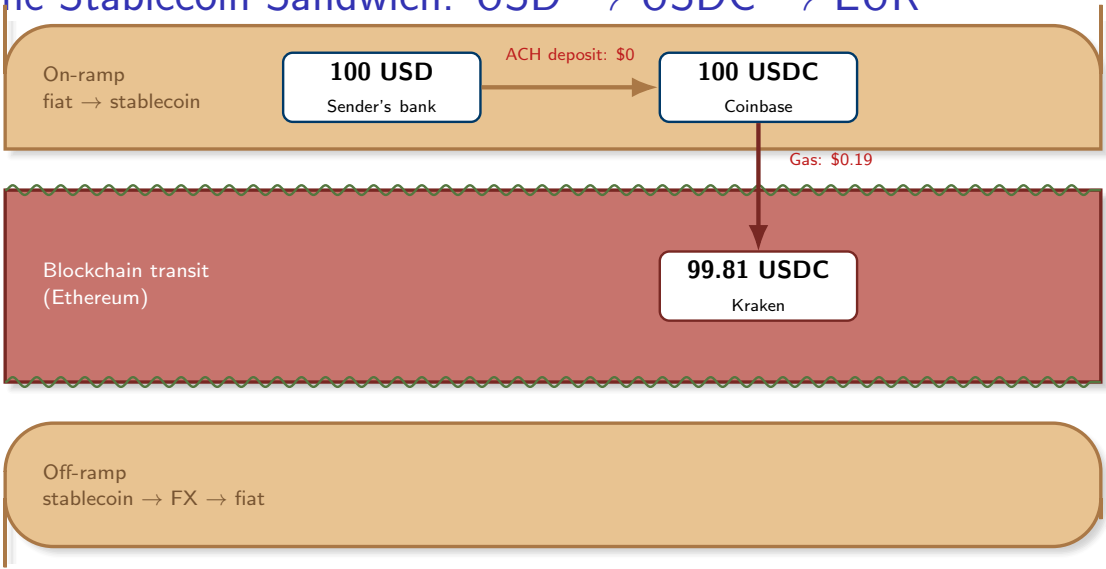

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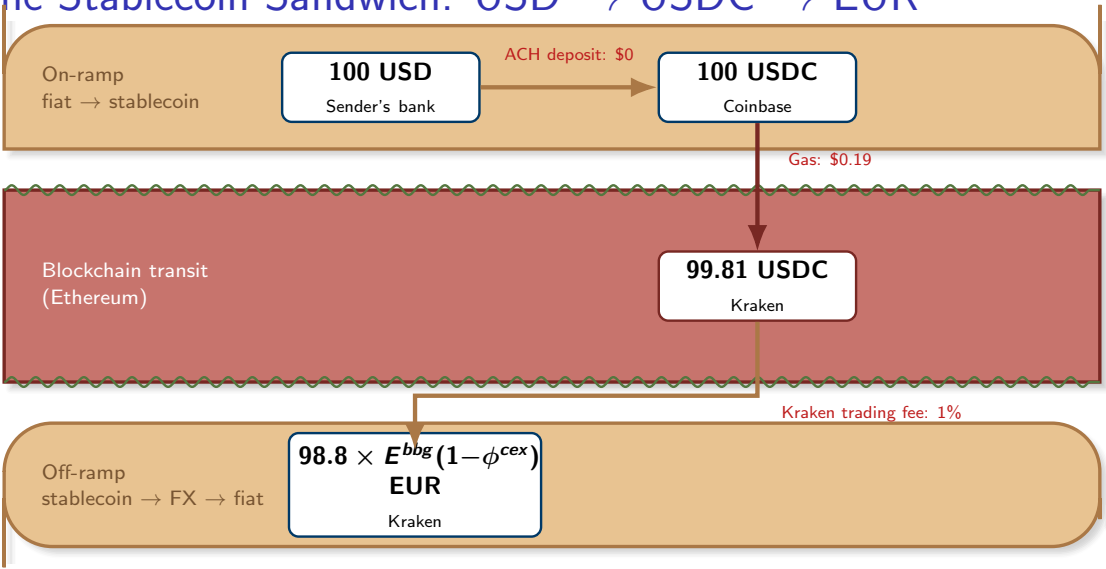

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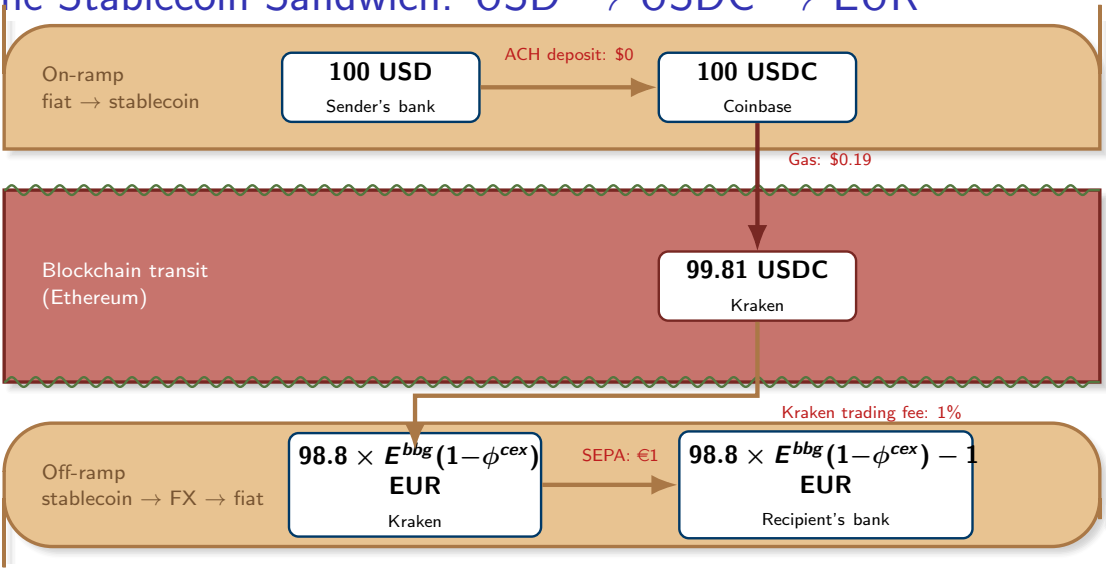

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Stablecoin FX Costs on CEX: Major Currencies

For Tier 1 and Tier 2 currencies, stablecoin-implied FX rates **track Bloomberg BFIX closely**:

Tier	Currency	Mean FX Cost (bps)	SD (bps)	Daily Vol ($M)
1	EUR	−8.2	35.8	185.7
1	GBP	−2.2	87.3	17.4
1	JPY	+1.2	162.2	0.2
2	CHF	−6.7	41.5	3.2
2	SGD	−8.0	29.2	0.7
2	AUD	−9.9	79.7	4.0
2	HKD	−2.0	23.8	3.5
2	CAD	+5.1	52.2	1.7

- Mean FX costs are near zero — stablecoin-implied rates closely match wholesale benchmarks for major currencies.
- SDs are large relative to means. Reliable pricing is not guaranteed over time.

Stablecoin FX Costs on CEX: Emerging-Market Currencies

For Tier 3 and 4 currencies, FX costs are **strongly negative** — stablecoin-implied rates are *more favorable* than Bloomberg benchmarks for inflows into EMs:

Tier	Curr.	Mean (bps)	SD (bps)	Vol ($M/day)
3	INR	–474	382	0.8
3	KRW	–211	1,067	143.5
3	ZAR	–194	177	3.6
3	TRY	–80	134	83.2
3	BRL	–60	81	20.9
3	MXN	–2	45	7.4
4	ARS	–4,393	2,886	2.0
4	NGN	–1,616	2,035	0.1
4	UAH	–429	532	2.3

Stablecoin Access Premium

Residents in capital-controlled economies pay a premium for USD stablecoins, creating a favorable FX rate for inbound senders. The cost advantage is due to capital control barriers, not due to better technology.

Emerging Use Case: Stablecoins Without Off-Ramps

- **Digital goods payments from emerging markets.** EM customers pay directly from their crypto wallets for services. No off-ramp for the sender.
- **Platform payouts to EM recipients.** Example: a platform like Airbnb collects in USD, converts to pesos, but hosts prefer dollars. Now the hosts can hold stablecoins
- **Virtual dollar accounts at scale.** Offering real dollar accounts globally requires costly banking licenses across jurisdictions. Stablecoins provide a scalable substitute.
- **Visa stablecoin cards help spend stablecoins in emerging markets**: Visa captures captures economic value through FX conversion spreads!
- After all payment "innovations", we are back to **CARDS**, which cost more than the digital wallets EMs have already adopted.

Conclusions

1. Costs reflect market power and payment rail architecture, not FX illiquidity.
2. Fintech MTOs have substantially compressed cross-border payment costs.
3. Stablecoins introduce new intermediaiton, rather than eliminate intermediation.
4. Stablecoin EM pricing advantage reflects capital-control frictions, not superior technology.
5. Stablecoin off-ramping into local currency faces significant liquidity constraint. However, important use cases exist without the need for off-ramping.

Stablecoins are not the magic solution to cross-border payments.