

INTERNATIONAL TRADE AND FINANCE MASTERCLASS

PART 22 OF 25 · SECTION X: SPECIALIZED FINANCE

PART 22

BANKING AND PAYMENTS INFRASTRUCTURE FOR INTERNATIONAL BUSINESS

The practical banking infrastructure that makes international commerce possible — correspondent banking, real-time payment rails, payment service providers, the correspondent banking crisis, emerging market banking challenges, and how to build a global banking architecture.

IN THIS PART

- Correspondent banking — how it works and where it is breaking
- Real-time payment rails — UPI, PIX, SEPA Instant
- Payment service providers as legitimate treasury tools
- Building a global banking architecture for multinationals
- Emerging market banking challenges — Nigeria, Egypt, Pakistan
- The future of cross-border payments — CBDCs and DeFi

CASE STUDIES

Each part includes fully worked case studies with detailed calculations, real-world context, and practical lessons for CFOs and finance leaders.

■ THE PAYMENT INFRASTRUCTURE LAYER

The Plumbing of International Commerce

International trade and finance could not exist without payment infrastructure — the network of banks, clearing systems, messaging protocols, and settlement mechanisms that move money across borders. Most CFOs interact with this infrastructure indirectly, through their banking relationships, without needing to understand its technical architecture. But the infrastructure is changing rapidly, in some cases breaking down, and in others being rebuilt in new forms. The CFO who understands these changes is in a position to reduce costs, avoid operational surprises, and capture competitive advantage from new payment technologies.

The Correspondent Banking System and Its Fragmentation

We covered the basics of correspondent banking in Part Five — the chain of banks through which international wire transfers flow from sender to recipient. The problem we touched on there deserves deeper examination here, because it is one of the most serious operational challenges facing companies doing business in developing markets.

Between 2011 and 2023, the number of active correspondent banking relationships globally fell by approximately twenty-three percent. The reason is compliance economics. Anti-money-laundering regulations require banks to conduct extensive due diligence on their correspondent relationships — screening every transaction for sanctions exposure, monitoring for suspicious patterns, and maintaining documentation standards that are expensive and time-consuming. For large, highly active correspondent relationships — say, between Citibank New York and Deutsche Bank Frankfurt — this compliance investment is commercially justified by the transaction volume. For small banks in small markets with low transaction volumes, the compliance cost often exceeds the revenue. Major banks have been systematically terminating these relationships — a process called de-risking — leaving companies that deal with counterparties in affected countries struggling to make or receive payments.

The Most Affected Markets

The markets most severely affected by correspondent banking de-risking include much of Sub-Saharan Africa, the Caribbean, parts of Central Asia, several Pacific Island nations, and countries under broad sanctions exposure. In these markets, a payment that travels through four or five correspondent banks can take two to three weeks and may fail entirely if one correspondent in the chain decides it cannot process the transaction for compliance reasons. For a company with suppliers or customers in these markets, this is not an abstract compliance problem — it is a cash flow and operational problem that requires practical solutions.

◆ CORRESPONDENT BANKING FAILURE – COST AND SOLUTION

CORRESPONDENT BANKING FAILURE – COST ANALYSIS

SCENARIO: US company pays Nigerian supplier \$180,000

PAYMENT ATTEMPT 1 (Day 1):

Wire sent through Correspondent Bank A

Day 3: Correspondent Bank A rejects – AML screening flag

Reason: Nigerian bank on restricted list

Wire returned minus \$45 in fees

PAYMENT ATTEMPT 2 (Day 4):

Route through alternative correspondent (Bank B)

Day 7: Payment reaches Bank B

Day 8: Bank B requests enhanced due diligence documentation

Day 12: Documentation provided

Day 14: Bank B approves and forwards to Nigerian bank

Day 16: Nigerian bank receives funds

TOTAL COST OF TWO PAYMENT ATTEMPTS:

Failed attempt fees: \$45

Successful attempt fees: \$92

Supplier delay penalty (15 days @ 2%/month prorated):

$\$180,000 \times 2\%/30 \times 15 = \$1,800$

Internal staff time managing process: \$1,200 (est.)

Total payment cost: \$3,137 on \$180,000 = 1.74%

SOLUTION: Pre-qualify payment routes BEFORE ordering

Test payment route with \$1,000 pilot before \$180K

Build 15-20 day payment buffer into supply terms

Consider fintech alternatives (e.g., local payment providers)

Real-Time Payment Rails: The New Infrastructure

While the correspondent banking system is contracting in some markets, a new generation of real-time payment infrastructure is emerging that promises to make domestic and increasingly cross-border payments faster, cheaper, and more reliable. These systems are government-backed or regulated real-time gross settlement systems that clear and settle payments in seconds rather than days.

System	Country	Transaction Volume (2023)	Settlement Time	Cross-Border?
UPI (Unified Payments Interface)	India	Over 100 billion transactions/year	Seconds	Expanding — live with Singapore, UAE, UK
PIX	Brazil	Over 40 billion transactions/year	Seconds (24/7)	Expanding — discussions with other LATAM countries
SEPA Instant	EU/UK/EA	Billions of transactions/year	10 seconds	Within SEPA zone only
FPS (Faster Payments)	United Kingdom	Over 4 billion transactions/year	Seconds	Limited international links via FPS
RTP (Real-Time Payments)	USA	Growing but small vs. ACH	Seconds	Domestic only currently
Interac e-Transfer	Canada	Over 1 billion/year	Minutes	Domestic only

Payment Service Providers as Legitimate Treasury Tools

A new generation of payment service providers — Wise Business, Airwallex, Payoneer, Corpay, and others — has created an alternative to traditional bank wire transfers for international payments that is faster, cheaper, and increasingly appropriate for corporate treasury use. These platforms do not hold banking licenses in the traditional sense but operate as licensed money service businesses or electronic money institutions, holding client funds in segregated accounts and executing FX conversions at rates far closer to the interbank midpoint than most corporate banking relationships provide.

◆ PSP vs. BANK WIRE — COST COMPARISON

PAYMENT SERVICE PROVIDER vs. BANK WIRE — COST COMPARISON

TRANSACTION: US company pays EUR 50,000 to French supplier

TRADITIONAL BANK WIRE:

USD required (at bank rate 1.0780 buy): \$53,900

vs. interbank midpoint (1.0843): \$54,215

FX spread loss: \$315

Bank outgoing wire fee: \$45

Correspondent fees (OUR): \$15 + \$20 = \$35

Total cost: \$315 + \$45 + \$35 = \$395

Settlement time: 1-3 business days

AIRWALLEX / WISE BUSINESS:

USD required (at platform rate 0.25% spread): \$54,036

vs. interbank midpoint: \$54,215

FX spread: \$179

Platform fee: \$20 flat (or 0.2% = \$108)

Total cost: \$179 + \$20 = \$199

Settlement time: same day or next day

SAVING vs. bank wire: \$395 - \$199 = \$196 per transaction

ANNUAL IMPACT (120 such transactions/year):

Annual saving: 120 x \$196 = \$23,520

LIMITATION: PSPs appropriate for routine AP payments

NOT appropriate for: large transactions >\$500K,
 transactions requiring bank guarantee infrastructure,
 markets where PSP has no local license

01

CASE STUDY 1

Lagos Textiles Ltd.

*Nigerian Banking Constraints — Managing Business When the System Does Not Work***Background**

Lagos Textiles Ltd. imports fabric from China, India, and Turkey, and exports finished garments primarily to European buyers. The company operates entirely within Nigeria's banking system, which is subject to Central Bank of Nigeria foreign exchange restrictions that have at various times limited the ability to purchase USD for import payments, created parallel market rates significantly above the official rate, and imposed mandatory LC requirements on many imports. This case study documents how the company's treasury function manages through these constraints.

◆ NIGERIAN BANKING CONSTRAINT MANAGEMENT

LAGOS TEXTILES – NIGERIAN FX CONSTRAINT MANAGEMENT

Annual import payments needed: \$8,400,000

Annual export receipts: \$6,200,000

CBN FX ALLOCATION CHALLENGES:

Official USD/NGN rate: 1,500 (post-2023 unification)

Monthly FX allocation from CBN: variable, often insufficient

Wait time for USD allocation: 4-12 weeks

Mandatory Form M (CBP equivalent) for every import

LC required for all imports >\$50,000

MANAGEMENT STRATEGIES:

1. EXPORT RETENTION ACCOUNT

Export proceeds retained in USD account (40% allowed)

Retained for import payments – avoids allocation queue

Annual retained: \$6.2M x 40% = \$2,480,000

2. IMPORT LC PRE-FUNDING

Open LCs 8-12 weeks before goods needed

Build FX allocation lead time into ordering schedule

3. SUPPLIER PAYMENT TERMS

Negotiate 60-90 day terms with all suppliers

Provides buffer for FX allocation processing

4. REGIONAL DIVERSIFICATION

Use Kenyan bank account for some supplier payments

Kenya has better USD access than Nigeria

NET RESULT: Company operates with 90-day payment cycle

vs. 30-day market standard – cost of operating in Nigeria

Working capital requirement 3x higher than in Germany

02

CASE STUDY 2

FinTech Payments Co.

Building a Multi-Currency Global Treasury Architecture

Background

FinTech Payments Co. is a US-based payments technology company with operations in twenty-two countries and revenues in fourteen currencies. When the company went public, its FX exposure and treasury infrastructure were examined closely

by analysts and institutional investors. The CFO had to build a world-class treasury architecture from scratch, under public company scrutiny, in under twelve months.

◆ GLOBAL TREASURY ARCHITECTURE — ROI

FINTECH PAYMENTS — GLOBAL TREASURY ARCHITECTURE

Annual revenue: \$280,000,000 in 14 currencies

Annual FX volume: approximately \$180,000,000

ARCHITECTURE CHOSEN:

Global header: US parent — USD functional

Regional hubs: UK (EUR/GBP), Singapore (AUD/SGD/INR)

Local accounts: 22 countries for operational payments

BANKING PANEL:

Global relationship banks (3): JP Morgan, Citi, HSBC

Regional banks: Barclays (UK/EU), DBS (Asia)

Local banks: one per country for operational accounts

PSPs: Airwallex for AP payments in 14 countries

FX EXECUTION:

80% automated via TMS within approved parameters

20% manually approved (trades >\$500K)

FX spread negotiated: 0.08% on major pairs

Annual FX cost: \$180M x 0.08% = \$144,000

vs. pre-architecture 0.65% spread: \$1,170,000

Annual FX execution saving: \$1,026,000

TOTAL ARCHITECTURE ANNUAL SAVING vs. PREVIOUS:

FX execution: \$1,026,000

Bank fee reduction: \$380,000

Working capital optimization: \$820,000

TOTAL: \$2,226,000

Implementation cost: \$1,800,000 (TMS + legal + banking)

Payback: 9.7 months

03

CASE STUDY 3

The Future — Central Bank Digital Currencies

mBridge and What Instant Programmable Cross-Border Settlement Means

Background

Project mBridge is a multi-CBDC platform developed by the central banks of China, Hong Kong, Thailand, UAE, and the Bank for International Settlements. It enables instant cross-border payments in central bank digital currencies, settling in seconds rather than days, at near-zero cost, without the need for correspondent banks. While still in a pilot phase as of 2024, mBridge provides a concrete illustration of what the future of cross-border payments may look like — and what it would mean for the financial infrastructure that underpins international trade.

◆ CBDC — IMPLICATIONS FOR INTERNATIONAL TREASURY

mBRIDGE vs. CORRESPONDENT BANKING — THE FUTURE

CURRENT CORRESPONDENT BANKING:

Settlement time: 1-5 business days

Cost: \$20-100+ per transaction + FX spread

Availability: Business hours, limited weekends

Transparency: Limited real-time tracking

Intermediaries: 2-6 banks in the chain

mBRIDGE / CBDC CROSS-BORDER (pilot results):

Settlement time: 2-10 seconds

Cost: Near zero (no correspondent markup)

Availability: 24/7/365

Transparency: Full real-time visibility

Intermediaries: Zero — direct central bank settlement

IMPLICATIONS FOR CFOs:

Working capital: eliminate 2-5 days of float on payables

On \$100M annual cross-border payments at 2.5 days:

$\$100M \times 8\% \times 2.5/365 = \$54,795$ annual saving

Payment certainty: eliminates failed payment risk

Programmable payments: payments with embedded conditions

(e.g., auto-release on customs clearance confirmation)

TIMELINE: Partial adoption in participating countries within 5-10 years. Full adoption: longer horizon.

CFOs should monitor but not yet restructure treasury infrastructure around CBDCs.