



NEXTRADE GROUP
World trade is changing. Are you?

POLICY REPORT · OCTOBER 2026

From Friction to Flow 2.0

Leveraging Technology and Smart Regulation to Unlock
SME Cross-Border Payments

1,100

SME importers
surveyed in Brazil,
Indonesia, South Africa,
and Thailand

34

economies scored on
the Cross-Border
Payments Enablement
Index

30

policy, technology, and
institutional indicators
across six pillars

+3.6%

bilateral trade gain from
a 10% Index
improvement, most
conservative model

EVERYDAY CHALLENGES OF SMALL BUSINESSES IN GLOBAL TRADE

“I had to go to the bank to apply, went back again to fill in the forms, and then a 3rd time to make the payment.”

SME IMPORTER · SOUTH AFRICA,
SEP 2025

“I had to contact customer service three times, submit verification documents, and wait over a week before the cross-border payment was completed.”

SME PAYING A FOREIGN VENDOR ·
INDONESIA, SEP 2025

“My bank charges 3–6 percent for international transfers, costing me US\$1,500–\$3,000 on a US\$50K deal... Waiting 30–60 days for payments creates cash flow gaps.”

ONLINE SELLER SME · UNITED
KINGDOM, APR 2025

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Executive summary

Today's global macroeconomic backdrop is posing challenges to job creation and inclusive growth in the developing world. One potential solution is in sight: the growing opportunities for small and medium enterprises (SMEs) to grow their sales through cross-border ecommerce. Yet today, six years after the G20 issued its Roadmap for Cross-Border Payments calling for faster and cheaper payments by the end of 2027, cross-border payments are failing SMEs: payments are slow, opaque, and costly. The Financial Stability Board (FSB) has concluded that most world regions are not progressing rapidly enough to reach the G20's goals, while the Bank for International Settlements found that improvements in end-user outcomes have been modest — only 35 percent of retail cross-border payments are credited within one hour, well below the G20's goal of 75 percent.

At its March 2026 Payments Summit, the FSB launched a “new implementation phase” to address implementation delays with the G20 Roadmap. This report provides insight into that next phase: it tracks pending challenges and emerging opportunities in SMEs' cross-border payments, identifies policy reforms for accelerating progress toward the G20's goals, and proposes ways to more holistically track the health of the cross-border payments system.

53%

of SMEs pay transaction costs exceeding 5% of transaction value

9 in 10

rely on informal workarounds, such as paying through friends and family abroad

42%

have adopted agentic AI to fuel their payments operations

US\$390B

global stablecoin payments in 2025 — a doubling in one year; 39% of SMEs use them

What this report offers

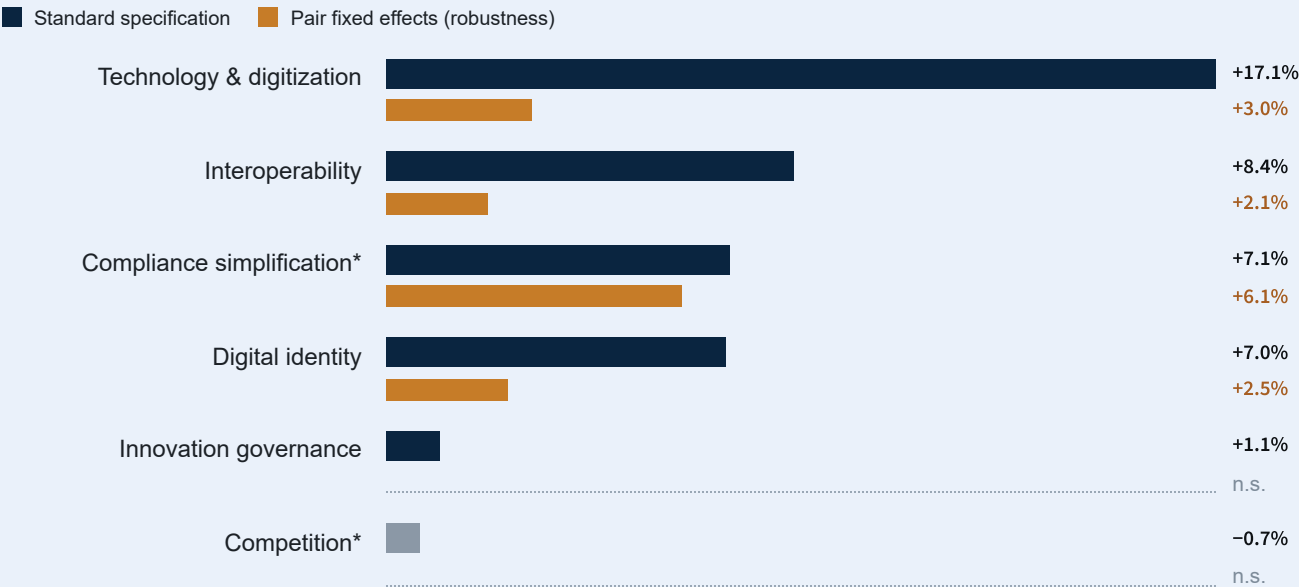
- **New SME survey data** on cross-border payments from Brazil, Indonesia, South Africa, and Thailand. Payments have become faster and more accessible — but more than 50 percent of SMEs pay transaction costs exceeding 5 percent, and 9 in 10 rely on informal workarounds that make payments more opaque to regulators.
- **A country-specific Cross-Border Payments Enablement Index** tracking 30 policy, technology, and institutional indicators across six pillars — compliance simplification, technology and digitization, innovation governance, digital identity, interoperability, and competition — in 34 countries.
- **Gravity model estimates** linking the Index to trade, income, and jobs. A 10 percent Index improvement expands bilateral trade under the most conservative model by 3.6 percent — similar to a 0.8–2.7 percentage-point tariff cut — and translates into GDP per capita gains of 1.5–3.7 percent and employment gains of 0.5–

2.6 percent.

- **Data-driven roadmaps for priority reforms.** Improvement on the technology pillar — digital STR tools, e-KYC, AI in AML/CFT — is associated with a 17.1 percent increase in bilateral trade; interoperability with 8.4 percent; corporate digital identity with 7.0 percent; and compliance simplification with up to 7.1 percent.

EXHIBIT 1

Pillar trade-elasticity coefficients (gravity model): effect on bilateral trade of a 10% improvement in each pillar score



Separate PPML gravity models with year fixed effects, standard bilateral controls, country-pair-clustered standard errors. *Compliance and competition estimates not statistically significant at conventional levels. Pillar estimates are not additive. Source: Nexttrade Group estimates.

EXECUTIVE SUMMARY

Eight policy recommendations

The policy recommendations that follow are organized around the payments index pillars:

01 Calibrate compliance obligations to actual risk

Effective cross-border payment reform is not about deregulation; it is about calibrating regulation to risk. The greatest friction in the SME survey in this study is not the cost of the payment itself — but rather the cost of the compliance process surrounding a payment. 61 percent of SMEs report that documentation requirements associated with cross-border payments are a recurring challenge when importing goods; on average SMEs spend 31 minutes to make a wire transfer. These burdens fall disproportionately on small traders that lack the compliance infrastructure of large corporations.

Governments should lower these burdens through tiered compliance thresholds calibrated by transaction value and counterparty risk. Low-value SME payments below US\$10,000 should qualify for simplified customer due diligence procedures and digital declaration. Brazil's cutting foreign exchange documentation codes from 180 to 10 under Law 14,286/2021 is a benchmark model.

Specific milestones under this pillar include publication of simplified customer due diligence (CDD) thresholds for low-value payments; reduction in the number of documents required for cross-border payments below and above US\$10,000; and reduction in average bank processing time per cross-border payment.

02 Digitize compliance and deploy AI to target risk

Digitization of compliance with financial regulations provides a high return on investment. Economies with the lowest scores in this pillar, such as Cambodia, Egypt, Morocco, Mexico, and Argentina, have a ready opportunity to translate technology investments into trade gains.

Governments should digitize compliance reporting by establishing or upgrading to cloud-based suspicious transaction reporting (STR) platforms; mandating e-KYC and digital onboarding rights for financial services; and implementing digital trade single windows. The Bank for International Settlements Project Mandala is a model for multi-country digitized compliance checks that could be scaled.⁴⁰

Governments should also accelerate AI transformation through regulatory frameworks that permit AI-assisted screening for anti-money laundering (AML) and countering the financing of terrorism (CFT), with clear accountability provisions for false positives and negatives.² The Financial Action Task Force (FATF) public consultation on strengthened payment transparency standards, launched in June 2026, reinforces this direction; governments that engage proactively today can shape standards that reflect their own implementation realities.⁶⁸

In addition, Verification of Payee and Confirmation of Payee schemes, such as in the EU and the United Kingdom, have reduced fraud losses and built trust in payments.⁵⁶ Governments should mandate or incentivize payee verification as a condition of participation in domestic fast payment rails, with cross-border interoperability requirements built in from the outset.

03 Build interoperability through standards, APIs, and digital identity

Lack of interoperability costs SMEs in cross-border transactions: when two payment networks cannot exchange messages in a common format, when a digital identity issued in one jurisdiction is not recognized in another, and when settlement finality requires multiple correspondent intermediaries, the costs are borne by the end user. While Singapore, the United Kingdom, the Netherlands,

Germany, and Spain are ready to interoperate in multiple dimensions, most economies lag behind in such areas as adoption of the ISO 20022 messaging standard, interoperable real-time payment networks, and mutually recognized AML/CFT controls.

Governments around the world should commit to full ISO 20022 deployment, including cross-border messaging compatibility. They should also create and scale interoperability initiatives: PAPSS in Africa and the EuroPA/EPI partnership in Europe demonstrate what regional implementation looks like in practice, while Project Nexus, the BIS Innovation Hub's initiative, provides a model and means to connect real-time payment rails.⁴³

Governments should also mandate a corporate digital identity, readily available as the Legal Entity Identifier (LEI), as the required identifier for business-to-business payments above US\$5,000, and that this requirement be accompanied by mutual recognition agreements with trading partners.

04 Promote SMEs' adoption of best-fit digital payment methods

The demand-side evidence in this study is unambiguous: SMEs are willing and eager to adopt lower-cost payment methods when they are accessible. SMEs favor fintechs as the most accessible payment methods and real-time payment systems as the cheapest and the most transparent option available to them and increasingly opt for stablecoins for at least some transactions. The survey also suggests that SMEs do not just pay in one fashion — but seek out methods that are fit for purpose.

To promote the use of most suitable alternative payment methods and competition among providers, governments should establish transparent payment cost comparison frameworks for different payment systems and providers. Payment service providers should be required to publish standardized all-in cost disclosures for cross-border transactions. Fee transparency mandates, modeled on the EU's Payment Services Regulation (PSR) cross-border fee disclosure requirements, reduce information asymmetries that systematically disadvantage small businesses.

Governments could also invest in financial literacy programs that equip SMEs to evaluate payment method options — staff-hours per payment is a meaningful metric.

05 Strengthen innovation governance for stablecoins and agentic AI

The rise of agentic AI and stablecoins, among others, heightens the urgency of innovation governance. Yet the Innovation Governance pillar is the weakest across all 34 economies in our Index. Singapore leads it thanks to a comprehensive stablecoin licensing regime, regulatory sandbox for payments fintech, and AI oversight framework for financial services.

Governments should consider establishing a governance framework for digital currencies. The legislative models are now available: the U.S. GENIUS Act provides a licensing structure; the EU's MiCA Regulation establishes electronic money token and asset-referenced token classification with ESMA technical standards already live; Hong Kong's Stablecoins Ordinance demonstrates that small open economies can move quickly without sacrificing prudential rigor; and the Bank of England's June 2026 policy statement, with its GBP 40 billion issuance guardrail, shows how macroprudential constraints can be built into framework design from the outset.

The appropriate response to high stablecoin usage is not a ban — Nigeria's 2021 banking ban, which pushed crypto transaction activity to peer-to-peer channels, shows why.⁵⁷ Rather, a response should be proportionate governance that promotes stablecoin use in the regulated infrastructure.⁵⁰

As for agentic AI, governments need to focus on accountability: when an AI agent initiates, routes, or settles a cross-border payment autonomously, existing liability frameworks do not clearly assign responsibility for errors, fraud, or sanctions violations. Governments should develop accountability provisions for AI agents in financial services, specifying that the financial institution that deploys the agent bears full liability for its actions. Compliance-by-design requirements should be incorporated into AI system standards for payment applications. The Global Financial Innovation Network (GFIN) Working Group on agentic AI provides the multilateral forum through which these standards could be developed and agreed upon by financial regulators.

06 Promote competition and market access

Competition in payment services is a precondition for the cost reductions and innovation that SMEs need. The competition and non-discrimination pillar scores in our Index show the widest variation of any pillar, with India, Cambodia, and Indonesia trailing far behind leaders New Zealand, Chile, the United States, and Australia.

Governments should ensure that non-bank payment providers have access to settlement infrastructure on fair and non-discriminatory terms. In addition, stablecoin issuers ought to be permitted to operate on equivalent regulatory terms to bank-issued electronic money, avoiding the regulatory arbitrage that emerges when different instruments performing similar economic functions are subject to different rules.⁵⁹ South Africa's drive to open access to non-bank players in the payments ecosystem is an inspiring case in point.

07 Improve tracking of progress on the G20 Roadmap

The G20 Roadmap's four targets — reduced cost, higher speed, and greater access and transparency — have been useful for tracking progress toward its goals. But they are not a monitoring framework. For example, a country could attain progress on cost without improving SME access. Or, it could improve average speed without addressing the long tail of payments that take days. What is needed is a complete monitoring architecture: (1) comprehensive outcome-level KPIs; (2) policy and institutional inputs that drive them; and (3) bottom-up evidence from SME end-users (Exhibit 2).

First, the G20 should extend the Roadmap's monitoring KPIs to include reliability, or the share of payments arriving without manual intervention or delay; interoperability, or the number of live bilateral real-time payment linkages for business-to-business settlements; innovation readiness, or the operational status of stablecoin, open finance, and AI governance frameworks; proportionality, or whether simplified procedures exist for low-value commercial payments; and documentation costs, or the administrative time and cost burden per cross-border payment as measured through periodic business surveys.

Second, policies conducive to payments need to be tracked. Currently, the G20 Roadmap provides no mechanism for tracking the policy, technology, and institutional inputs that drive outcomes, leaving governments without guidance on what to reform. The Cross-Border Payments Enablement Index developed in this study provides this tool. Its 30 indicators — each trackable over time across economies — translate vague aspirations into six specific policy dimensions with demonstrated relevance to international trade. The FSB's March 2026 "new implementation phase" and its July 2026 call for debate on "the next chapter" create a window of opportunity for adopting this framework.

Third, SME survey evidence as developed in this study should be incorporated as a formal monitoring instrument of the G20 goals. SME surveys ground-truth the impacts of policy reforms. For example, if pillar scores improve but businesses report no reduction in frictions, the policy change has not reached its intended beneficiaries. In addition, SME surveys help track cross-border payment gaps in a nuanced fashion, by different firm segments and payments use cases, which in turn enables targeted policy interventions. The G20 should commission surveys every two years and track its own goals and more. A declining share of SMEs that use workarounds is the most direct signal that formal channels are working.

08 Translate policy and survey data into customized country-specific reform roadmaps, technical assistance, and trade commitments

Building on these data, each G20 and FSB member economy should establish a baseline composite Index score and set pillar-level improvement targets aligned with FSB Roadmap reporting.

Targets should be calibrated to baseline: emerging market economies do not need Singapore-style highly sophisticated regulatory architecture overnight, but they should demonstrate measurable year-on-year improvement on their weakest Index pillars and commit to specific tangible policies in that pillar, such as "establishing a stablecoin governance framework" or "building an agentic AI

regulatory sandbox.” Exhibit 3 illustrates: for example, Brazil, with its strong technology and interoperability scores, is well positioned but lacks the regulatory infrastructure to govern stablecoin adoption.

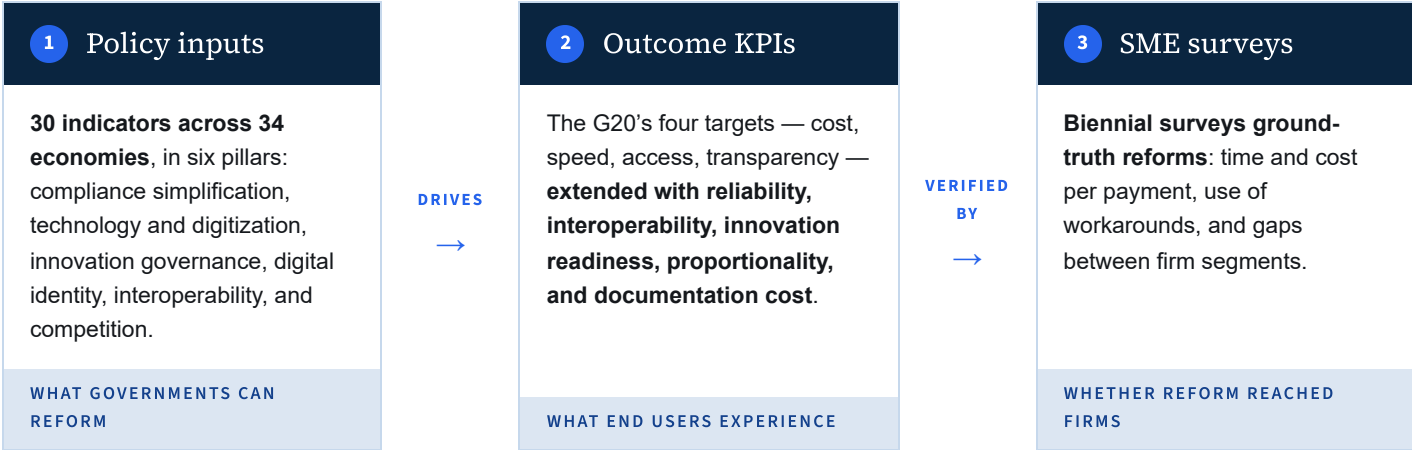
International organizations can also fashion and promote these roadmaps. The IMF Article IV consultation process and World Bank technical assistance programs can incorporate diagnostics from the Index and prioritize reforms. Technical assistance should focus on trade corridors — it is the economy with the lower Index score that constrains trade growth for both economies — and digital trade and economy agreements can bind interoperable regulations, payments, and digital identity.

These recommendations are not new ideas: most echo priorities the G20 Roadmap has endorsed since 2020. What has been missing is a robust architecture of measurement and reform: specific indicators that translate each recommendation into a measurable commitment; evidence on which reforms yield the highest trade returns; and a feedback mechanism connecting regulatory inputs to end-user business outcomes. This study provides all three.

Two tools anchor these recommendations: a monitoring architecture that connects policy inputs to end-user outcomes, and country-specific reform roadmaps that translate Index diagnostics into pillar targets.

EXHIBIT 2

Monitoring architecture for the G20 Roadmap: from policy inputs to outcomes to SME evidence



Condensed; the full architecture appears with Recommendation 7. Source: Nextrade Group.

EXHIBIT 3

Illustrative country reform roadmaps based on the Cross-Border Payments Enablement Index

Brazil		9.27 / 12
WEAKEST PILLARS → TARGET		PRIORITY ACTIONS
Innovation governance	0.75 → 1.25	01 Stablecoin governance — establish a national framework
		02 Agentic AI — formalize provisions for AI-initiated payments
		03 Pix cross-border — extend the rail to B2B
Thailand		6.77 / 12
WEAKEST PILLARS → TARGET		PRIORITY ACTIONS
Innovation governance	0.25 → 1.00	01 FX documentation — simplify requirements for importers
Compliance	1.12 → 1.50	02 Stablecoin framework — formalize the 58% already using them
		03 PromptPay — extend the rail to B2B
Indonesia		6.62 / 12
WEAKEST PILLARS → TARGET		PRIORITY ACTIONS
Competition	0.60 → 1.20	01 Forced routing — relax National Payment Gateway rules
Interoperability	1.00 → 1.50	02 Project Nexus — leverage go-live for cross-border RTP
		03 Stablecoin framework — establish rules where none exist
Nigeria		6.62 / 12
WEAKEST PILLARS → TARGET		PRIORITY ACTIONS
Innovation governance	0.25 → 0.75	01 Stablecoin governance — replace the 2021 ban
Interoperability	1.17 → 1.67	02 PAPSS — complete regional integration
		03 Open banking — accelerate under PSV 2028
South Africa		6.43 / 12
WEAKEST PILLARS → TARGET		PRIORITY ACTIONS
Identity	0.33 → 1.00	01 Digital identity — deploy corporate and individual systems
Innovation governance	0.25 → 0.75	02 Innovation sandbox — activate the existing framework
		03 Exchange control — digitize documentation

Pillar scores on a 0–2 scale; composite is the sum of six pillar scores (max 12); bars shown against the 12-point scale. Detailed diagnostics accompany Recommendation 8. Source: Cross-Border Payments Enablement Index, 2025/26 data.

SECTION 1

Introduction

Emerging market and developing country governments face a challenging global environment for job creation, inclusive growth, and resilience. One practical lever is easier cross-border payments for SMEs engaged in ecommerce and trade. For small firms, the ability to pay and get paid quickly, cheaply, transparently, and securely is central to importing inputs, reaching customers, diversifying suppliers, and participating in global markets.

However, cross-border payments remain costly and burdensome for many SMEs. High fees, documentation requirements, foreign exchange controls, fragmented payment rails, and compliance processes raise transaction costs and absorb staff time. These frictions affect not only SMEs, but also exporters, marketplaces, payment service providers, and financial institutions that intermediate SME trade.

THE G20 ROADMAP TARGETS FOR END-2027

- Reduce average retail cross-border payment costs to **1 percent or less**
- Eliminate corridors with costs **above 3 percent**
- Make **75 percent** of retail cross-border payments available within one hour
- Ensure all end-users have access to **at least one electronic option** for sending and receiving payments

Progress has been made in modernizing cross-border payments through upgrades to correspondent banking, adoption of ISO 20022, wider use of APIs, digitized compliance tools, improved fraud detection, and projects linking fast-payment systems across borders. Progress nevertheless remains uneven: the FSB's October 2025 assessment concluded that most regions are not advancing quickly enough to meet the G20 targets by the end of 2027.

This report examines how policy, regulation, and payment infrastructure shape the time, cost, and reliability of cross-border payments for smaller firms. It draws on a 2026 online survey of importers in Brazil, Indonesia, South Africa, and Thailand; a 34-economy index of policies and institutions that support payments; estimates of the association between index scores and bilateral trade in manufactured goods; and country reform cases. Each source answers a different question: the survey describes firms' reported experiences, the index compares policy settings, and the trade model identifies a relationship that requires cautious interpretation.

Financial integrity rules protect the payment system. Their design and implementation also determine the work required of legitimate users. The policy task is to reduce unnecessary duplication and manual processing while preserving effective checks, auditability, and accountability.

SECTION 2

How payments regulations shape trade and ecommerce: insights from survey data

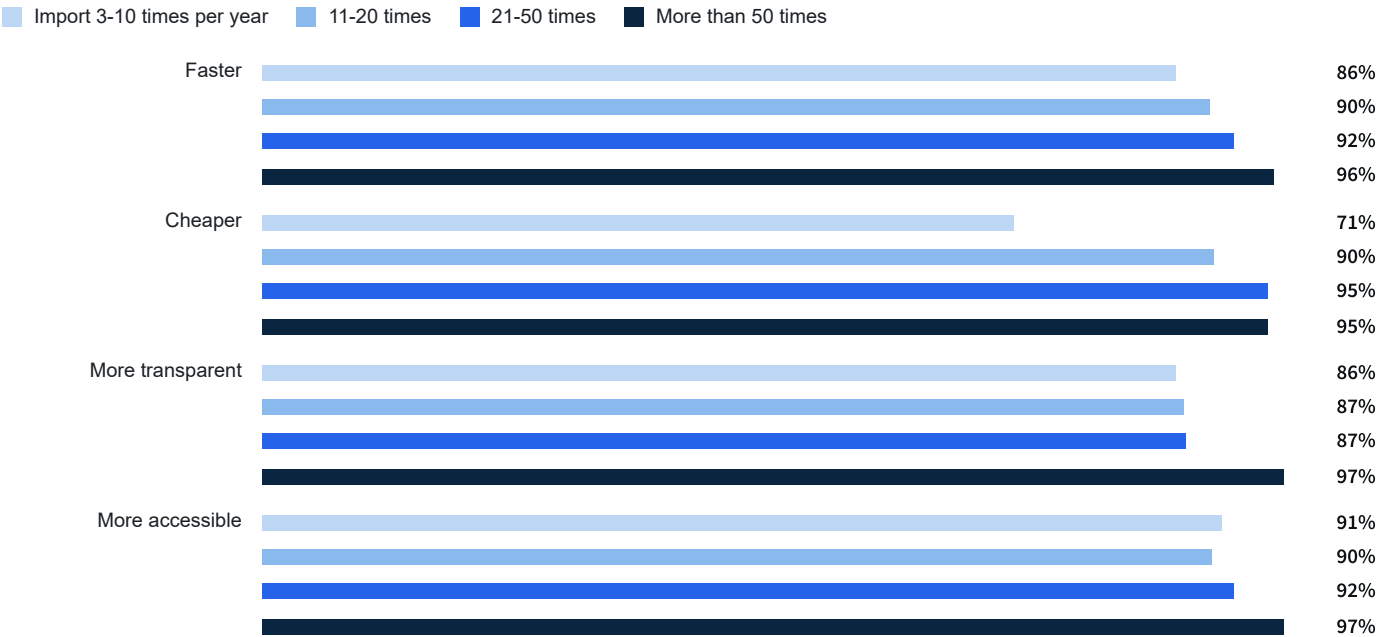
Financial integrity, customer identification, and foreign exchange requirements affect how a firm initiates and completes a payment. To document these frictions, this study surveyed 1,100 SME importers with 2–150 employees in Brazil, Indonesia, South Africa, and Thailand in 2026. The online sample provides evidence on the experiences of participating firms; it is not a representative estimate for all SMEs in those economies.

Payments are improving — but costs remain elevated

Most respondents say cross-border payments have become faster and easier to access over the preceding three years (Exhibit 4). Costs remain a concern. Among respondents who could estimate per-transaction charges, many reported charges of 5 percent or more of payment value (Exhibit 5). The World Bank’s average cost of sending a US\$200 remittance provides a separate benchmark for person-to-person transfers; it is not directly comparable with the firms’ import payments.⁷

EXHIBIT 4

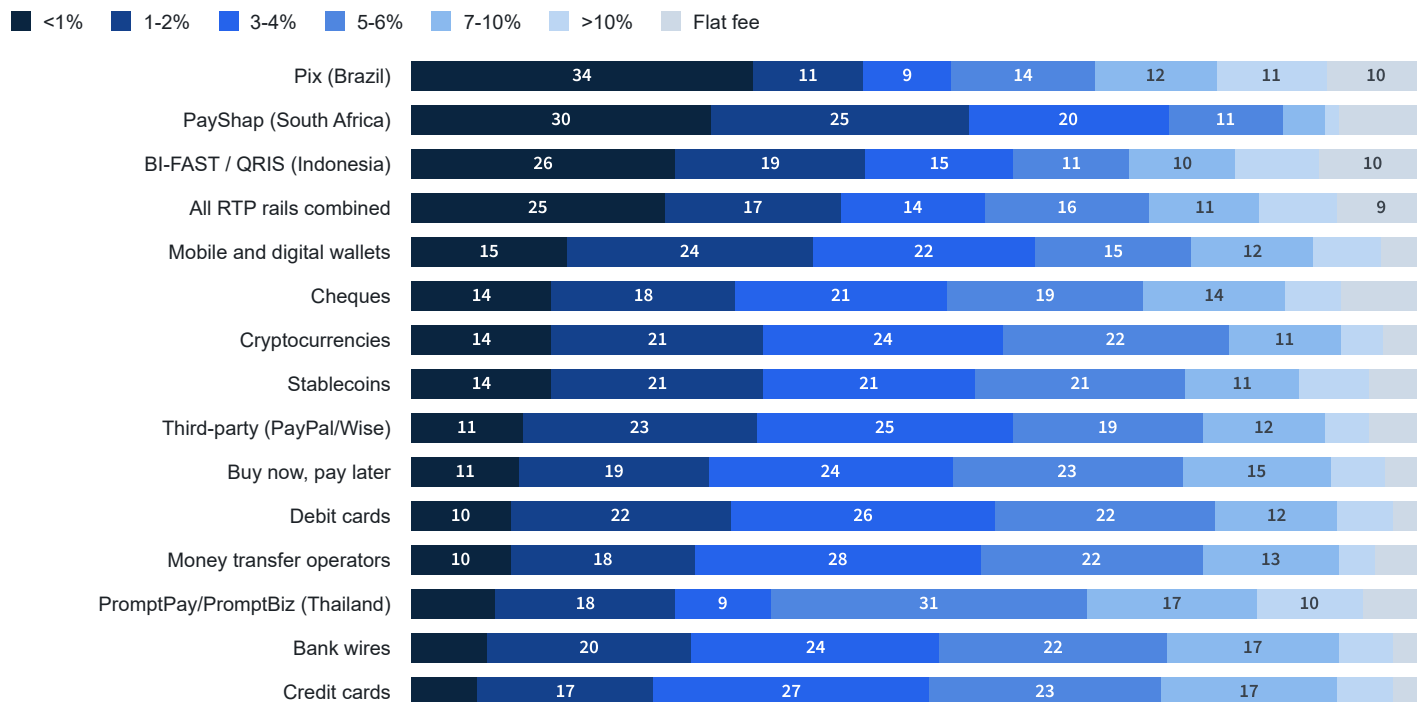
Share of SMEs reporting faster, cheaper, more transparent, and more accessible cross-border payments than three years ago, by import frequency



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

EXHIBIT 5

Per-transaction charges when paying foreign sellers, by payment method (share of users)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. Only SMEs that report knowing the cost.

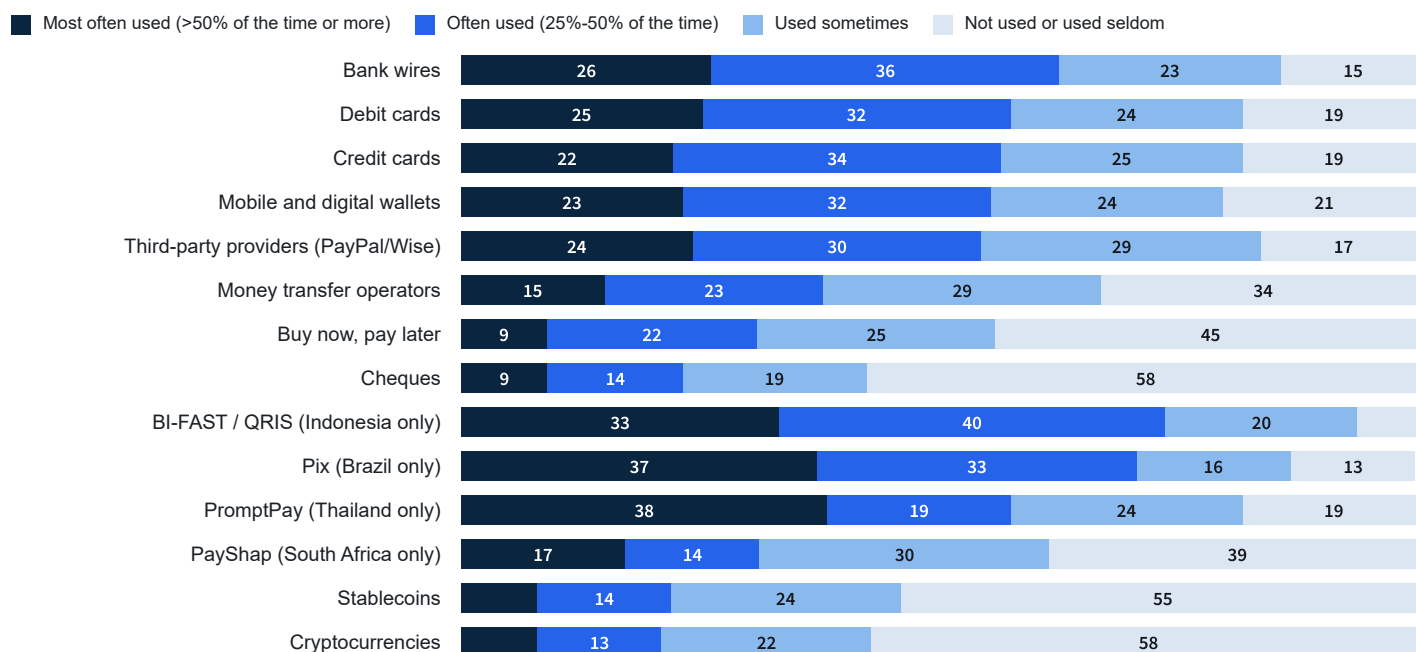
SMEs use a diverse — and diversifying — set of payment methods

Nine in ten SMEs with a typical cross-border payment of US\$500 or more use bank wires or credit cards; smaller-ticket payers lean on third-party providers such as PayPal or debit cards (Exhibit 6). Use of fast-payment tools specific to each country is widespread among surveyed importers: Pix in Brazil, BI-FAST or QRIS in Indonesia, and PromptPay or PromptBiz in Thailand. The survey records their use in connection with cross-border transactions, but the data presented here do not establish whether the domestic rail carried the cross-border leg, funded a wallet or provider, or delivered the final payout. A third of firms with payments over US\$500 use stablecoins often. SMEs prize choice: 80 percent use at least three payment methods often, 55 percent use five, and 36 percent use at least seven — 5.4 methods on average (Exhibit 7). If they could choose just one method, SMEs would opt for credit cards (23 percent), bank wires (21 percent), and third-party providers (19 percent); RTPs are favored by 17 percent (Exhibit 8).

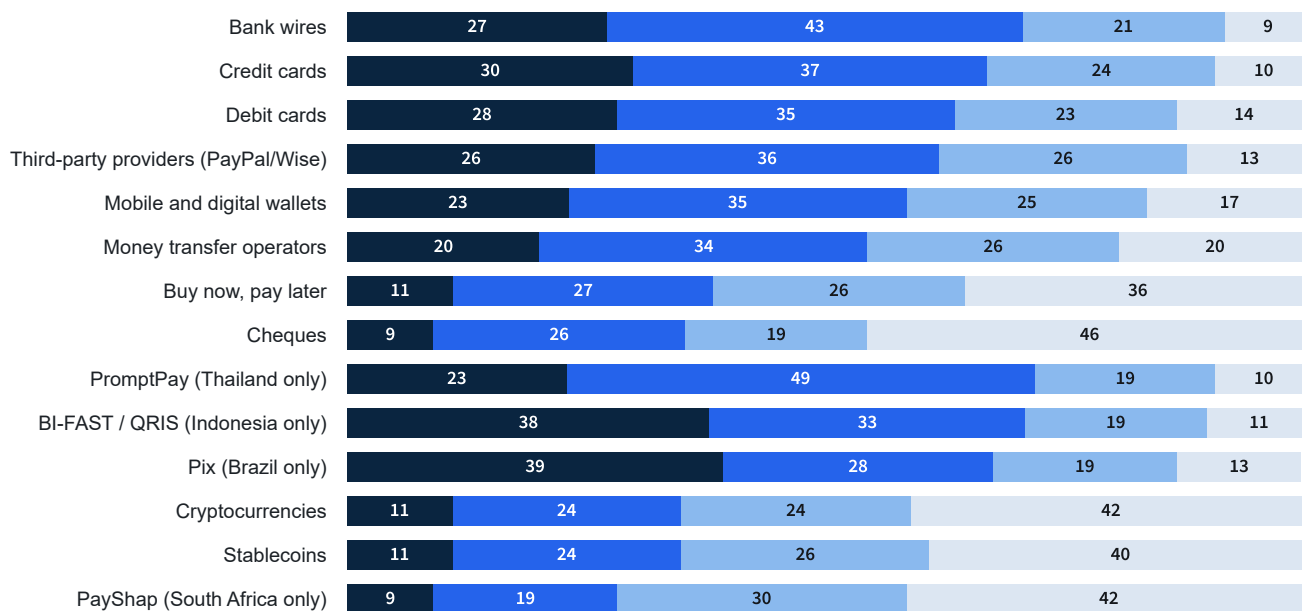
EXHIBIT 6

Choice of cross-border payment methods, by typical payment size (share of SMEs)

TYPICAL PAYMENT US\$500 OR LESS



TYPICAL PAYMENT ABOVE US\$500



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. Segment values are percentages of firms.

EXHIBIT 7

Share of SMEs using three, five, and seven payment methods in at least a quarter of their cross-border payments



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. Firms use 5.4 methods on average.

Online sellers and multimarket exporters are likeliest to use emerging methods. Among firms exporting to four or more markets, 41 percent use cryptocurrency often (vs. 21 percent of other firms), 39 percent stablecoins (vs. 22 percent), 64 percent third-party providers, and 74 percent RTPs (Table 1). When asked, per the G20’s goals, which method is best: RTP rails stand out as the **cheapest** (ranked first by 29 percent) and lead on **transparency** (20 percent); credit cards, RTP rails, and fintech providers are nearly tied on **speed** (21, 20, and 19 percent); credit cards and fintech providers lead jointly on **accessibility** (22 percent each) (Table 2).

TABLE 1

Choice of cross-border payment methods: online sellers exporting to multiple markets vs. other firms (share using method often)

PAYMENT METHOD	MULTI-MARKET ONLINE SELLERS (4+ MARKETS)	OTHER FIRMS
Real-time payment rails **	74%	59%
Third-party providers (PayPal/Wise) **	64%	55%
Buy now, pay later (BNPL) ***	49%	27%
Cryptocurrency ***	42%	21%
Stablecoins ***	41%	22%
BI-FAST / QRIS (Indonesia) **	30%	26%

*** p<0.01, ** p<0.05, * p<0.10. Shaded rows: statistically significant gaps of 15+ points (the emerging rails). RTP rails (Pix, PromptPay, BI-FAST/QRIS, PromptBiz, PayShap) are country-specific. Color intensity scales with the share of firms. Source: Nextrade Group SME survey, 2026.

TABLE 2

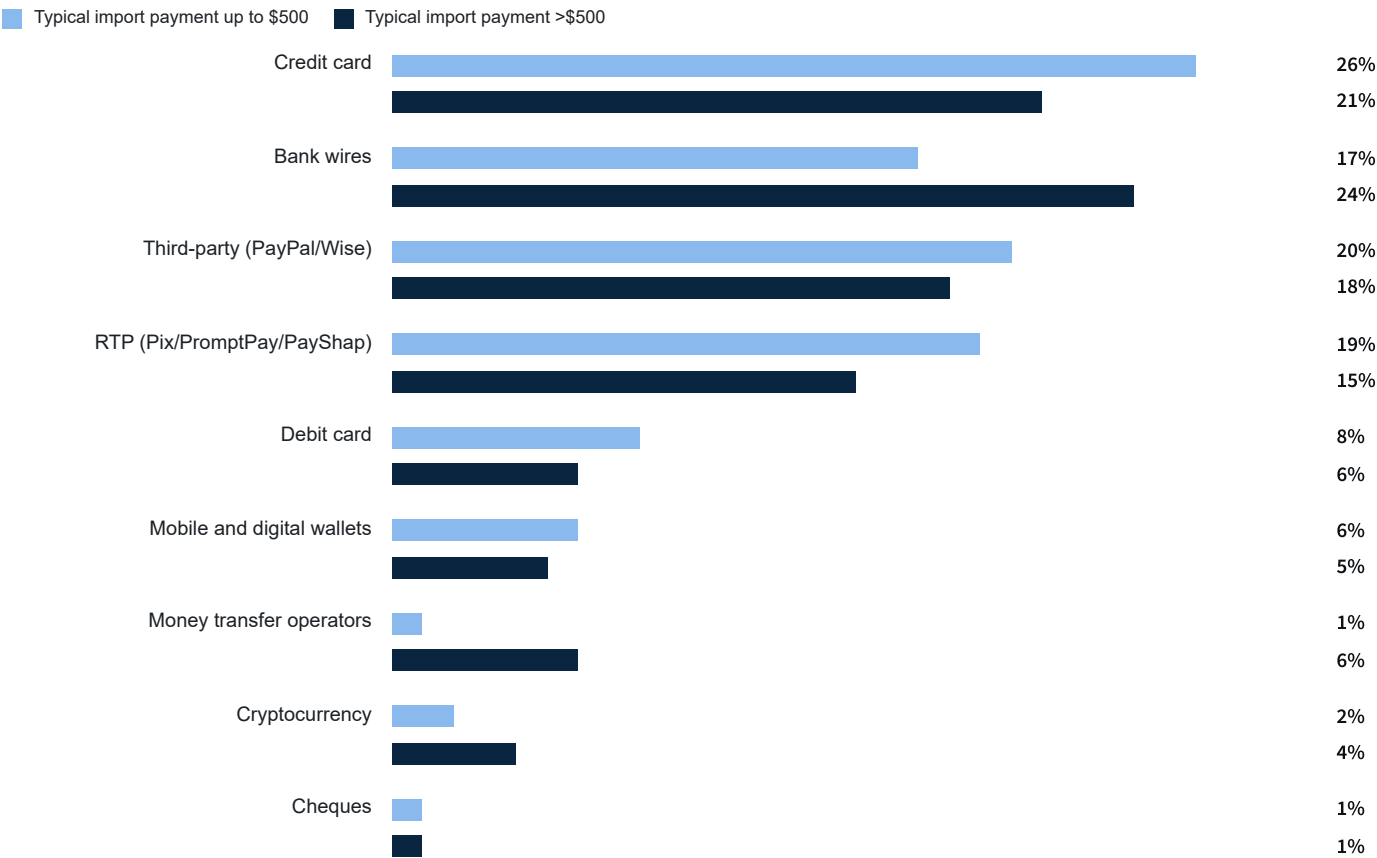
Share of SMEs that rank a payment method as fastest, cheapest, most transparent, and most accessible

METHOD	FASTEST	CHEAPEST	MOST TRANSPARENT	MOST ACCESSIBLE
Credit cards	21%	14%	17%	22%
RTP rails	20%	29%	20%	18%
Fintech providers	19%	17%	17%	22%
Bank wires	—	—	19%	—

Share of SMEs ranking each method first on each G20 dimension; color intensity scales with the share; remaining shares go to other methods. Source: Nextrade Group SME survey, 2026.

EXHIBIT 8

Preferred cross-border payment method if SMEs could choose just one, by import size



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

CASE 1 · MEASURING STABLECOINS IN CROSS-BORDER PAYMENTS

Estimates of stablecoin payment use depend heavily on what is counted. Gross on-chain transfers include trading, internal movements, and protocol activity. A McKinsey–Artemis analysis estimates about US\$390 billion of stablecoin payments in 2025, roughly 0.02 percent of global payment volume. BCG separately estimates US\$350–550 billion of observable bilateral payments for goods and services in 2025; that estimate includes domestic as well as cross-border transactions and excludes some off-chain uses. Neither estimate is a measure of stablecoins’ share of all cross-border payments.

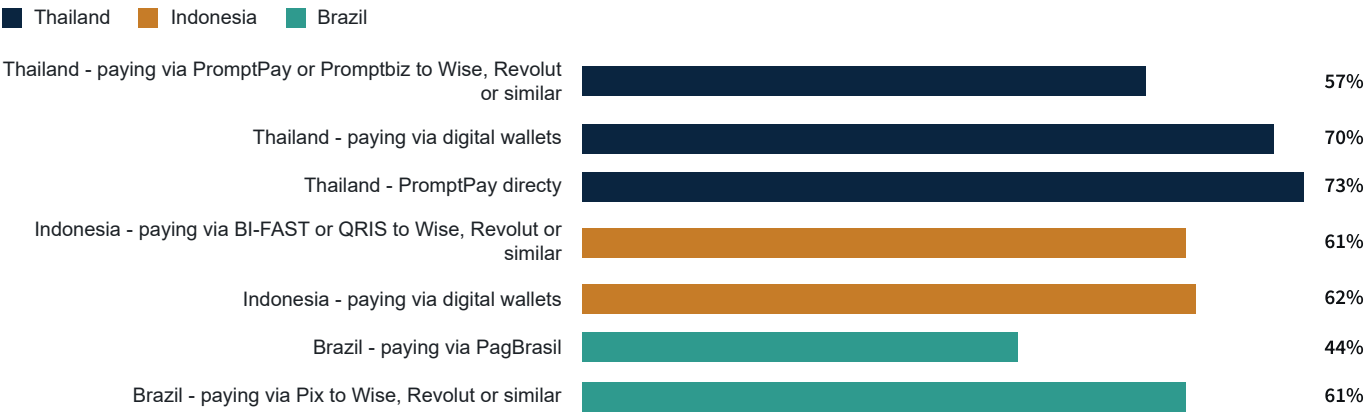
Stablecoins may shorten the digital settlement stage of a transaction, but users still need access to the token, liquidity, currency conversion, a local payout channel, and compliance services. Their value to SMEs therefore depends on the cost, speed, and legality of the complete payment, rather than the network fee or transfer time alone. Corridor claims should identify whether they measure consumer remittances, settlement using stablecoins within payment providers, or gross flows of crypto assets.

RTP rails: how SMEs route them and whom they pay

Firms report combining domestic fast-payment rails with wallets and cross-border payment providers such as GoPay, OVO, Dana, Wise, Revolut, or Remessa (Exhibit 9). These are distinct legs of a payment. The survey should identify separately the domestic funding method, the cross-border transfer service, and the method used to pay the recipient before conclusions are drawn about direct cross-border rail use. And when using RTPs, firms typically pay co-national vendors living abroad and firms in neighboring countries — regional rather than global payments (Exhibit 10).

EXHIBIT 9

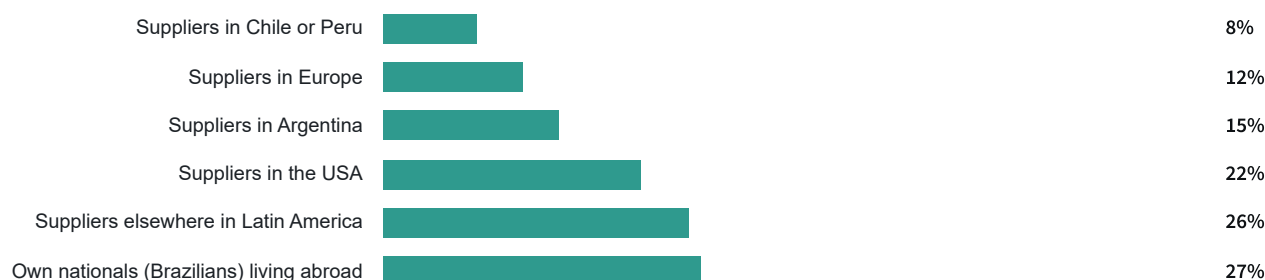
How SMEs route RTP payments across borders (RTP users only)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

EXHIBIT 10

Payees in cross-border payments made with RTP rails (share of RTP users)

PROMPTPAY / PROMPTBIZ — THAILAND**BI-FAST / QRIS — INDONESIA****PIX — BRAZIL**

Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.⁷⁰

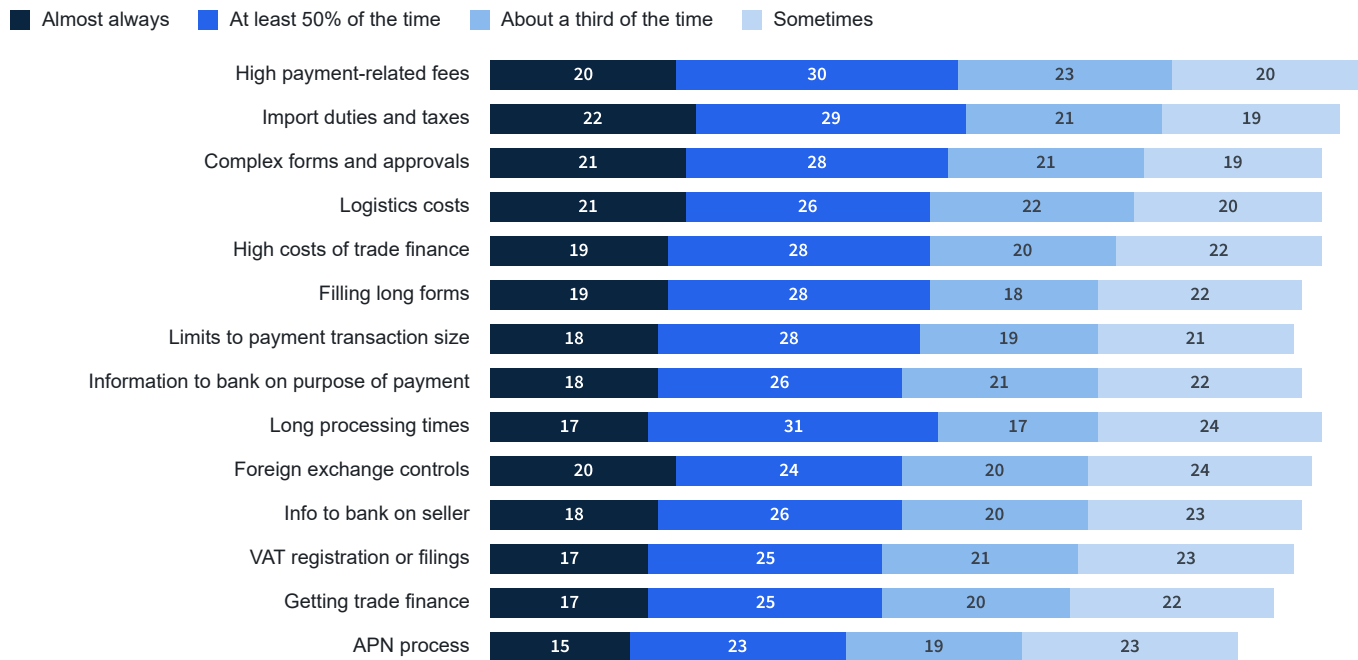
Compliance workloads: the paperwork around the payment

Of 14 obstacles to cross-border payments and importing, high payment fees are a recurring problem for half the firms, comparable to import duties and taxes (51 percent). Complex forms or approvals affect 49 percent at least half the time; long processing times, 48 percent; filling long forms, 47 percent. The median firm reports 11 of the 14 challenges as recurring (Exhibit 11). SMEs point to regulatory sources: 48 percent highlight foreign exchange issues, 44 percent tax documentation, and 42 percent KYC validation (Exhibit 12). Respondents also report staff time spent initiating and documenting payments. The reported mean is 31 minutes for a bank wire, compared with 15–16 minutes for a domestic fast-payment rail or digital wallet (Exhibit 13). These are administrative times

reported by respondents, not the elapsed time until funds reach the recipient. Firms relying on bank wires also report more hours of monthly payment paperwork (Exhibit 14); the survey alone cannot establish whether the payment method caused the difference.

EXHIBIT 11

Frequency of import-related challenges facing SMEs (share of importers, by how often each binds)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. The median firm reports 11 of 14 challenges as recurring.

EXHIBIT 12

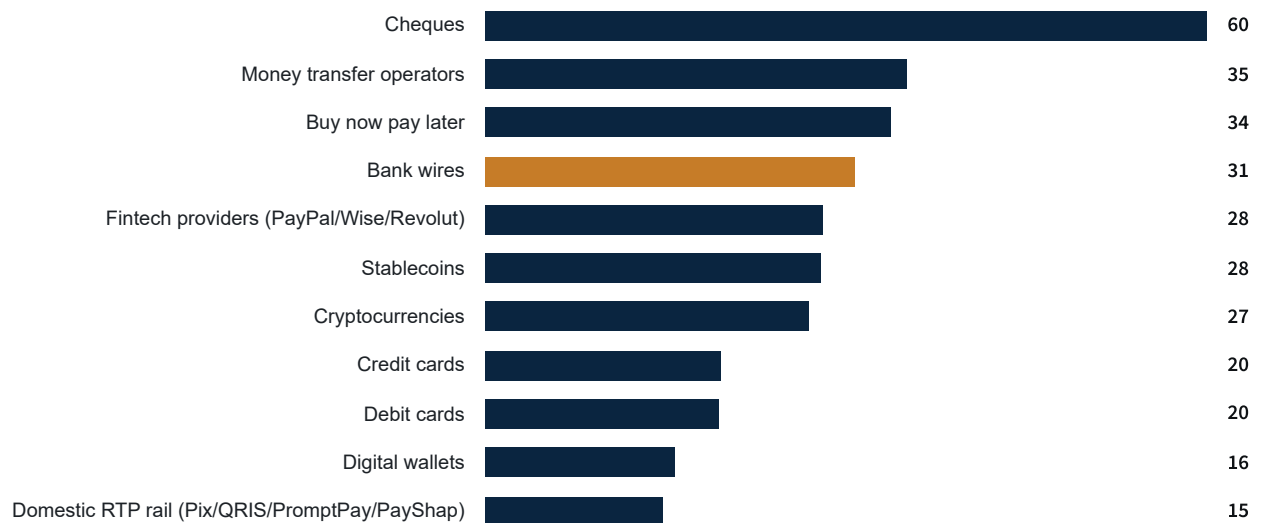
Regulatory and compliance issues SMEs find most challenging when paying foreign sellers



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

EXHIBIT 13

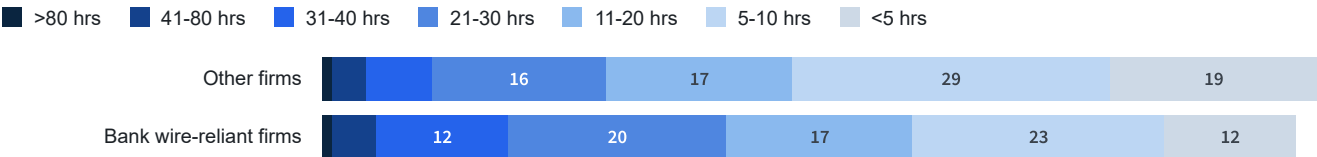
Mean added processing time per payment, by method (minutes)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. 86% of firms involve two or more staff in a typical international payment. Bank wires highlighted.

EXHIBIT 14

Staff-hours per month spent on payments paperwork: wire-reliant firms vs. others



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. 37% of wire-reliant firms exceed 20 hours a month vs. 26% of others (odds ratio 1.5, p=0.02).

Alternative practices, including informal channels, are common

Ninety-one percent of surveyed firms report at least one alternative practice for paying foreign vendors (Exhibit 15). The list spans several different responses to friction: batching payments or changing invoice terms, using a marketplace or local distributor, and paying through intermediaries, cash, or digital assets. Under the report’s narrower definition, 67 percent report at least one informal practice. The practices should not be treated as equivalent in their legal status, regulatory visibility, or effect on costs.

EXHIBIT 15

Workarounds SMEs use to complete payments to foreign vendors (share of SMEs)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026. 91% of SMEs use at least one workaround.

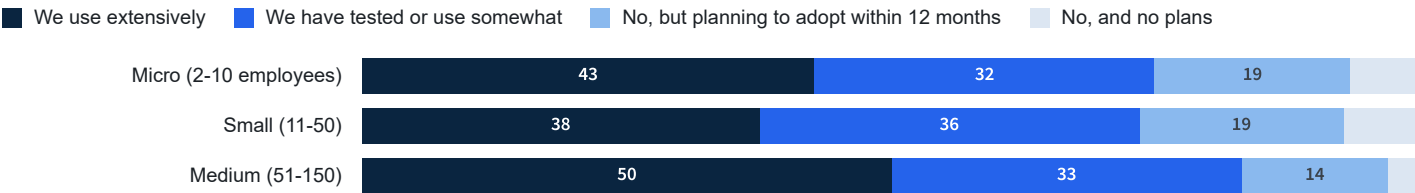
Agentic AI is reshaping how SMEs source, pay, and comply

Many surveyed firms report using or testing AI tools in sourcing, payment administration, or compliance. Exhibit 16 separates extensive use, limited use or testing, planned use, and no plans. Those categories should be reported separately: a respondent’s description of “agentic AI” is not independent evidence that an autonomous system initiates or settles payments. Reported use is concentrated among firms with more complex cross-border activity,

but this online sample contains a high share of ecommerce sellers and should not be used to estimate SME adoption across each economy. Exhibit 17 lists the functions where respondents apply AI, and Exhibit 18 the changes they attribute to its use.

EXHIBIT 16

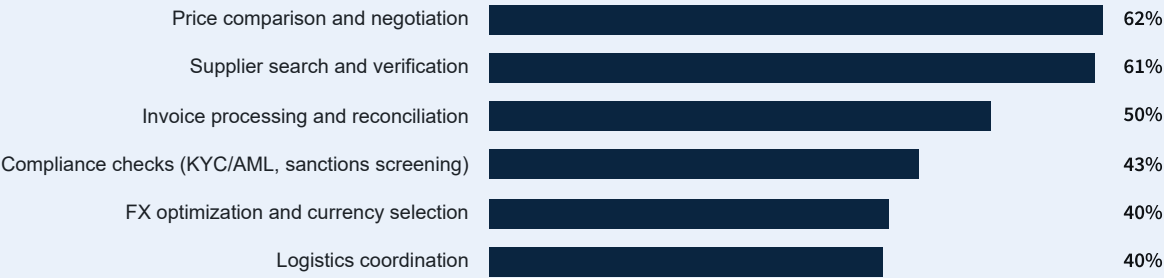
Agentic AI use to autonomously perform tasks in sourcing, payments, or compliance, by firm size



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

EXHIBIT 17

Business functions where SMEs use or plan to use agentic AI



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

EXHIBIT 18

Changes respondents attribute to agentic AI use (share of SMEs reporting each effect)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

Frictions constrain growth — and better payments would unlock it

Firms reporting lower time spent on payments were more likely to report adding sourcing markets and imported products than firms reporting higher burdens (Exhibits 19 and 20). The difference persists after the controls shown in the exhibit notes. Because firm growth can also change the methods and staff time devoted to payments, these comparisons across firms at one point in time should be interpreted as associations rather than estimates of the effect of payment friction. Across the four markets, 52 percent of SMEs say payment challenges have led them to consider or actually reduce importing — sharpest in Thailand (64 percent), lightest in South Africa (29 percent) (Exhibit 21). Firms persist because foreign goods offer higher quality (71 percent), better prices (63 percent), more variety (47 percent), or are simply unavailable at home (44 percent) (Exhibit 22).

EXHIBIT 19

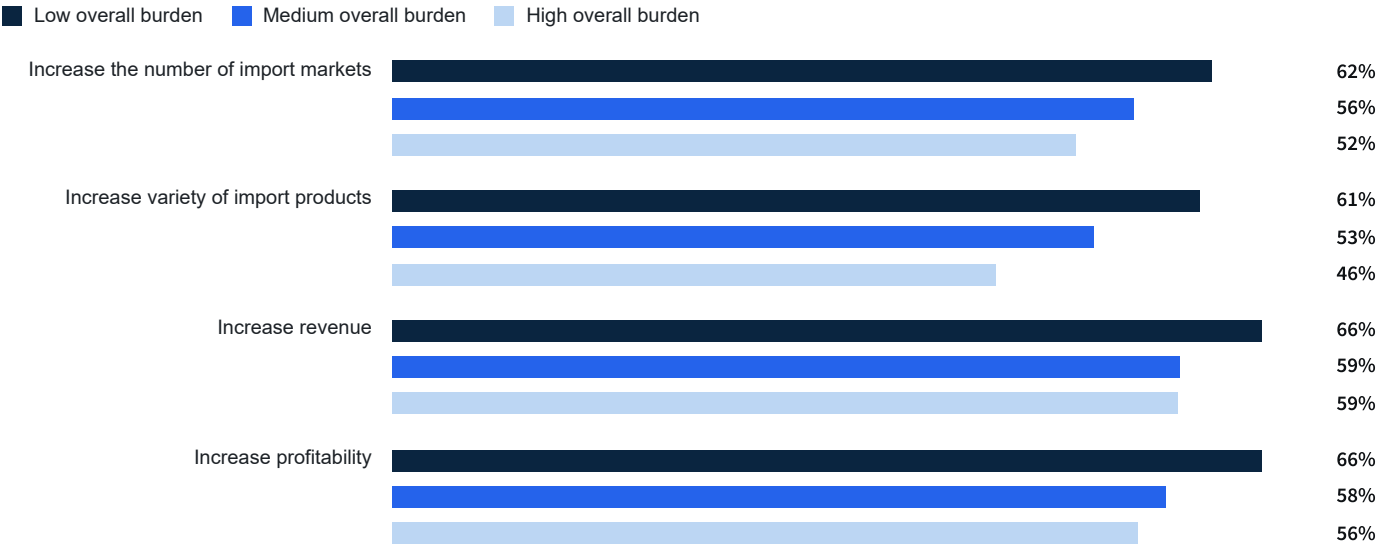
Probability of import diversification and growth in 2024–26, by payments-related time burden



Predicted probabilities from logit regressions controlling for firm size, with sector, country, and export-participation fixed effects. Low–high difference significant at 1% for both diversification outcomes.

EXHIBIT 20

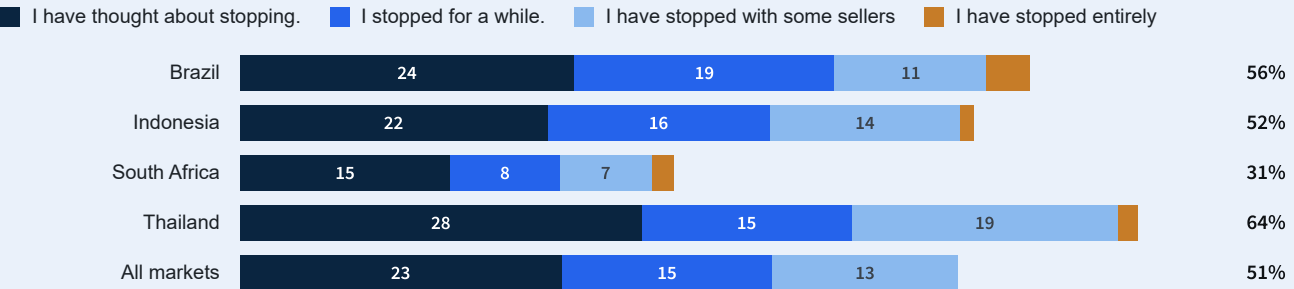
Probability of import, revenue, and profitability improvement in 2024–26, by overall payments friction



Friction measured as how often rejected payments, delays, and repeated document requests bind. Low–high difference significant at 1% for diversification, 5% for profitability growth.

EXHIBIT 21

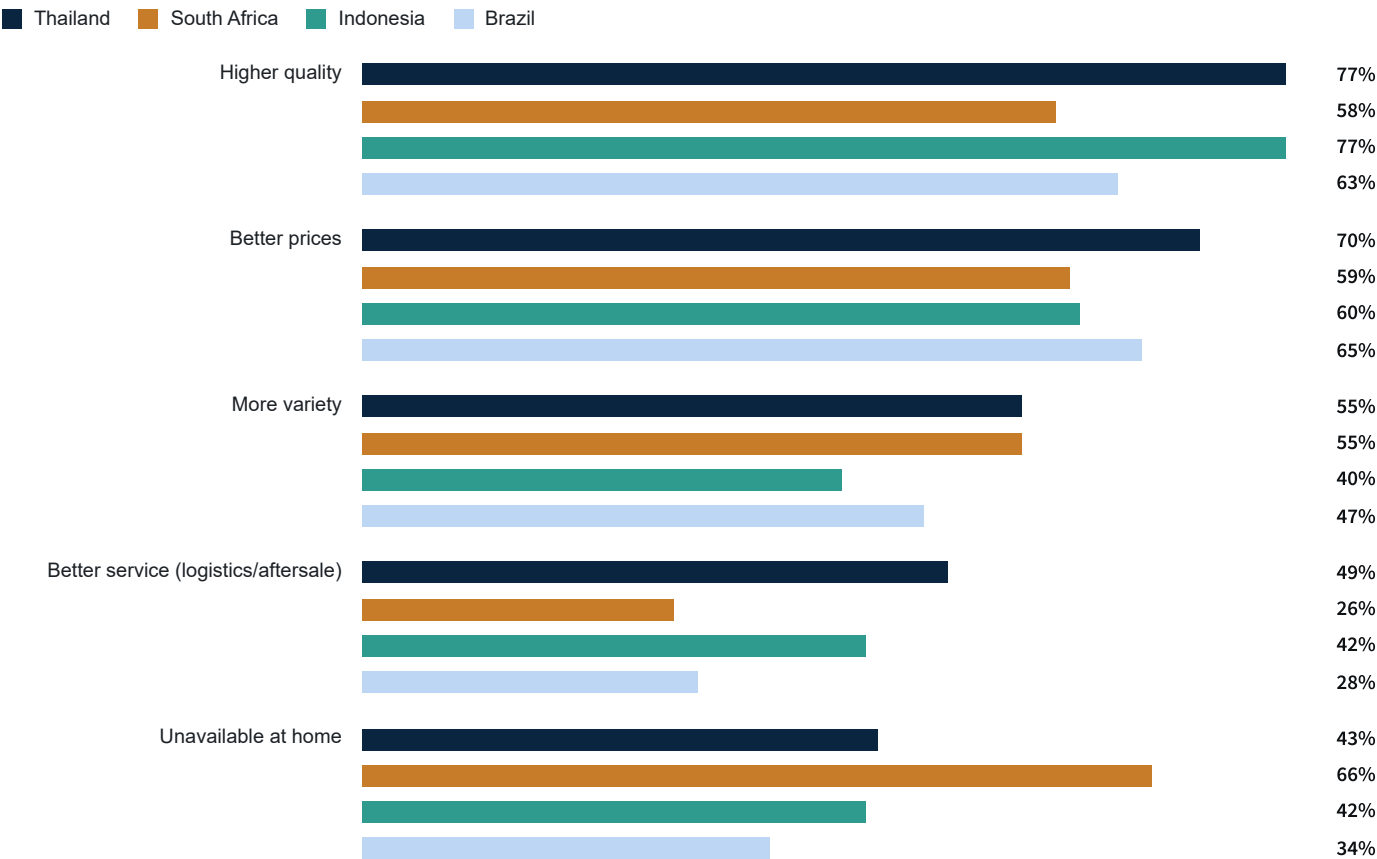
Whether payment challenges have caused SMEs to reduce or stop importing (share of importers)



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

EXHIBIT 22

Reasons firms keep importing from foreign sellers despite payment challenges, by country

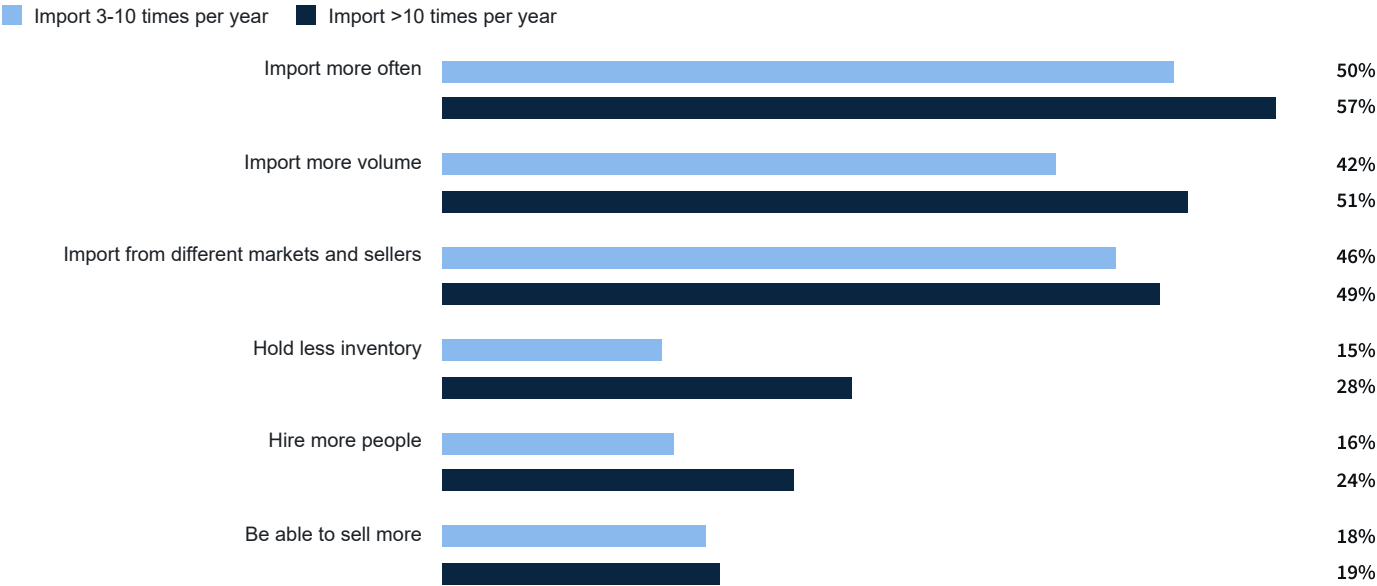


Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

Conversely, if payments were faster, cheaper, and simpler: 59 percent of SMEs would import more frequently, 53 percent would source from a wider range of markets and sellers, and 52 percent would import larger volumes (Exhibit 23).¹⁰ Multi-market online sellers are almost twice as likely as other firms to say easier payments would let them diversify sourcing — the firms with the most trade at stake gain the most.¹¹

EXHIBIT 23

What SMEs would do if cross-border payments were faster, cheaper, and simpler, by import frequency



Source: Nextrade Group SME survey — Brazil, Indonesia, South Africa, Thailand, 2026.

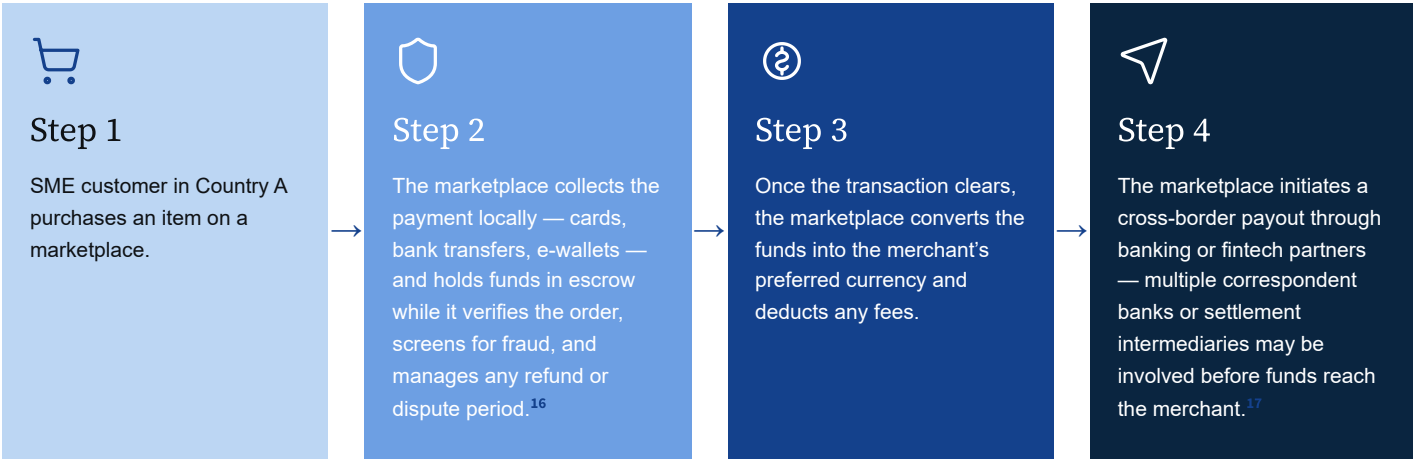
SECTION 3

How marketplace service providers facilitate SMEs’ cross-border ecommerce payments

Marketplaces can reduce some payment frictions for smaller merchants by combining customer checkout, fraud controls, currency conversion, and merchant disbursement within a managed service. Their legal and operational roles differ, however. Some operate or license a payment entity, while others contract with a payment service provider; the timing of a merchant payout and the handling of customer funds vary by model and jurisdiction. Exhibit 24 should therefore be read as an illustrative workflow for one common arrangement, not as a description of every named marketplace.¹²¹⁴

EXHIBIT 24

Illustrative marketplace payment and payout workflow; legal roles and fund flows differ by platform



Marketplaces and their payment partners must satisfy the financial, tax, and seller-verification obligations that apply to their respective roles. The EU’s DAC7 rules, for example, require platform operators to collect and report specified seller identification and financial information for tax purposes. They do not, by themselves, require DUNS numbers, production capacity records, or product quality information; those items may arise from a platform’s commercial onboarding rules or other laws.¹⁸

Solutions include a proportionate approach that enables marketplaces to apply simplified due diligence for low-value, low-risk payouts, and embedding ISO 20022 standards across disbursement channels.

SECTION 4

Cross-Border Payments Enablement Index: how financial regulations shape cross-border trade

The Cross-Border Payments Enablement Index compares policy and institutional conditions across 34 economies. Its indicators cover compliance rules, digital processes, innovation governance, identity, interoperability, and access to payment infrastructure, organized into six pillars (Exhibit 25). The index describes the presence and design of these conditions; it does not measure the price, speed, or reliability experienced by every user in each corridor. Differences in index scores should therefore be interpreted alongside transaction-level outcomes and firm evidence.

EXHIBIT 25

Six pillars, 30 indicators

1 · Compliance

FX regime openness · no advance-payment verification · FX reconciliation documentation · CDD and implementation ease · beneficial-ownership transparency · STR/SAR filing · importer/exporter licensing

2 · Technology

Digital STR platforms · e-KYC and digital onboarding · digital trade single window · regulatory promotion of AI in AML/CFT · payee verification (CoP/VoP)

3 · Innovation governance

Risk-based AI oversight in financial services · agentic AI enablement · stablecoin governance framework · regulatory sandboxes

4 · Identity

Digital identity for individuals · multi-sectoral use of digital ID · corporate digital identity

5 · Interoperability

ISO 20022 deployment · RTP interoperability · open banking / APIs · mutual recognition of AML/CFT controls · security standards alignment

6 · Competition

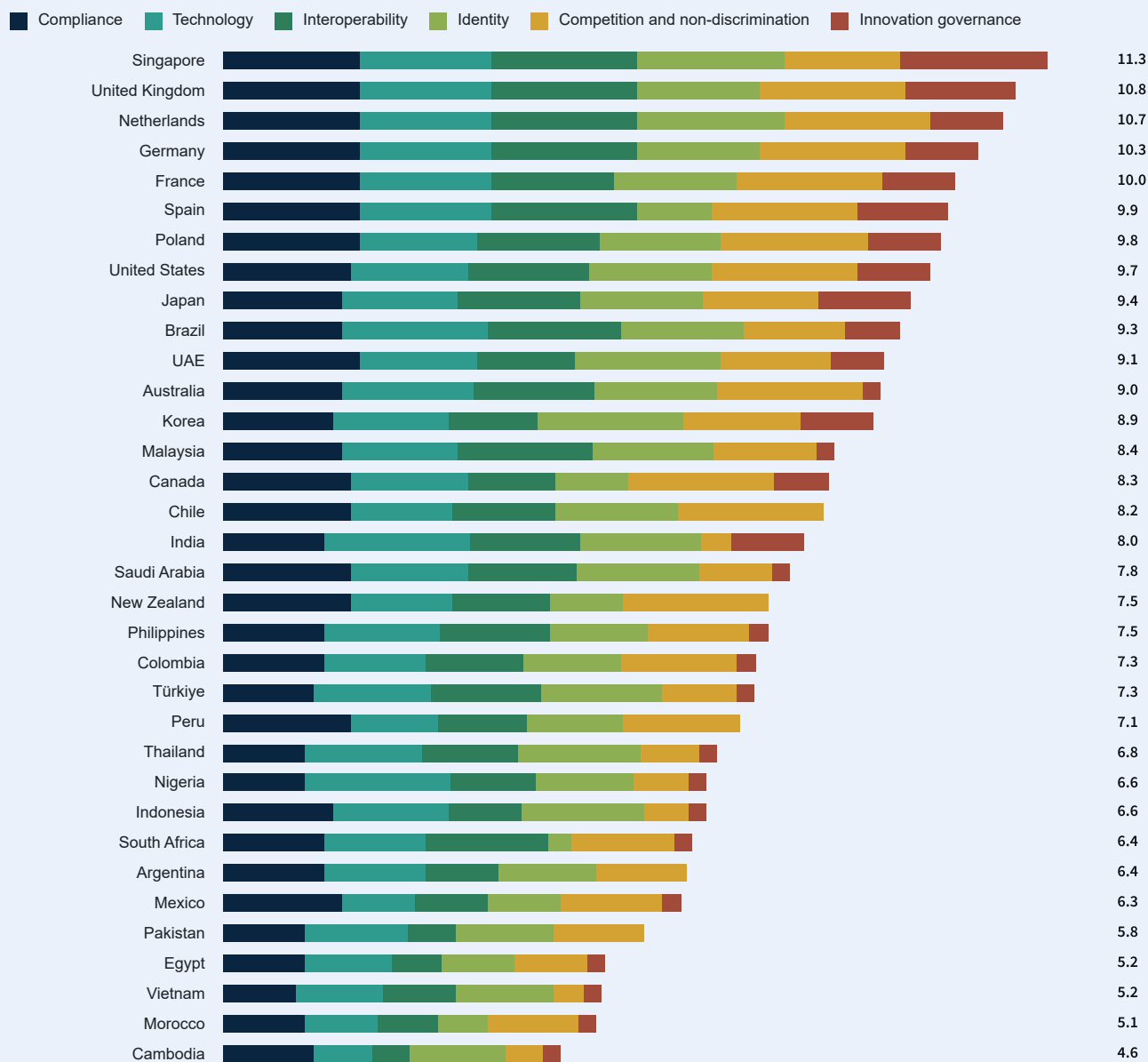
Banking STRI · non-discrimination in payment infrastructure and in stablecoins/tokenized deposits · no forced local routing · settlement access

Results in 34 economies

Many of the economies that exporters flag as challenging to be paid from — Cambodia, Morocco, Egypt, Nigeria, and South Africa — are among those with the lowest Index scores, while Singapore, the United Kingdom, and the Netherlands top the ranking (Exhibit 26). Regionally, Western Europe and North America have the most enabling environments; Africa and South and Southeast Asia have more work ahead, particularly on ease of access to foreign exchange and customs procedures.

EXHIBIT 26

Cross-Border Payments Enablement Index, 34 economies — pillar scores (maximum 12)



Higher values: payments system is more simplified, digitized, and interoperable. Source: Nextrade Group estimates.

EUROPE

leads on interoperability, identity, and fraud prevention (the EU's Verification of Payee mandate took effect October 2025), but innovation governance is held back by the AI Act's high-risk obligations, delayed to December 2027.

NORTH AMERICA

scores well on technology and trade facilitation — the U.S. operates a fully implemented single window (ACE) and a 30-day SAR deadline — but underperforms after the March 2025 elimination of domestic beneficial-ownership reporting.

EAST ASIA & OCEANIA

have near-universal ISO 20022 and mature digital identity, and are advancing cross-border RTP links; remaining gaps are in open data and AI governance.

LATIN AMERICA

has strong fintech innovation, and Chile and Peru run open FX regimes, but standards alignment and corporate identity are uneven.

MENA

: UAE and Saudi Arabia have modernized rapidly on identity and instant payments, while Egypt and Morocco lag on interoperability and innovation governance.

SUB-SAHARAN AFRICA

is building digital compliance foundations: Nigeria's beneficial ownership registry is a regional model, and Nigeria and South Africa were FATF-delisted in October 2025 — but interoperability and FX automation remain constrained.

Findings by policy area

The 2026 index covers 34 economies and 30 policy indicators. Exhibit 27 reports the number of economies scoring 2 (full), 1 (partial), or 0 (none) under the index rubric. These categories describe the specified feature at the assessment date; they do not by themselves establish that every economy in a category has the same legal instrument, threshold, or implementation route. The examples below illustrate country practices, subject to the source and scope identified in the accompanying scorecards; the notable cases flagged are developed in full in Appendix 2.

PILLAR 1 · COMPLIANCE

- ▶ **Customer due diligence scores are near-universal:** 32 of 34 economies score full on CDD under the index rubric, with Cambodia and Vietnam partial. On CDD implementation ease, 24 economies score full and ten score partial (Cambodia, Egypt, Japan, Mexico, Morocco, Nigeria, Pakistan, Thailand, Türkiye, and Vietnam). In a notable case, in 2023–24 Indonesia modernized its AML/CFT framework through Bank Indonesia and OJK regulations that permit customer due diligence through supervised third parties, including foreign institutions: an Indonesian bank can rely on verification performed by an eligible supervised third party rather than rebuilding the file from scratch — while retaining ultimate responsibility, with access to the underlying information and conditions aligned with FATF Recommendation 17.²¹ → [APPENDIX 2, CASE 3](#)
- ▶ **Beneficial ownership registries have spread, but their operation, scope, timeliness, and access vary.** Fourteen economies score full and 18 partial. Cambodia and the United States score zero: Cambodia has no functional register, and the US register, following the March 2025 FinCEN rule, no longer applies to domestic firms. Ownership thresholds also differ — Nigeria applies 5 percent, India and Argentina 10 percent — but the indicator does not encode a single threshold.

- ▶ **In STR/SAR reporting**, five economies score full, pairing suspicion-based reporting with a clear, moderate statutory deadline: the United States (30-day SAR), India (7 working days), Indonesia (3 working days), Mexico (a fixed reporting cycle), and Australia, which requires reports within 24 hours for suspected terrorism financing and three business days otherwise. The other 29 score partial; the rubric weighs clarity, operation, and proportionality, not only the statutory standard.
- ▶ **Foreign exchange regimes are open in 18 of 34 economies.** The remaining 16 score partial: some manage access through authorized dealers or documentation (India, Indonesia, Korea, Malaysia, South Africa, and others) without a substantive restriction, while Egypt, Nigeria, Pakistan, and Vietnam retain approval for some imports.³² Argentina's April 2025 reforms moved it to a managed float with residual controls — partly open rather than fully open. As a notable case, Brazil's Law 14,286/2021, in force from 30 December 2022, modernized the foreign exchange market, capital flows, and reporting: it reduced legal fragmentation and made routine FX operations easier to administer, while authorities retain regulatory, supervisory, AML/CFT, and emergency powers.²⁵ The lesson: consolidation can itself be reform — replacing decades of overlapping instruments with one principles-based statute removes legal uncertainty that piecemeal circular amendments cannot solve. → [APPENDIX 2, CASE 2](#)
- ▶ **On advance payment verification or notification**, 21 economies score full under the index rule — no separate general preapproval or notification for ordinary advance import payments — while 13 score partial — among them Morocco, which caps advance import payments (30 percent of value generally, up to 100 percent for categorized operators), and India, which requires a standby letter of credit or bank guarantee for advance remittances above US\$200,000. On FX reconciliation documentation, 19 economies score full while 15 require additional or manual supporting records.
- ▶ **On importer/exporter licensing**, 20 economies offer straightforward, durable registration (for instance the EU's EORI number, which does not expire), while 14 impose periodic renewal or added friction, such as the Philippines' annual Bureau of Customs accreditation and India's Import-Export Code, which must be updated annually.

PILLAR 2 · TECHNOLOGY

- ▶ **Digital reporting tools:** 32 economies file STR/SARs through a digital platform such as goAML or a national equivalent — France's TRACFIN, Singapore's SONAR, the Philippines' GoTRACS — with only Cambodia and Vietnam still transitioning (Vietnam mandated electronic reporting from January 2026).
- ▶ **e-KYC: all 34 scorecards show at least partial provision.** Thirty economies score full, allowing full remote onboarding; four (Cambodia, Egypt, Mexico, and Morocco) score partial, retaining hybrid models with some in-person steps. In a notable case, India connected customer due diligence to national digital public infrastructure: Aadhaar-based authentication and offline verification are legally valid identity-verification routes, and the RBI's Video-based Customer Identification Process (V-CIP) is a consent-based, live video alternative to face-to-face verification — with authorized officials, audit trails, cybersecurity controls, and data-retention safeguards.²⁶ RBI guidance also recognizes DigiLocker and the Central KYC Records Registry as parts of a reusable identity ecosystem.²⁸ The reform is only partly technological, and mostly legal and institutional: governments must specify which digital methods are equivalent to in-person verification and give regulated entities confidence that remote onboarding satisfies AML/CFT obligations.²⁹ The main verified effect is lower onboarding friction — customers complete identification without visiting a branch.³⁰ → [APPENDIX 2, CASE 9](#)
- ▶ **Digital trade single windows are widely implemented:** 22 economies operate a fully implemented single window — the United States' ACE, Korea's UNI-PASS, Singapore's NTP, Japan's NACCS — 11 have partial single windows, and one — the United Kingdom, whose Single Trade Window first release was paused for 2025–26 — scores zero at the index assessment date. A notable case is the Pakistan Single Window Act of 2021: the platform links customs, regulatory agencies, traders, banks, and the State Bank, and eliminated consignment-wise Electronic Import Forms and Form-E, replacing them with real-time electronic exchange of trader and bank-profile data.³¹ Importers can still use letters of credit, documentary collection, advance payment, or open account — but the transaction is linked to data in the system rather than a separate paper chain.³³ The main effect is better reconciliation: customs declarations, trader profiles, and payment data match electronically, reducing repeated bank visits and duplicate documentation.³⁴ → [APPENDIX 2, CASE 4](#)

- ▶ **Fraud-prevention payee verification is the newest frontier and remains thin:** only nine economies mandate or fully operate a scheme — Eurozone members France, Germany, the Netherlands, and Spain (mandatory since October 2025 → [APPENDIX 2, CASE 5](#)), the United Kingdom (Confirmation of Payee since 2020), Australia (rolling out from July 2025), Brazil (built into Pix), India (NPCI, June 2025), and Nigeria (NIBSS). Seventeen, including the United States, have the capability but no mandate, and eight have no scheme.
- ▶ **Regulatory promotion of AI in payments and AML/CFT** scores full in only three economies (Brazil, India, and Singapore); 24, including Nigeria, score partial, and seven show no clear regulator-led promotion.

PILLAR 3 · INTEROPERABILITY INFRASTRUCTURE

- ▶ **ISO 20022:** under the index's production-use test, 24 economies score full, six partial, and four zero — with Cambodia and Poland at full and Korea and Indonesia partial. In a useful case, Banco Central de Chile migrated its high-value payment system in two planned phases — 25 November 2024 and 8 September 2025 — making Chile the second country in Latin America to adopt ISO 20022 fully in its high-value system. The experience suggests treating ISO 20022 as an infrastructure obligation with a hard deadline, joint testing with banks well before it, and updated operating regulations and contingency procedures as part of the migration.³⁶ → [APPENDIX 2, CASE 10](#)
- ▶ **Operational open-banking or API frameworks** score full in 19 economies, while 13 score partial — in progress or voluntary — and two, Cambodia and Morocco, score zero.
- ▶ **Real-time payment interoperability** is scored on a live cross-border link or cross-border QR arrangement; domestic instant-payment capability alone does not count. On that test, 19 economies score full and 15 score zero. Japan and Korea moved to full after verified live cross-border QR links. In a useful case, the UPI–PayNow linkage between India and Singapore established a live real-time cross-border corridor, and in June 2024 the RBI signed the Project Nexus agreement with the BIS and the central banks of Malaysia, the Philippines, Singapore, and Thailand — a founding member of the first multilateral platform for interlinking fast payment systems, expected live around 2026.³⁷ → [APPENDIX 2, CASE 12](#)
- ▶ **Recognition or reliance on AML/CFT controls** scores full in 14 economies (mostly via reliance frameworks in the EU, the UK, the US, Singapore, and Japan), with 20 partial — some resting on conditional third-party reliance.

PILLAR 4 · IDENTITY

- ▶ **Individual digital identity is mature:** 32 economies have a live, widely used national digital ID; Egypt and South Africa score partial. On use across two or more sectors, 27 economies fully meet the criterion and Egypt partially; six — Canada, Mexico, Morocco, New Zealand, South Africa, and Spain — score zero.
- ▶ **Corporate digital identity is the sharpest identity gap.** Only four economies operate a true corporate authentication system: Singapore (CorpPass), the Netherlands (eHerkenning), Korea, and the UAE (UAE Pass for Business). Nineteen are emerging, often relying on the individual's personal eID or digital certificates, and 11 score zero, with no qualifying business authentication mechanism under the rubric. The EU's Digital Identity Wallet for businesses, due by end-2026, would move several European economies up.

PILLAR 5 · INNOVATION GOVERNANCE

- ▶ **This is the weakest pillar across the board.** Risk-based AI oversight in financial services is comprehensive in only three economies — India, Korea, and Singapore — while nine are partial and 22 have none; the EU is in the partial group because, at the assessment date, the AI Act's high-risk obligations had been delayed to December 2027.
- ▶ **Agentic AI frameworks are essentially pre-regulatory:** Singapore alone scores full, nine economies score partial, and 24 have nothing in place. Singapore has been a particular leader: in November 2025 MAS consulted on Guidelines on AI Risk Management covering generative AI and AI agents; in March 2026 MAS and industry partners published the Project MindForge AI Risk Management Toolkit; and on 7 October 2026 MAS issued final AI risk management guidelines that expressly cover AI agents, with their main requirements taking effect in 2027 and 2028.³⁹ → [APPENDIX 2, CASE 7](#)

- ▶ **Regulatory sandboxes:** 21 economies score above zero — five at full (India, Singapore, Spain, the UAE, and the United Kingdom) and 16 partial, a category that can reflect limited scope or an implementation-stage scheme — while 13 score zero.
- ▶ **Stablecoin governance:** eight economies score full, with a dedicated operational regime; three score partial, including the United States and the United Kingdom, where implementation is pending; and 23 score zero. A zero means no dedicated operational regime, not necessarily a ban.

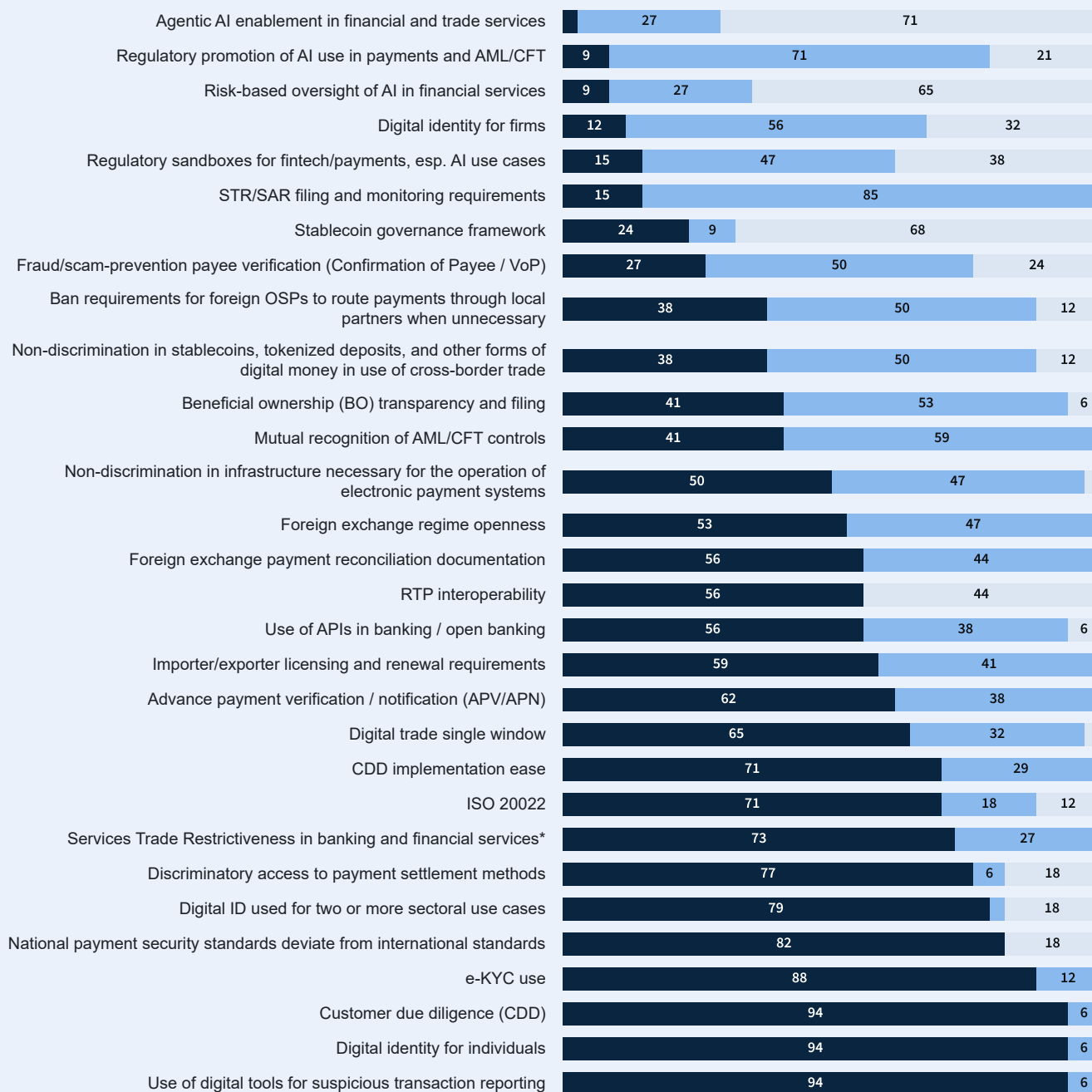
PILLAR 6 · COMPETITION AND NON-DISCRIMINATION

- ▶ **On services-trade restrictiveness in banking (OECD STRI),** 19 of the 26 covered economies are relatively open (below 0.25), while seven (India, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) are more restrictive; eight economies are not covered by the OECD database.
- ▶ **Forced local-routing of foreign payment providers** is absent in 13 economies but partial in 17, and four (Cambodia, India, Indonesia, and Vietnam) require routing through local partners (India's PA-CB rules, Indonesia's National Payment Gateway, Vietnam's Decree 52/2024). Whether a local-partner requirement is unnecessary depends on a country-specific functional assessment.
- ▶ **On non-discrimination in payment infrastructure,** 17 economies are fully open and 16 partial, with India the most restrictive; on non-discrimination in stablecoins and tokenized deposits, 13 are open, 17 partial, and four (Egypt, Saudi Arabia, Türkiye, Vietnam) restrictive. Opening payment infrastructure is a design decision that can be made at three moments: retrofitted onto legacy infrastructure with proportionate supervision, as the United Kingdom did; layered onto an existing instant payment system through a technical gateway and licensing category, as Singapore did; or built in from day one for a particular rail with a single participation rulebook for banks and non-banks alike, as Brazil did with Pix — although Brazil scores partial on infrastructure non-discrimination overall.⁷² In every version, the counterpart of access is supervision proportionate to the participant, rather than requiring a banking license. → [APPENDIX 2, CASE 13](#)

EXHIBIT 27

Share of 34 economies that have adopted key policies for cross-border payments

■ Fully meet ■ Partly meet ■ Do not meet



Share of economies scoring 2 (full), 1 (partial), or 0 (none) under the index rubric at the assessment date; percentages of scored economies, rounded to whole numbers; ordered from least to most widely met. *OECD banking STRI: share of the 26 covered economies; eight are not covered. ISO 20022 counts are pending adjudication of the Nigeria score. Source: Nextrade Group corrected country scorecards, 9 October 2026.

CASE 2 · NIGERIA'S REFORMS TO UNLOCK CROSS-BORDER PAYMENTS

Nigeria has moved on several fronts at once: the 2024 FX Code and electronic interbank matching brought conduct standards and price discovery to a strained currency market; the ISO 20022-based National Payment Stack launched in June 2025, settling its first live transaction in milliseconds that November; April 2025 PAPSS thresholds let individuals pay up to US\$2,000 and companies US\$5,000 monthly intra-Africa with only basic KYC/AML documentation; and the NRBVN platform gives the diaspora remote onboarding.⁴²

The cautionary counterpoint: the IMF estimates Nigeria received about US\$59 billion in crypto-asset inflows between July 2023 and June 2024 — roughly 60 percent of stablecoin inflows in sub-Saharan Africa since 2019. When formal channels are slow, costly, and FX-constrained, users build their own workaround. The durable response is not prohibition — the 2021 ban largely shifted activity to peer-to-peer platforms — but closing the gap that made the workaround attractive.

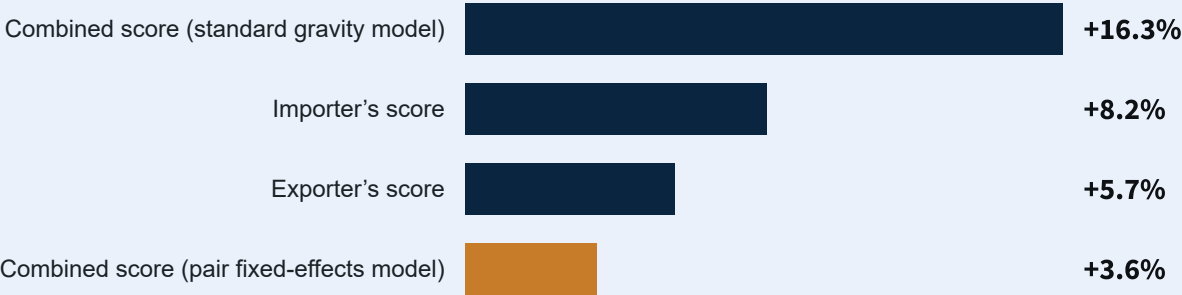
SECTION 5

Trade, income, and employment gains of cross-border payments enablement

This section estimates the association between conditions supporting payments and bilateral trade in manufactured goods from 2018 to 2025. In the specification with fixed effects for each country pair and year, a 10 percent higher prior-year combined exporter–importer index score is associated with approximately 3.6 percent higher bilateral trade (Exhibits 28 and 29). The one-year lag establishes the order of measurement, but it does not exclude other changes that may affect both payment conditions and trade. The coefficient should therefore be read as an association, not the predicted effect of raising the index by 10 percent.

EXHIBIT 28

Association between a 10% higher prior-year index score and bilateral trade in manufactured goods



PPML gravity estimates, bilateral manufactured-goods trade 2018–25, payments enablement lagged one year. Pair-FE model highlighted. Source: Nextrade Group estimates.

EXHIBIT 29

Gravity estimates: bilateral trade in manufactured goods, 2018–25 (PPML)

DEPENDENT VARIABLE: BILATERAL TRADE	(1)	(2)	(3)	(4) EMERGING	(5) DEVELOPING
Lagged combined Index, log	1.588*** (0.405)	—	0.374*** (0.113)	0.395*** (0.108)	0.545*** (0.152)
Lagged exporter Index, log	—	0.583** (0.267)	—	—	—
Lagged importer Index, log	—	0.830*** (0.278)	—	—	—
GDP, combined log	1.124***	1.129***	—	—	—
Distance, log	−0.458***	−0.461***	—	—	—
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Country-pair fixed effects	No	No	Yes	Yes	Yes
Observations	6,772	6,772	8,821	8,821	8,821
Pseudo R ²	0.832	0.832	0.996	0.996	0.99

*** significant at 1%; ** at 5%. Country-pair-clustered standard errors in parentheses. Columns (4)–(5) report group-specific linear combinations from a single regression interacting the lagged combined index with the exporter's development group. Standard gravity controls (language, FTA/WTO, contiguity, colonial links) included in (1)–(2).

Payments enablement matters most for emerging and developing economies

In the most demanding pair fixed-effects specifications, a 10 percent improvement in the prior-year combined score is associated with 3.8 percent higher manufactured-goods trade for emerging markets and 5.3 percent for developing economies. Regional estimates put the largest association in South Asia (+7.0 percent), with positive and significant effects also for North America, MENA, Latin America, and Southeast Asia (Exhibit 30).

EXHIBIT 30

Trade increase associated with a 10 percent higher Index score, by country group (pair-FE model)



Group-specific linear combinations from a single regression interacting the lagged combined index with the exporter's development group. Advanced-economy estimate statistically indistinguishable from zero. Source: Nexttrade Group estimates.

Exhibit 31 illustrates what the estimated trade association would imply if combined with selected relationships between trade, income, and employment from other studies. These conversions are scenarios, not independently estimated effects of payment reform. They compound uncertainty at each step and should not be used as forecasts of GDP or jobs from a change in the index.

EXHIBIT 31

Illustrative trade, income, and employment scenarios associated with a 10% higher index score

ILLUSTRATIVE MECHANICAL CONVERSIONS — NOT FORECASTS



Tariff equivalents assume a 1pp tariff change produces a 2–5% change in trade; income and employment effects are illustrative mechanical conversions.
Source: Nextrade Group estimates.

Which policy levers matter most?

Separate pillar regressions find positive associations for technology, interoperability, and digital identity in the standard specification (Exhibit 32). The estimates change when fixed effects for each country pair are added: the technology coefficient falls from 17.1 to 3.0 percent, and some pillar estimates are not statistically distinguishable from zero. These regressions do not identify an independent causal effect for each pillar, and their coefficients cannot be added. The practical case for digital reporting, remote identification, and interoperability rests on the transaction frictions they address as well as on these associations across countries.

EXHIBIT 32

Association between Index pillars and trade in goods: effect of a 10% improvement in each prior-year pillar score



Separate PPML gravity models with year fixed effects and standard bilateral controls. Compliance and competition not statistically significant; pillar estimates are not additive. Source: Nextrade Group estimates.

CASE 3 · PROJECT MANDALA: AUTOMATED COMPLIANCE FOR CROSS-BORDER PAYMENTS

Project Mandala — a proof-of-concept by the BIS Innovation Hub Singapore Centre with the central banks of Australia, Korea, Malaysia, and Singapore — enables banks to automatically integrate country-specific regulatory requirements into cross-border payment workflows and detect risks before making the payment.⁵¹ Its decentralized architecture pairs a peer-to-peer messaging system, a rules engine, and a proof engine; once a payment is verified, a compliance proof travels with the Swift credit transfer instruction.⁵² Identity draws on the LEI database; sanctions data on OpenSanctions.

Completed in late 2024, the proof of concept validated automated capital-flow-management compliance and sanctions screening in cross-border lending and capital investment, improving privacy through zero-knowledge proofs and multi-party computation. Phase 2 — now including the Bank of France, the Reserve Bank of India, and others — is exploring programmable compliance for digital assets.

SECTION 6

Policy recommendations

Financial regulation is essential to protect financial integrity. However, poorly calibrated rules, excessive documentation, and defensive over-enforcement restrict legitimate transactions without materially reducing risk. The evidence points to a clear conclusion: cross-border payment frictions are a material and substantially policy-induced constraint on SME trade. Governments can reduce them — without weakening financial integrity — by making regulation more proportionate, digitized, interoperable, competitive, and responsive to technological change.

01 Calibrate compliance obligations to actual risk

Effective reform is not about deregulation; it is about calibrating regulation to risk. The greatest friction in the SME survey is not the cost of the payment itself but the compliance process surrounding it: 61 percent of SMEs report documentation requirements as a recurring challenge, and SMEs spend 31 minutes on average per wire transfer. Governments should review documentation and due diligence requirements by transaction purpose, customer and counterparty risk, value, and payment channel. Where a national risk assessment supports simplified measures for a defined lower-risk segment, authorities can specify eligibility, safeguards, and reporting requirements in regulation, then monitor whether the change reduces processing time without weakening detection. A value threshold may form part of such a regime, but the US\$10,000 figure proposed here requires calibration to each country's circumstances rather than universal adoption. Brazil's consolidation of FX documentation codes from 180 to 10 under Law 14,286/2021 and Nigeria's April 2025 PAPSS thresholds illustrate two such designs in different legal contexts.

Trackable milestones: published simplified-CDD thresholds for low-value payments; fewer documents required for payments in defined lower-risk segments; lower average bank processing time per payment.

02 Digitize compliance and deploy AI to target risk

Digitization of compliance provides a high return on investment — the lowest-scoring economies (Cambodia, Egypt, Morocco, Mexico, Argentina) have a ready opportunity. Governments should establish cloud-based STR platforms, mandate e-KYC and digital onboarding rights, and implement digital trade single windows; Project Mandala — a proof of concept whose governance and legal recognition remain unresolved — illustrates how multi-country compliance checks could be digitized. FATF's June 2026 consultation on Recommendation 16 concerns the transparency of information accompanying cross-border payments and checks that can reduce misdirected payments; it is relevant to data quality and payee verification. The use of AI in AML/CFT screening raises a separate supervisory question: institutions need documented model performance, oversight, audit trails, and clear responsibility for screening decisions. Verification-of-Payee schemes, as in the EU and UK, have reduced fraud and built trust; payee verification should be a condition of participation in domestic fast payment rails, with cross-border interoperability built in from the outset.

03 Build interoperability through standards, APIs, and digital identity

When two payment networks cannot exchange messages in a common format, when a digital identity issued in one jurisdiction is not recognized in another, and when settlement finality requires multiple correspondent intermediaries, the costs are borne by the end user. Governments should commit to full ISO 20022 deployment, including cross-border messaging compatibility, and create and scale interoperability initiatives (PAPSS in Africa, EuroPA/EPI in Europe, Project Nexus for real-time rails). Governments and payment systems should enable the LEI to travel as a structured, complementary identifier for business payments where the participating firms have one. Before imposing a transaction value threshold, authorities should assess LEI coverage among SMEs, registration and renewal costs, data quality, and compatibility with the applicable ISO 20022 usage guidelines. Pilots with larger or riskier business payments could establish whether the identifier improves screening and reconciliation.

04 Promote SMEs' adoption of best-fit digital payment methods

The demand-side evidence is unambiguous: SMEs adopt lower-cost methods when they are accessible, and they seek methods fit for purpose. Governments should establish transparent payment cost comparison frameworks. Payment providers should disclose the full expected amount paid and received, including provider fees, FX conversion, intermediary deductions, and the expected delivery time, in a form SMEs can compare before authorizing a transaction. The EU's proposed Payment Services Regulation offers one model for clearer FX and payment information, although its final scope and implementation dates should be stated accurately when citing it. Financial literacy programs should equip SMEs to evaluate options; staff-hours per payment is a meaningful metric.

05 Strengthen innovation governance for stablecoins and agentic AI

Innovation governance is the weakest pillar across all 34 economies. Governments should establish digital currency governance frameworks — the legislative models exist: the U.S. GENIUS Act's licensing structure, the EU's MiCA classification with ESMA standards live, Hong Kong's Stablecoins Ordinance, and the Bank of England's June 2026 policy statement with its GBP 40 billion issuance guardrail. Nigeria's 2021 restriction on bank services to cryptocurrency exchanges illustrates how limits on formal intermediation can shift activity to less visible channels. The Central Bank issued guidelines for bank accounts for virtual-asset service providers in December 2023. The current policy question is how licensed providers, stablecoin issuers, banks, and payment firms should interact under a proportionate supervisory framework. Financial supervisors should clarify the responsibilities of institutions that deploy autonomous payment agents, technology providers, and other participants in the payment chain. Rules should specify authorization limits, human escalation, audit records, incident reporting, and customer redress. Liability should follow the legal role and control exercised by each actor under the applicable payment and financial services law. The GFIN Working Group on agentic AI provides the multilateral forum.

06 Promote non-discrimination and market access

Competition in payment services is a precondition for the cost reductions and innovation SMEs need — and this pillar shows the widest variation of any, with India, Cambodia, and Indonesia trailing leaders New Zealand, Chile, the United States, and Australia. Operators of core payment infrastructure should publish transparent, risk-based eligibility criteria for banks and payment providers outside the banking sector. Access should depend on authorization, operational resilience, management of settlement risk, and the function performed. Similar economic functions warrant comparable safeguards, but the requirements for deposit-taking banks, electronic money providers, and stablecoin issuers need not be identical where their risks and legal claims differ. South Africa's drive to open access to non-bank players is an inspiring case in point.

07 Improve tracking of progress on the G20 Roadmap

The FSB already reports progress against the G20 Roadmap through annual key performance indicators. A complementary monitoring layer would track the domestic rules and infrastructure changes that may help explain those outcomes, alongside repeated surveys of SME users. This report's index could contribute to that layer if the underlying coding and historical series are published and updated consistently. Exhibit 2 sets out such an architecture: policy inputs tracked by the Enablement Index, outcome KPIs extended beyond the G20's four targets, and biennial SME surveys that ground-truth whether reform reached firms.

08 Translate data into country-specific reform roadmaps, technical assistance, and trade commitments

Each G20 and FSB member economy should establish a baseline composite Index score and set pillar-level improvement targets aligned with FSB Roadmap reporting. Targets should be calibrated to baseline: emerging markets do not need Singapore-style regulatory architecture overnight, but they should demonstrate measurable year-on-year improvement on their weakest pillars and commit to tangible policies — “establish a stablecoin governance framework,” “build an agentic AI regulatory sandbox.”

Country roadmaps should begin with a documented baseline, identify the few frictions most relevant to the country's trade corridors, and assign measurable milestones to the authorities and payment system operators responsible for them. Technical assistance can support implementation and evaluation. The index can help structure the diagnosis, but a lower score in one partner economy should not be treated as proof that it alone constrains a corridor's trade growth.

APPENDIX 1

Importer survey sample and methodology

The importer survey materials supplied for this annex contain 1,080 completed online responses from businesses in Brazil (300), Indonesia (430), South Africa (200) and Thailand (150). The six Pollfish exports record fieldwork from 31 May 2026 to 13 July 2026.³⁵ Each respondent reported buying products directly from foreign sellers for their business at least three times during the preceding 12 months. The exports cover respondents in manufacturing, retail, tourism and hospitality, wholesale, consumer goods, and fashion and apparel. The sample comprises respondents rather than verified unique firms; the files do not contain a company identifier. No exporter survey records were supplied for this annex.

Pollfish administered the questionnaires online. Responses could be completed through the platform’s supported devices, but the supplied files do not identify each respondent’s device. The six exports represent separate survey IDs. Their 1,080 transaction IDs are distinct, including across files labeled “Copy of.” Every exported respondent weight equals 1; the figures below therefore use unweighted counts and percentages. The exports do not document invitation numbers, response rates, the quota design, independent firm verification, or population weights. Results describe participating respondents and should not be read as national prevalence estimates for all SMEs.

TABLE A1

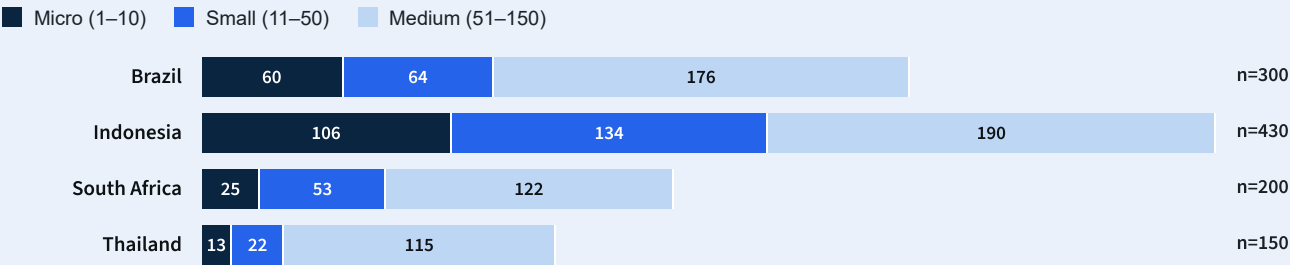
Survey exports and completed responses

ECONOMY	COMPLETED RESPONSES	FIELDWORK IN SUPPLIED EXPORTS
Brazil	300	31 May–20 June 2026
Indonesia	430	3 June–13 July 2026
South Africa	200	31 May–22 June 2026
Thailand	150	8–23 June 2026
Total	1,080	31 May–13 July 2026

Source: six Pollfish respondent exports supplied for this annex.

FIGURE A1

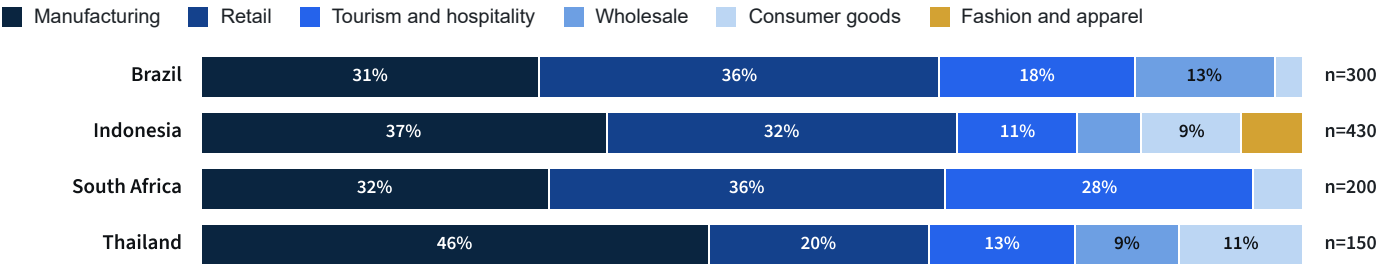
Firm size by economy (number of respondents)



Micro = 1–10 or 2–10 employees according to the wave’s lowest eligible band; small = 11–50; medium = 51–150. The exports report 204 micro, 273 small and 603 medium-sized businesses. The size field was an explicit screening question in four exports and a Pollfish profile field in the additional Indonesia export and the South Africa export. Source: Pollfish respondent exports; audit workbook tabulations.

FIGURE A2

Sector composition by economy (share of respondents)



Percentage of respondents within each economy. “Tourism and hospitality” combines two equivalent labels used across the instruments; “consumer goods” combines FMCG and consumer packaged goods. Fashion and apparel is shown separately because it appears as a distinct profile category in one Indonesia export. Sector was collected as a screening question in four exports and as a Pollfish profile field in the other two. Source: Pollfish respondent exports; audit workbook tabulations.

The questionnaire versions vary across the six survey IDs. Country-specific modules and some questions are absent from particular exports, so each reported statistic should identify its applicable survey IDs and valid response denominator. Multiple-choice items can yield percentages that sum to more than 100. Questions asking about 2024 or 2025 are retrospective; those asking what respondents expect by the end of 2026 measure expectations rather than realized outcomes. Country comparisons should account for the unequal sample sizes and the different sources of the firm size and sector fields.

RECONCILIATION WITH THE CURRENT REPORT

The report’s earlier Appendix 1 stated 1,100 respondents with 2–150 employees and fieldwork in August–September 2025. These six exports instead contain 1,080 distinct respondent records dated May–July 2026. They exceed the requested 1,000-response threshold. The lower size band in four exports is 1–10 employees, so the stated two-employee minimum cannot be verified for those 750 respondents. The report’s count, dates, firm size wording, questionnaire references and results should be reconciled against the analysis dataset before publication.

Index and trade model

The Cross-Border Payments Enablement Index maps 30 policy, technology, and institutional indicators across 34 economies, each coded 0–2, with sources documented in the underlying matrix. Gravity estimates are Poisson pseudo-maximum-likelihood models of bilateral manufactured-goods trade over 2018–2025 with payments-enablement values lagged one year and country-pair-clustered standard errors. Full country data for the Index and regression specifications are available from Nextrade Group.

Sources: six Polish respondent exports supplied for this annex; sample tabulations and wave checks in the accompanying audit workbook. Format reference: Nextrade Group, "Simplifying cross-border payments to unlock ecommerce growth," Appendix 1, November 2025.

APPENDIX 2

Reform experiences to fuel cross-border payments

These cases examine how regulatory and infrastructure reforms can reduce frictions in cross-border payments for smaller firms. Each distinguishes the policy change from observed outcomes and identifies the conditions under which the approach may be transferable. Reported activity and operator estimates are labelled where independent impact evidence is unavailable.

POLICY AREA	CASE	FRICTION	REFORM OR EVIDENCE	POLICY IMPLICATION
Compliance	1 · Argentina	Unpredictable, rationed access to foreign exchange for import payments.	Removed the current-import foreign exchange waiting period in April 2025; later reinstated a 90-day restriction for certain individual foreign exchange transactions.	<i>Set a clear cutover and plan for stress-related rule changes.</i>
Compliance	2 · Brazil	Fragmented foreign exchange legislation accumulated over decades.	Law 14,286/2021 consolidated the foreign exchange statute and shifted operating detail to Central Bank rules.	<i>Simplify the legal architecture while keeping rules current.</i>
Compliance	3 · Indonesia	Duplicated customer due diligence across institutions.	OJK Regulation 8/2023 permits conditional reliance on third-party verification while liability stays with the relying institution.	<i>Reuse verification with enforceable safeguards.</i>
Technology	4 · Pakistan	A separate bank form required before every customs declaration.	The single window linked banks, customs and traders, replacing the import and export form step for covered transactions; the rollout remains incomplete.	<i>Give electronic data legal effect and bring banks into the single window.</i>
Technology	5 · European Union	Voluntary instant transfers had uneven reach and could carry a price premium; payee verification was not a common obligation.	Regulation 2024/886 mandates instant euro transfers, fee parity and free verification of payee on staggered dates through 2028.	<i>Combine reachability with fraud and sanctions controls.</i>
Technology	6 · Project Mandala	Compliance checks repeated manually across jurisdictions and institutions.	A Bank for International Settlements proof of concept encoded differing jurisdictional checks and generated portable compliance proofs.	<i>Test legal recognition and governance before production use.</i>
Innovation governance	7 · Singapore	Artificial intelligence systems moving from advice to autonomous action.	The Monetary Authority of Singapore and industry moved from FEAT and Veritas to AI risk tools and a 2026 agentic-finance white paper.	<i>Control actions at execution; distinguish white papers from regulation.</i>
Innovation governance	8 · Stablecoins	Gross on-chain volumes overstate payment activity; conversion and compliance add costs.	BCG estimates US\$350–550 billion in observable goods-and-services payments in 2025, combining domestic and cross-border use.	<i>Evaluate total payment-chain costs, not on-chain volume alone.</i>
Identity	9 · India	Repeated, in-person identity verification at every institution.	Remote know-your-customer routes and a central registry permit regulated reuse of customer records.	<i>Remove repeated onboarding steps while preserving due diligence.</i>
Interoperability	10 · Chile	A domestic high-value system needed a coordinated move to structured messages.	LBTR migrated in two phases; an industry review found remaining gaps against harmonised requirements.	<i>Complete the migration and then use the richer message functions.</i>
Interoperability	11 · Nigeria	Friction at the foreign exchange, infrastructure, documentation and identity layers at once.	Nigeria changed foreign-exchange, documentation, identity and domestic-payment arrangements; reported platform use is not a cross-border impact estimate.	<i>Measure actual cross-border outcomes across the chain.</i>
Interoperability	12 · India	A domestic rail without legal, technical and intermediary pathways abroad.	Foreign exchange rule changes, bilateral and Nexus links, and payment-aggregator rules address currency, rail and intermediary requirements.	<i>A corridor needs legal permission, connection and regulated service providers.</i>
Competition	13 · UK and Singapore	Non-banks dependent on sponsor banks for access to payment infrastructure.	Both opened payment infrastructure access to eligible regulated non-bank providers.	<i>Set access by function, authorisation and operational risk.</i>

1 · Argentina: sequencing the easing of foreign-exchange controls

CONSTRAINT: Import approvals and foreign-exchange rules made payment timing uncertain.

REFORM: Argentina removed approval layers, ended the waiting period for current import payments in April 2025 and adopted an exchange-rate band. It reinstated a 90-day restriction for certain individual transactions in September.

POLICY IMPLICATION: Set a dated transition, distinguish current from legacy obligations and account for the possibility of selective tightening under reserve pressure.

Argentina's exchange-control regime made the timing of import payments a policy decision. Import approvals, payment schedules and restrictions on access to the official foreign-exchange market interacted to delay settlement and complicate planning for importers.

REFORM SEQUENCE

The government eased these restrictions in stages.

The first was import approvals. The Sistema de Importaciones de la República Argentina (SIRA) was replaced in December 2023 by the Sistema Estadístico de Importaciones (SEDI), a declaration-based regime that removed the SIRA economic-approval mechanism administered by the Secretariat of Commerce while leaving ordinary customs, tax, sanitary and other controls intact.¹ SEDI itself was repealed in February 2025, eliminating the separate pre-import statistical filing.²

The payment regime opened next. Communication "A" 8226 was issued by the Central Bank on 11 April 2025 and took effect on 14 April.³ It formed part of phase three of the government's economic programme, launched alongside a new US\$20 billion International Monetary Fund (IMF) arrangement and other external financing intended to strengthen reserves and the Central Bank balance sheet.⁴ For goods registered with customs from 14 April 2025, the waiting period for access to foreign exchange fell from 30 days to zero. Earlier entries remained subject to the old schedule. Micro, small, and medium enterprises (MSMEs) gained access to payment at sight, that is, immediate payment once qualifying goods had been shipped from origin, from that date. Advance payment limits for capital goods were also relaxed.⁵

For services supplied or accrued from 14 April, payments to unrelated counterparties became eligible from the date of supply or accrual. Payments to related counterparties remained subject to a 90-day delay.⁶

Resident individuals were again allowed to access the official foreign exchange market to purchase foreign currency for savings or deposits without prior approval from the Banco Central de la República Argentina (BCRA), and the US\$200 monthly limit was removed. Several transaction conditions remained, including account-based settlement, registration and evidence of income or assets consistent with the purchase.⁷

Companies also regained access to foreign exchange to remit dividends to non-resident shareholders, although only for distributable profits from audited financial years beginning on or after 1 January 2025.⁸ The wider package eliminated the dólar blend export settlement mechanism and introduced a managed exchange-rate band initially ranging from ARS 1,000 to ARS 1,400 per dollar, with the floor and ceiling moving one per cent per month in opposite directions.⁹ The IMF's first review in July 2025 concluded that the transition to greater exchange-rate flexibility and the easing of most foreign exchange restrictions had proceeded smoothly.¹⁰

Legacy obligations remained on a separate track. In April 2025 the Central Bank approved Series 4 of the BOPREAL bonds (Bonos para la Reconstrucción de una Argentina Libre), up to US\$3 billion, to address retained dividends generated through 2024, specified related-party debt service and older commercial debts.¹¹

OBSERVED DEVELOPMENTS

Imports rose sharply in 2025. Goods imports reached US\$75.8 billion, up 24.7 per cent from 2024, driven primarily by a 30.5 per cent rise in volumes. Consumer goods imports increased 54.0 per cent, capital goods 51.3 per cent, and passenger vehicles 97.6 per cent.¹² These are outcomes after reform, not estimates of its causal impact. Import procedures, foreign exchange access, the exchange rate and domestic demand all changed during the year.

RESERVE PRESSURE AND SELECTIVE TIGHTENING

The framework was tested within months. Following the Buenos Aires provincial election on 7 September 2025, the peso moved to the top of the exchange rate band. The Central Bank sold US\$53 million on 17 September, US\$379 million on 18 September and US\$678 million on 19 September, or US\$1.11 billion over three sessions.¹³ Gross reserves stood at US\$39.8 billion after the first intervention.¹⁴

The government then acted on both dollar supply and demand. On 22 September it temporarily reduced export duties to zero on specified agricultural products, conditional on rapid settlement of export proceeds. The US\$7 billion quota was exhausted within days.¹⁵ On 26 September, Communication “A” 8336 reinstated a 90-day cross-restriction for individuals accessing the official foreign exchange (FX) market for external asset formation. The measure did not restore the broader cepo or impose a new dollar-purchase cap. It reintroduced one important restriction that had been removed in April.¹⁶ Additional U.S. bilateral support followed. In October 2025 the U.S. Treasury established a swap facility of up to US\$20 billion with the Central Bank.¹⁷ Argentina drew US\$2.5 billion in October and repaid it in December; a separate transaction supplied US\$872 million against Special Drawing Rights (SDRs).¹⁸ The exchange-rate band was subsequently redesigned. From 1 January 2026, both the floor and ceiling began moving each month by the latest published monthly inflation rate, with a two-month lag, replacing the previous one-per-cent adjustment rule.¹⁹ By early 2026 the Central Bank had returned to net purchases of foreign currency.²⁰

The reintroduced cross-restriction persisted. In February 2026 Central Bank sources indicated that its removal for individuals was not under consideration, while remittances of dividends from financial years before 2025 remained restricted.²¹ Communication “A” 8417 of April 2026 extended the cross-restriction to certain transfers of foreign currency to accounts abroad while liberalising other parts of the export settlement regime.²²

POLICY IMPLICATIONS

Argentina’s experience points to the value of a dated and sequenced transition. Import approval requirements were removed first, followed by shorter payment delays and a managed exchange-rate band. Firms could distinguish transactions covered by the new rules from legacy obligations. The treatment of smaller importers was more favourable: MSMs obtained access to payment at sight for qualifying goods, while legacy dividend and commercial claims were channelled through BOPREAL rather than immediately entering the spot market.

The September 2025 episode illustrates the limits of predictability. Reserve sales, accelerated export settlements and a reinstated restriction for individuals followed pressure on the exchange-rate band. The broader liberalisation remained in place, but access conditions could still change rapidly through Central Bank communications.

For firms, the relevant measure of openness is therefore both the current ability to obtain foreign exchange and the stability of the rules that govern access.

2 · Brazil: consolidating the foreign-exchange legal framework

CONSTRAINT: Foreign-exchange law and regulation were dispersed across instruments accumulated over several decades.

REFORM: Law 14,286/2021 consolidated the statutory framework and moved operating detail into Central Bank resolutions adopted at year-end 2022.

POLICY IMPLICATION: A stable legal hierarchy can reduce fragmentation while leaving room for regulatory updates; implementation time and continuing discretion still matter.

Brazil’s 2021 reform consolidated a fragmented body of foreign-exchange and capital-flow legislation in Law 14,286.²³ It changed the legal architecture of an already open market more than the degree of market access.

The free foreign-exchange market had been consolidated in 2005, and mandatory conversion of export proceeds ended in 2008.²⁴ The new law codified broad principles and assigned operating detail to Central Bank regulation.

LEGAL REFORM

The law entered into force on 30 December 2022.²⁵ Banco Central do Brasil (BCB) adopted the principal implementing framework through Resolutions 277–281 at year-end 2022. The resolutions cover the foreign-exchange market, foreign capital and reporting, Brazilian capital abroad, residency definitions and investment conversions.²⁶

The scale of consolidation is visible in the repeal provisions. Article 28 of Law 14,286 repealed fifteen instruments in full and specified provisions of numerous others, including legislation dating from the 1930s and 1940s.²⁷ At the regulatory level, Article 86 of Resolution 277 revoked 47 instruments.²⁸ The substantive framework is comparatively simple. Foreign exchange transactions may be carried out freely, without a statutory value limit, subject to legislation, National Monetary Council guidelines and Central Bank regulation, with exchange rates freely negotiated between authorised institutions and customers.²⁹ Transactions must pass through institutions authorised by the Central Bank.³⁰ Customers are responsible for classifying the purpose of transactions, while authorised institutions must provide guidance and technical support where needed.³¹

The law also facilitates cross-border business. Banks may execute payment orders in reais to and from abroad through accounts held by appropriately regulated foreign institutions.³² Non-resident real accounts generally receive the same treatment as resident accounts, subject to Central Bank requirements.³³ Within this framework, foreign capital is accorded the same legal treatment as national capital on equal terms.³⁴

External commentators have described the reform as moving Brazil closer to OECD practices, including by giving financial institutions greater flexibility in the use of funding raised at home or abroad.³⁵ This is an assessment of the reform, not an objective stated in the statute.

CHANGES FOR FIRMS

The legal texts identify several changes relevant to firms.

Payments under intellectual property and technology contracts were simplified. Article 9 of Law 4,131 now requires proof only of income tax payment where applicable, while several legacy registration and remittance provisions were repealed.³⁶ The law also repealed provisions that had restricted or conditioned certain royalty and technology-related payments, including transactions involving foreign related parties.³⁷

Classification requirements were simplified for smaller transactions. Under Resolution 277, operations up to US\$50,000 use the shorter classification list in Annex III, while larger transactions remain subject to the more detailed Annex IV.³⁸

Foreign currency pricing became lawful in specified domestic transactions, including certain contracts linked to foreign trade, non-residents and infrastructure concessions. Outside the statutory exceptions, foreign currency payment clauses remain prohibited.³⁹ Settlement channels were also broadened. Resolution 277 permits the reais leg of qualifying foreign-exchange and cross-border payment transactions to be settled through authorised institutions and, in specified circumstances, payment institutions participating in the Brazilian Payment System through Pix.⁴⁰

Two smaller provisions reduce transaction costs directly. Occasional, non-professional purchases and sales of foreign banknotes between individuals up to US\$500 fall outside the law.⁴¹ Authorised institutions also may not require information or documents they already hold or can obtain from widely accessible databases.⁴²

These provisions change legal requirements and available channels. Their effect on firms' realised compliance costs has not been established with transaction-level evidence.

CONTINUING CONTROLS AND DISCRETION

Brazil retained an administered foreign exchange regime. The Central Bank continues to define products and operating conditions, supervise authorised institutions and impose differentiated requirements according to transaction value, risk and other characteristics.⁴³ Anti-money-laundering and counter-terrorist-financing obligations remain in place.⁴⁴ Reporting for official macroeconomic statistics remains a statutory requirement.⁴⁵

The legal framework also preserves emergency intervention powers. Under Article 4 XVIII of Law 4,595 of 1964, the National Monetary Council may grant the Central Bank a monopoly over foreign exchange operations where a serious balance-of-payments imbalance exists or is considered imminent. Law 14,286 repealed the Council's broader rulemaking power in Article 4 XXXI but left this emergency authority intact. The Central Bank also retains powers under Article 11 III to intervene for the orderly functioning of the exchange market and balance-of-payments stability.⁴⁶

The regulatory framework continues to evolve. Resolution 277 has been amended by Resolutions 337 of 2023, 401 of 2024, 521 of 2025 and 574 of 2026. The 2025 amendments brought specified virtual-asset services within the foreign exchange framework, while Resolution 574 further amended reporting requirements; reporting on relevant transactions begins in November 2026.⁴⁷

POLICY IMPLICATIONS

Brazil illustrates how consolidation can make an established foreign-exchange regime easier to navigate. A framework statute replaced overlapping legal provisions, while implementing resolutions retained scope for updates as markets and risks change.

The transition required time: the bill spent more than two years in Congress, the statute allowed a year for implementation, and operating detail emerged through consultations and Central Bank resolutions.⁴⁸ Firms therefore gained a clearer legal hierarchy only after the implementing rules were in place. The result is a more coherent statutory framework with substantial policy discretion still exercised through Central Bank regulation. Predictability depends on both levels of the regime.

3 · Indonesia: regulated reliance on third-party customer verification

CONSTRAINT: Repeated customer identification can duplicate work across supervised institutions.

REFORM: POJK 8/2023 permits conditional reliance on prior third-party verification, while the institution establishing the customer relationship retains responsibility.

POLICY IMPLICATION: Allow reuse where supervision, record access and country-risk safeguards can be verified.

Repeated customer identification can raise the cost of cross-border financial services when several institutions verify the same person or firm. Indonesia permits an OJK-supervised provider to use identification and verification already performed for a third party's customer, subject to conditions in POJK 8 of 2023.⁴⁹ The relying provider remains responsible for compliance.

REGULATED RELIANCE

POJK 8 of 2023 replaced the earlier 2017 framework, as amended in 2019, and applies across OJK-supervised financial services providers, including banks, securities firms, lending platforms and financial technology providers.⁵⁰

Article 46 permits reliance on another party's identification and verification results.⁵¹ Responsibility remains with the relying institution.⁵² It must still establish the purpose and intended nature of the relationship and meet the applicable customer and beneficial-owner requirements.⁵³

Reliance is subject to five main safeguards. The provider must have a written agreement with the third party; obtain the relevant identification and verification information directly and immediately; ensure supporting documents can be supplied promptly; establish that the third party is subject to AML, counter-terrorist financing (CFT) and counter-proliferation requirements and competent supervision; and consider the risk of the country in which the third party is located.⁵⁴

Reliance on a third party located in a high-risk country is permitted only within the same financial conglomerate, where group-wide CDD, record-keeping and AML controls meet Financial Action Task Force (FATF) standards and are subject to competent supervision.⁵⁵

The rule expressly excludes outsourcing and agency relationships.⁵⁶ Separate provisions govern the use of third-party technology or systems to perform verification on behalf of the provider.⁵⁷ Breaches can trigger administrative sanctions, including warnings, fines and restrictions on business activities.⁵⁸

A narrower rule applies to beneficial ownership. Where another financial services provider acts for a beneficial owner, verification may in specified circumstances rely on a written confirmation from that provider. For foreign providers, the applicable AML framework must be at least equivalent to the Indonesian requirements; otherwise full identification and verification is required.⁵⁹

The rule can reduce repeated verification where an eligible third party already holds a customer record and the Article 46 safeguards are met.

The relying institution must nevertheless obtain the underlying information and documents and remains accountable for the customer relationship. The cited sources do not quantify uptake, onboarding times or cost savings.

LIMITS

The most important limitation lies outside the OJK framework.

Non-bank payment and money-changing providers are supervised under a separate Bank Indonesia regime. Bank Indonesia Regulation 10 of 2024 replaced the prior AML/CFT framework for these providers.⁶⁰ The provisions reviewed here do not establish whether that regime offers equivalent third-party reliance.

The distinction matters for the assessment of Indonesia's wider framework. FATF rates Recommendation 17 on third-party reliance as Largely Compliant because it found a gap in group-wide record-keeping and AML/CFT obligations for non-bank payment and money-changing providers.⁶¹ That finding does not identify a deficiency in OJK Article 46.

A second limitation concerns beneficial ownership. FATF continues to identify inconsistencies in Indonesia's definition and verification requirements for beneficial owners.⁶² Reliance cannot fully solve weaknesses in the underlying information being relied upon. Indonesia's June 2026 FATF follow-up report upgraded Recommendation 6 to Compliant. It continued to report Recommendation 17 as Largely Compliant and stated that Indonesia would no longer report back under the fourth-round follow-up process.⁶³

POLICY IMPLICATIONS

Indonesia shows that a jurisdiction can permit cross-institution reliance without a mutual-recognition agreement with another government. The safeguards attach to the relying institution, the third party and the jurisdiction where the third party operates.

The design has three features with wider relevance.

First, accountability remains with the institution establishing the customer relationship. Second, the third party must be supervised and capable of supplying the supporting record promptly; higher-risk jurisdictions trigger further group-wide conditions.⁵⁴

Third, reliance on another institution's prior checks is governed separately from outsourcing verification to a vendor. This distinction clarifies which institution owns the customer relationship and the associated compliance obligation.

The potential benefit is less repeated work without a transfer of legal responsibility. Consistency across OJK and Bank Indonesia supervision will matter for payment providers operating across the two regimes.

4 · Pakistan: integrating the payment leg into the single window

CONSTRAINT: Traders using the legacy process obtained a separate bank form before a customs declaration.

REFORM: Pakistan linked banks to its single window; electronic banking profiles and data exchange replace the EIF/EFE step for transactions using integrated banks.

POLICY IMPLICATION: Give the digital workflow a regulatory basis and expand bank and agency coverage.

Pakistan extended the single-window model beyond customs documentation by connecting traders, Customs and authorised banks in one digital process. The payment-related gain came from removing a separate bank form for covered transactions.

The key reform was narrow but important. For traders using banks integrated with the Pakistan Single Window (PSW), the old consignment-level Electronic Import Form (EIF) and Electronic Form-E (EFE) were replaced by electronic banking profiles and real-time data exchange between banks and PSW.⁶⁴

DIGITAL WORKFLOW

The Pakistan Single Window Act, 2021 established the legal framework and designated Pakistan Single Window Company as the system's operating entity. It also requires Customs and scheduled government agencies to align their procedures and information requirements with PSW.⁶⁵

Before PSW, traders generally had to obtain an EIF or EFE from an Authorized Dealer before filing the relevant customs declaration. Under PSW, the trader instead associates a bank account with its PSW profile and the bank verifies the relationship electronically. Financial instruments such as letters of credit, advance-payment arrangements and collection or contract arrangements can then be associated electronically with customs declarations. Open-account transactions do not require a financial instrument.⁶⁶

This does not eliminate the underlying banking or trade-finance relationship. It removes the separate consignment-level EIF/EFE step for transactions processed through integrated banks.

The State Bank amended its Foreign Exchange Manual accordingly. Foreign Exchange (FE) Circular No. 05 of 2021 revised the export rules for processing through PSW.⁶⁷ FE Circular No. 06 of 2021 introduced a new paragraph on executing import payments through PSW.⁶⁸ The official PSW account explains that, for users of integrated banks, electronic trader profiles and data exchange replace the separate EIF/EFE approval step.⁶⁴

Together, these rules and operating changes allow an electronic banking profile to replace a recurring pre-declaration approval step where the trader's bank is integrated with PSW.

EFFECTS FOR TRADERS

For covered transactions, a recurring bank-document step was replaced by a standing banking profile and electronic association of payment information with the customs declaration. Information can move in real time among the trader, Authorized Dealer, Customs and State Bank.⁶⁹

The system is operating at substantial scale. For fiscal year (FY) 2024/25, PSW reported more than 93,000 subscribers, 1.25 million trade declarations and 797,000 licences, permits, certificates and other documents processed through the system. It also reported 173 business processes digitised and 104 redundant processes eliminated.⁷⁰

PSW reports transaction-time reductions exceeding 50 per cent and expected annual trade-transaction-cost savings of about US\$430 million.⁷¹ These are operator estimates; the cited material does not isolate their causal effect. Pakistan's score in the UN trade-facilitation survey reflects reforms across multiple agencies and cannot be attributed to PSW alone.⁷²

The same infrastructure also supports compliance. Pakistan's trade-based money-laundering framework predates PSW: the State Bank introduced it in 2019 and revised it in 2025.⁷³ Under PSW-based import processing, Authorized Dealers remain responsible for customer due diligence and other controls under that framework.⁷⁴ PSW digitises the transmission and application of existing controls rather than replacing them.

LIMITS

Agency integration remains incomplete.

PSW's FY2024/25 annual report recorded 23 integrated government agencies as of 30 June 2025.⁷⁵ Its submission to the UNECE Single Window Repository identifies manual processes, uneven technical capacity, staff turnover and approval delays as obstacles to further integration.⁷⁶

Bank coverage still matters. PSW states that a trader must use a bank integrated with its platform to use the replacement process, so the document step has not disappeared for every trader.⁷⁷

Independent survey research reports a generally positive user assessment alongside continuing usability, inter-agency coordination and customs-process problems.⁷⁸

The reform has changed how covered trade and payment information moves; it has not removed the underlying foreign-exchange or trade controls.

POLICY IMPLICATIONS

Pakistan's experience yields three transferable design principles.

First, include banks in the single window. A customs-only platform leaves traders facing a separate payment-document process.

Second, align the legal rule with the digital workflow. State Bank circulars gave PSW-based processing a regulatory basis, allowing covered transactions to proceed without the earlier EIF/EFE approval step. Third, reuse verified data. The banking profile and transaction records replace repeated consignment-level forms rather than replicating them on screen.

The size of the benefit will depend on bank and agency coverage, reliable data exchange and the institutions' ability to operate the revised process.

The same infrastructure can support faster processing and more systematic application of foreign-exchange and AML controls. Evidence on firm-level time and cost savings is still needed.

5 · European Union: extending instant euro transfers with common safeguards

CONSTRAINT: Voluntary instant euro transfers had uneven reach and could cost more than standard transfers; no common payee-verification obligation applied.

REFORM: Regulation (EU) 2024/886 sets staggered obligations for instant euro transfers, fee parity, free payee verification and daily screening of users against targeted financial restrictive measures.

POLICY IMPLICATION: Pair reachability rules with safeguards and allow adequate time for technical standards and provider testing.

The Single Euro Payments Area (SEPA) had harmonised euro credit transfers, and its instant-transfer scheme had operated since 2017. Participation remained voluntary, coverage uneven and pricing sometimes higher than for standard transfers.⁷⁹ Regulation (EU) 2024/886 introduced common obligations for providers that offer euro credit transfers, with deadlines that differ by provider type and member state.⁸⁰

WHAT THE EUROPEAN UNION DID

Implementation is staggered. For euro area providers, the requirement to receive instant euro transfers, and the prohibition on charging more for them than for comparable standard transfers, applied from 9 January 2025. The requirement to offer sending, and to provide verification of payee, applied from 9 October 2025. Providers in non-euro area member states follow from 9 January 2027 for receiving and 9 July 2027 for sending and verification of payee, with electronic money institutions and payment institutions on their own dates, and a final deadline of 9 June 2028 for sending outside business hours from accounts denominated in national currency.⁸¹

The core obligation is simple. A provider that offers the sending and receiving of euro credit transfers must also offer the sending and receiving of instant euro credit transfers.⁸² Charges for instant transfers may not exceed charges for other credit transfers of corresponding type.⁸³

Verification of payee adds a fraud control layer. Before a euro credit transfer is authorised, the payer's provider checks whether the payee name supplied by the payer corresponds to the account identifier held by the payee's provider, and returns a result of match, close match, no match or other. The service applies to both standard and instant euro credit transfers and must be provided to the payer free of charge.⁸⁴

For instant credit transfers, the regulation replaces transaction-by-transaction screening for targeted financial restrictive measures with screening of payment service users at least daily.⁸⁵ This design seeks to preserve sanctions controls while allowing payments to be processed within the required time. On the infrastructure side, the Eurosystem itself offers a verification of payee service, built on solutions developed by Banco de Portugal and Latvijas Banka in accordance with the European Payments Council scheme, available both for instant payments settled in TARGET Instant Payment Settlement and for SEPA credit transfers.⁸⁶

EFFECTS FOR USERS

The regulation addresses three barriers to wider use: limited reachability, higher prices and uncertainty about whether a name matches the destination account.

Once the applicable deadline has passed, an SME can send an eligible euro transfer to a supplier in the covered area at any hour, at no higher charge than a comparable standard transfer, and receive a payee-verification result before authorisation.⁸⁷

The obligation is on providers to offer the service; customers may continue to choose standard transfers.

IMPLEMENTATION CHALLENGES

Providers have had to adapt systems built around banking hours and batch processing to continuous service, liquidity management and near-immediate settlement. The staggered deadlines reflect the scale of that change.

Verification of payee created a second implementation challenge, and the timing was tight. The European Payments Council's verification of payee rulebook, approved in October 2024, entered into force on 5 October 2025, four days before the regulatory deadline for euro area providers.⁸⁸ Problems surfaced after launch. Following a December 2025 public consultation on urgent change requests identified by its

verification of payee working group, the Council published version 1.1 of the rulebook on 16 March 2026, together with revised application programming interface (API) specifications and a revised API security framework, all effective from 20 September 2026. A further consultation on a version 2.0 ran from April to June 2026.⁸⁹ Name matching is also inherently imperfect. Differences between registered names and trading names, spelling variations and account structures can produce close match, no match or other results even where the intended payee is legitimate. The scheme has to specify matching rules and how results are communicated to payers.⁹⁰

Verification of payee addresses only one fraud mechanism. It helps detect cases where the account identifier does not correspond to the intended payee. It cannot prevent fraud where a criminal controls an account whose name correctly matches the payment instruction.

POLICY IMPLICATIONS

The EU experience suggests that a common technical scheme may need binding reachability and pricing rules to achieve broad availability. SEPA Instant had operated for eight years before those obligations took effect.

Speed also requires safeguards designed for the same operating model. Verification of payee addresses errors and some forms of payment redirection, while daily customer screening avoids interrupting each instant transfer for a targeted-sanctions check.

Implementation timing matters. The verification-of-payee rulebook took effect four days before the first major regulatory deadline and was revised within months. Common standards and provider testing need to mature alongside the mandate.

For regional payment areas, the transferable package is a connected set of service obligations, interoperable verification, pricing rules and coordinated deadlines.

6 · Project Mandala: programmable compliance for cross-border payments

CONSTRAINT: Different national compliance rules can require repeated checks and data exchange along a cross-border payment chain.

PROOF OF CONCEPT: Project Mandala encoded selected jurisdiction-specific rules and generated compliance evidence that could accompany a payment in experimental systems.

POLICY IMPLICATION: Machine-readable checks can coexist with national rules, but live use requires governance, liability and legal recognition of the evidence.

Cross-border payments must satisfy jurisdiction-specific sanctions, capital-flow and reporting requirements. When each institution repeats those checks, compliance can add time and require more data to be exchanged.

Project Mandala tested whether machine-readable rules and portable evidence of completed checks could move part of that work earlier in the payment chain. The BIS Innovation Hub published the proof-of-concept report in October 2024.⁹¹

PROOF OF CONCEPT

The first phase was a proof of concept run by the BIS Innovation Hub Singapore Centre with the Reserve Bank of Australia, the Bank of Korea, Bank Negara Malaysia and the Monetary Authority of Singapore, with significant contributions from the Bank of France and with participating commercial banks. The BIS describes the project as purely experimental and states that it does not indicate any intention by the participating banks to deploy the system.⁹²

Mandala did not harmonise national regulation. It preserved the existing framework, encoding jurisdiction-specific requirements such as sanctions screening and capital flow management measures into machine-readable rules, and maintained the model in which financial institutions remain responsible for interpreting and applying official measures.⁹³

Its decentralised architecture gives every participant a node with three components: a peer-to-peer messaging element, a rules engine and a proof engine. The rules engine determines which regulatory requirements apply to a transaction. The proof engine performs the checks and generates cryptographic evidence that they were completed.⁹⁴

The proof can then travel with the transaction. The proof of concept integrated compliance proofs both with the wholesale central bank digital currency developed in Project Mariana, deployed on a testnet, and with Swift, by embedding a compliance check identifier in an ISO 20022 credit transfer message in Swift's experimental sandbox.⁹⁵

DATA AND PRIVACY

Mandala also tested common external data sources. For basic entity information it used the Legal Entity Identifier database. For sanctions screening it connected to OpenSanctions, which consolidated the official sanctions lists of the four participating jurisdictions.⁹⁶ Privacy-preserving techniques allowed participants to demonstrate that a check had been satisfied without sharing the underlying data. Where one party held the confidential data, checks were implemented through zero-knowledge proofs. Where both parties held commercially sensitive data, they were implemented through secure multi-party computation.⁹⁷

USE CASES

The proof of concept tested two cross-border financing cases.

The first involved lending from Singapore to Malaysia. Mandala demonstrated how sanctions screening and Malaysian capital flow management requirements, including the limit on foreign currency external borrowing from unrelated non-residents, could be checked during pre-validation, with compliance proofs generated before settlement.⁹⁸ It also explored how a central bank could use the same architecture for more timely monitoring of that compliance.⁹⁸

The second involved a Korean entity financing an Australian company through the acquisition of unlisted debt securities. Mandala tested automated checks against Korean capital flow management thresholds and netting reporting requirements, together with sanctions screening.⁹⁹

The tests established technical feasibility for the specified use cases. They did not measure savings in a production payment system. The BIS identified possible compliance-cost reductions for further study and excluded identity, onboarding, beneficial ownership, governance, liability, cybersecurity, commercial viability and full integration with live payment systems from this phase.¹⁰⁰

POTENTIAL AND LIMITS

Mandala offers a technical route to regulatory interoperability where national rules remain different. A shared architecture can identify the rules applicable to a transaction and attach evidence that specified checks were completed.

Pre-validation may reduce the risk of a compliance problem emerging after a payment has entered the chain. Production use, however, would require regulators and institutions to agree on the legal status of the proof, the quality of underlying data, governance and liability. The proof of concept did not resolve those questions.

PHASE 2 In November 2025 the BIS moved Mandala into a second phase focused on programmable compliance for digital assets and broader use cases. Phase 2 is led by the BIS Innovation Hub Singapore Centre with the Reserve Bank of Australia, the Bank of France, the Reserve Bank of India, the Central Bank of Kuwait, the Central Bank of Malaysia, Bangko Sentral ng Pilipinas and the Monetary Authority of Singapore.¹⁰¹

The stated focus is on evaluating potential benefits empirically, expanding the range of use cases, and assessing utility for other platforms and projects.¹⁰²

POLICY IMPLICATIONS

Mandala's transferable insight is the separation of common processing from national rulemaking. Jurisdictions can retain different requirements while expressing selected checks in a format that other participants can process.

Checking those requirements before payment initiation could avoid later exceptions and rework, subject to reliable rules and data.

Cryptographic proofs could reduce repeated disclosure of confidential information. That potential depends on whether receiving institutions and supervisors accept the proof and can determine who is responsible if an underlying check is wrong.

Mandala remains experimental. The next test is institutional as well as technical: whether governance, legal responsibility and recognition of compliance evidence can be agreed for live use.

7 · Singapore: governing AI and agentic finance

CONSTRAINT: AI systems that initiate financial actions require controls over authority and execution as well as model performance.

POLICY RESPONSE: MAS and industry have developed principles, assessment methods, risk-management tools and a 2026 white paper proposing runtime safeguards for agents.

POLICY IMPLICATION: Specify controls as use cases mature and distinguish industry proposals from supervisory requirements.

As financial institutions begin testing AI systems that can initiate actions, governance must address the authority granted to a system and the controls applied at the point of execution.¹⁰³ Singapore provides a sequence of principles, assessment tools and proposed runtime safeguards.

GOVERNANCE SEQUENCE

Singapore developed financial sector AI governance progressively. The Monetary Authority of Singapore (MAS) introduced the Fairness, Ethics, Accountability and Transparency (FEAT) principles in 2018 and subsequently worked with industry through Veritas to develop methods for assessing AI systems against those principles.¹⁰⁴ MAS then used thematic reviews and Project MindForge to translate broad principles into more operational risk management practices.¹⁰⁵

The framework has since expanded to generative and agentic AI. MAS consulted on specific AI Risk Management Guidelines in November 2025 and released the MindForge AI Risk Management Toolkit with industry in March 2026.¹⁰⁶ On 3 July 2026 the Safeguards for Agentic Finance at Runtime framework, or SAFR, was published as an industry white paper jointly developed by financial institutions and FinTechs under MAS' BuildFin.ai initiative. It proposes controls that validate, constrain and record the actions of AI agents before execution. The paper states expressly that it does not constitute regulatory guidance or supervisory expectations.¹⁰⁷

POLICY IMPLICATIONS

Singapore's approach has become more specific as financial-sector use of AI has evolved: broad FEAT principles were followed by assessment methods, supervisory observations and industry tools.¹⁰⁸ The SAFR white paper extends this work to proposed controls on an agent's individual actions, including authorisation, escalation and records at the point of execution.¹⁰⁹

The cited materials document governance practices and proposed safeguards. They do not establish effects on fraud, payment volumes or financial inclusion.¹¹⁰ SAFR is an industry white paper and does not create supervisory requirements.

8 · Stablecoins and cross-border payments

MEASUREMENT ISSUE: Gross on-chain transfers include trading and technical activity and cannot be equated with cross-border payments.

EVIDENCE AND RESPONSE: BCG estimates US\$350–550 billion in observable 2025 goods-and-services payments, domestic and cross-border combined; regulatory frameworks focus on issuer and intermediary safeguards.

POLICY IMPLICATION: Compare end-to-end payment costs and risks with other rails, rather than relying on transfer volume or network fees.

On-chain stablecoin transfers are large, but gross transfer volume is a poor proxy for payments to households or businesses.¹¹¹ The policy assessment requires separating economic uses from trading and network activity, then measuring the full cost of entering, transferring and redeeming a token.

EVIDENCE ON USE

Stablecoin market capitalisation was around US\$320 billion at end-May 2026, and approximately 99 per cent of supply is denominated in US dollars. The Bank for International Settlements (BIS) notes that the market remains dwarfed by the trillions of US dollars held in bank deposits.¹¹²

BCG estimates about US\$62 trillion in gross stablecoin transfers in 2025. After filtering non-economic activity, it identifies US\$350–550 billion in observable bilateral payments for goods and services.¹¹³ The estimate covers domestic and cross-border uses and excludes some off-chain and card-based activity. It therefore cannot be read as a total for cross-border payments.

A stablecoin can provide continuous digital settlement without a conventional correspondent-bank chain.¹¹⁴ Users still need access to the token, foreign-exchange conversion, liquidity, redemption and compliance services. The network fee alone does not measure the end-to-end cost of a cross-border payment.¹¹⁵

THE POLICY TRADE-OFF

Dollar-denominated stablecoins can increase currency-substitution, capital-flow and financial-integrity risks, particularly in emerging markets.¹¹⁶ The BIS finds that inflows were broadly similar in economies with and without capital-flow restrictions and cautions that restrictions on domestic intermediaries may be imperfect where unhosted wallets are used. Regulatory frameworks therefore focus on issuer authorisation, reserves, redemption, custody, disclosure and AML obligations.¹¹⁷

POLICY IMPLICATIONS

Stablecoins may improve the settlement stage of some cross-border transfers, but outcomes depend on access, conversion, liquidity and regulatory treatment throughout the chain.¹¹⁸ Policymakers should compare those end-to-end outcomes with fast-payment interlinking and regulated forms of tokenised money.¹¹⁹

9 · India: digital KYC and reusable customer identity

CONSTRAINT: Repeated document collection and in-person checks can slow customer onboarding.

REFORM: RBI rules allow specified remote identification methods, while the Central KYC Records Registry supports retrieval of valid existing records.

POLICY IMPLICATION: Combine reusable identity records with consent, updating and risk-based due diligence.

Repeated collection and verification of identity documents can slow remote onboarding. India combines legally recognised digital identification methods with a central registry from which regulated entities can retrieve existing KYC records.¹²⁰

DIGITAL KYC FRAMEWORK

Reserve Bank of India (RBI) rules recognise several remote identification routes, including Aadhaar-based methods where permitted, equivalent electronic documents and the Video-based Customer Identification Process, or V-CIP.¹²¹ V-CIP is a live, consent-based audio-visual process conducted by an authorised official and, when performed in accordance with RBI requirements, is treated as equivalent to face-to-face identification.¹²²

India also uses the Central KYC Records Registry. Where a valid record exists, a regulated entity can retrieve it using the customer's KYC identifier and consent rather than requiring the customer to resubmit the same documents, subject to updating or additional due diligence requirements where necessary.¹²³ RBI retains requirements governing liveness, auditability, data security, enhanced due diligence and the circumstances in which additional verification is required.¹²⁴

POLICY IMPLICATIONS

Remote identification can remove a physical visit; reuse of a valid KYC record can remove repeated document submission.¹²⁵ The second benefit depends on consent, reliable records and the regulated entity's ability to update information or conduct further checks when needed.¹²⁶

The rules establish a route to lower procedural friction in onboarding. They do not, on their own, establish a causal link to the growth of UPI or digital finance in India.¹²⁷

10 · Chile: phased ISO 20022 migration

CONSTRAINT: Migrating Chile's domestic high-value payment system required coordinated changes in message formats, participant systems and operating procedures.

REFORM: Banco Central de Chile moved LBTR to ISO 20022 in two stages, in November 2024 and September 2025.

POLICY IMPLICATION: Completing message conversion is a first step; harmonised data and payment-return functions require further implementation.

ISO 20022 provides a common format for structured payment data. Consistent implementation can support interoperability and automated processing, but the standard's benefits depend on which data fields and message functions participants actually use.¹²⁸

MIGRATION SEQUENCE

Banco Central de Chile migrated its high-value payment system, the LBTR (Liquidación Bruta en Tiempo Real), to ISO 20022 in two phases. Phase 1 went live on 25 November 2024 and Phase 2 on 8 September 2025, following a programme begun in 2022 with banks and financial market infrastructures.¹²⁹

The phased migration required changes not only at the central bank but also in participating institutions' transactional systems, operating procedures and contingency arrangements.¹³⁰

POLICY IMPLICATIONS

Chile completed a two-stage migration, yet its initial implementation reproduced some legacy message practices.¹³¹ A February 2026 industry task-force review found that LBTR did not support the pacs.004 payment-return message and rated that requirement not aligned; no implementation date had been confirmed. Other data requirements were scheduled for later upgrades.¹³²

The case distinguishes migration from harmonisation. Common deadlines and testing can bring participants onto ISO 20022; further work is needed to use its structured data and return functions consistently across payment chains.¹³³ The cited sources do not measure effects on payment prices, AML costs or correspondent-banking relationships.¹³⁴

11 · Nigeria: reforming several layers of the payment chain

CONSTRAINT: Foreign-exchange access, documentation, payment infrastructure and remote onboarding each added friction to cross-border transactions.

REFORM: Nigeria has changed foreign-exchange market rules, introduced a new domestic payment stack, simplified documentation for low-value PAPSS transactions and enabled remote diaspora identification.

POLICY IMPLICATION: Assess the combined effect on cross-border users; a faster domestic rail addresses only one part of the transaction.

Nigeria has addressed several parts of the payment chain through separate reforms. The available sources document policy measures and early platform use, while evidence on cross-border SME outcomes remains limited.¹³⁵

REFORM MEASURES

The Central Bank of Nigeria introduced the Nigerian Foreign Exchange (FX) Code and electronic interbank matching arrangements to strengthen conduct, price discovery and transparency in the foreign exchange market.¹³⁶ These are reforms to market structure. The cited sources do not by themselves establish lower spreads or greater foreign exchange availability for smaller firms.

The Nigeria Inter-Bank Settlement System (NIBSS) unveiled the ISO 20022-based National Payment Stack in June 2025, and a live transaction was reported in November 2025.¹³⁷ In August 2026 NIBSS reported 26.55 million transactions worth 1.4 trillion naira (NGN) across 48 participating institutions during rollout. These are operator-reported platform figures, not evidence of reduced cross-border prices or small and medium-sized enterprise (SME) payment costs.¹³⁸

In April 2025 the Central Bank simplified documentation for qualifying low-value Pan-African Payment and Settlement System (PAPSS) transactions. Basic know your customer and anti-money laundering documentation applies up to US\$2,000 per month for individuals and US\$5,000 for companies, and banks may source foreign exchange for PAPSS transactions through the official market.¹³⁹

In May 2025 the Central Bank and NIBSS launched the Non-Resident Bank Verification Number (BVN) platform, enabling Nigerians abroad to obtain a BVN remotely and use it for access to regulated financial services.¹⁴⁰

POLICY IMPLICATIONS

Nigeria illustrates why payment-system modernisation needs complementary changes in foreign-exchange access, documentation and onboarding. The authorities have acted at each of these points, but the cited sources do not yet measure their combined effect on smaller firms.¹⁴¹

Alternative channels indicate the scale of unmet demand, although the measures are broader than cross-border payments alone. IMF analysis reports about US\$59 billion in Nigerian crypto-asset inflows from July 2023 to June 2024 and estimates that Nigeria accounted for roughly 60 per cent of sub-Saharan African stablecoin inflows since 2019.¹⁴² It identifies inflation, depreciation, restricted foreign-exchange access, remittances and supplier payments among the drivers.¹⁴³

The policy test is whether formal channels become more accessible and competitive across the full transaction, from customer onboarding through currency conversion and settlement.¹⁴⁴

12 · India: connecting currency rules, payment rails and intermediaries

CONSTRAINT: A fast domestic payment rail cannot serve an international corridor without compatible currency rules, technical links and regulated intermediaries.

REFORM: India amended foreign-exchange rules, linked UPI to Singapore's PayNow, joined Nexus and established a framework for cross-border payment aggregators.

POLICY IMPLICATION: Coordinate currency permission, system connectivity and intermediary authorisation.

India's approach to cross-border instant payments spans three linked requirements: permission to conduct the currency transaction, a connection between domestic systems and intermediaries authorised to serve users.¹⁴⁵

CURRENCY RULES

In January 2025 the Reserve Bank of India (RBI) amended foreign exchange regulations to widen the permissible use of rupee and foreign currency accounts in specified cross-border transactions.¹⁴⁶ The changes facilitate settlement. They do not make the rupee generally convertible.

PAYMENT LINKS

India already operates the Unified Payments Interface (UPI) and PayNow linkage with Singapore. It also joined the multilateral Nexus initiative to establish a common framework for connecting domestic fast payment systems.¹⁴⁷

Nexus has since moved beyond its original Bank for International Settlements (BIS) Innovation Hub phase. Nexus Global Payments was incorporated in Singapore in March 2025 by the central banks and instant payment system operators of India, Malaysia, the Philippines, Singapore and Thailand, and announced on 3 April 2025, to operationalise and manage the scheme. Bank Indonesia and the European Central Bank continued as special observers, and Indonesia joined as the sixth participating jurisdiction in 2026.¹⁴⁸

The model reduces the need for a separate technical integration between every pair of participating domestic systems. Each system connects through the common framework.¹⁴⁹

INTERMEDIARIES

RBI's Payment Aggregator Cross Border (PA-CB) framework subjects entities facilitating qualifying import and export payments to a dedicated authorisation and compliance regime, including account, know your customer, anti-money laundering and transaction requirements.¹⁵⁰

POLICY IMPLICATIONS

A domestic instant-payment rail reaches another country only when the underlying transaction is permitted, the systems are connected and regulated providers can move funds for the customer.¹⁵¹ India has advanced each element through foreign-exchange amendments, payment-system links and a cross-border payment-aggregator framework. The cited sources do not establish that cross-border UPI transactions match domestic UPI on speed or price.¹⁵²

13 · United Kingdom and Singapore: opening payment infrastructure to non-banks

CONSTRAINT: Non-bank payment providers often depended on banks for access to core infrastructure.

REFORM: The United Kingdom and Singapore opened specified payment systems to eligible regulated non-bank providers under technical and operational conditions.

POLICY IMPLICATION: Base access on the function performed and the risks managed, with transparent eligibility requirements.

Access to core payment systems shapes how non-bank providers compete and settle obligations. The United Kingdom and Singapore have made direct participation possible for eligible providers under authorisation and operational requirements.¹⁵³

UNITED KINGDOM

In 2017 the Bank of England made regulated non-bank payment service providers eligible to apply for settlement accounts in the real-time gross settlement (RTGS) system, enabling qualifying firms to participate directly in payment systems that settle in central bank money.¹⁵⁴ TransferWise, now Wise, became the first non-bank payment service provider to participate directly in Faster Payments with an RTGS settlement account, in 2018.¹⁵⁵

The Bank framed the reform in terms of competition, innovation, diversification and financial stability.¹⁵⁶ Direct access nevertheless remained conditional on authorisation, risk management and system requirements. It was eligibility to participate, not an unconditional right to settlement access.¹⁵⁷

SINGAPORE

The Monetary Authority of Singapore (MAS) similarly opened Fast and Secure Transfers (FAST) and PayNow access to eligible major payment institutions from 2021 through an interface-based gateway.¹⁵⁸ This allowed participating non-bank payment providers to connect directly to interoperable retail payment infrastructure, as opposed to having to rely on closed-loop wallet arrangements.¹⁵⁹

POLICY IMPLICATIONS

Both reforms apply functional, risk-based access criteria. A provider can qualify for the relevant infrastructure by meeting licensing, technical and resilience requirements, without being a bank.¹⁶⁰ The reforms reduce mandatory reliance on a sponsoring bank. The cited official sources do not quantify the resulting effect on prices or market entry.¹⁶¹

For cross-border services, the relevant implication is institutional: domestic infrastructure open to qualified non-bank providers gives payment firms a route to build services with less dependence on incumbent banks.¹⁶²

APPENDIX 3 · COUNTRY CASE STUDIES

Country case study: Brazil

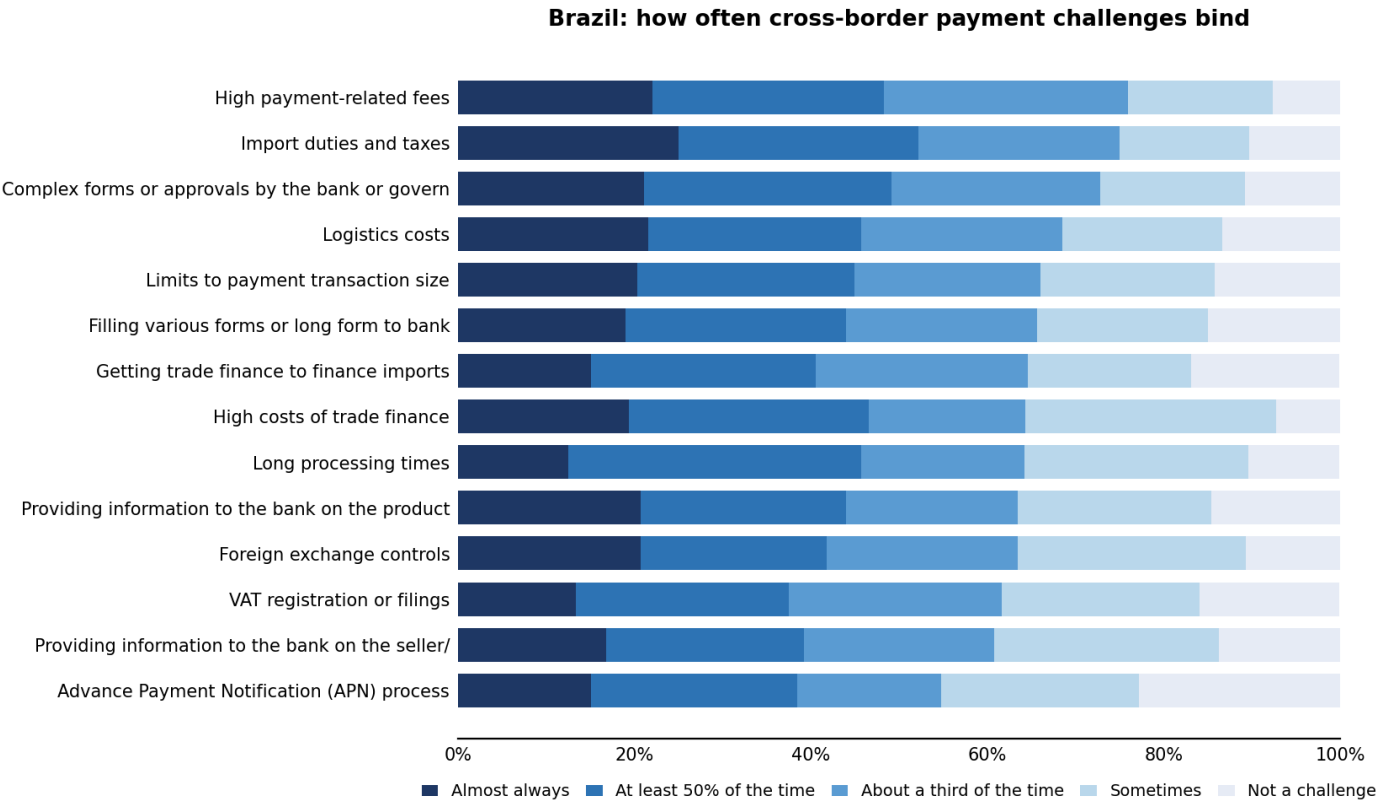
The percentages below describe respondents to the 2026 online survey in this country. They should not be interpreted as population prevalence estimates for all national SMEs.

Brazil has a developed domestic payment market, but its small importers still find cross-border payments costly and slow. Domestically, digital payments have displaced cash: 89 percent of surveyed importers use credit cards, 85 percent debit cards, 84 percent bank wires, and 82 percent Pix. For cross-border payments, firms rely mainly on bank wires, cards, and providers such as Wise, Remessa, and PagBrasil; two-thirds use bank wires often.

Firms see payments improving — 89 percent say faster, 91 percent more transparent, 91 percent easier to use — yet frictions remain: 76 percent report high payment fees as recurring, 73 percent complex forms or approvals, and 53 percent pay 5 percent or more of transaction value (Exhibit 33). Firms respond with workarounds: 41 percent pay through intermediaries abroad, 33 percent settle in cryptocurrency. As many as 56 percent say payment problems have led them to consider or reduce importing. If payments were faster, cheaper, and simpler, 61 percent would import more often and 23 percent would hire more people (Exhibit 34).

EXHIBIT 33

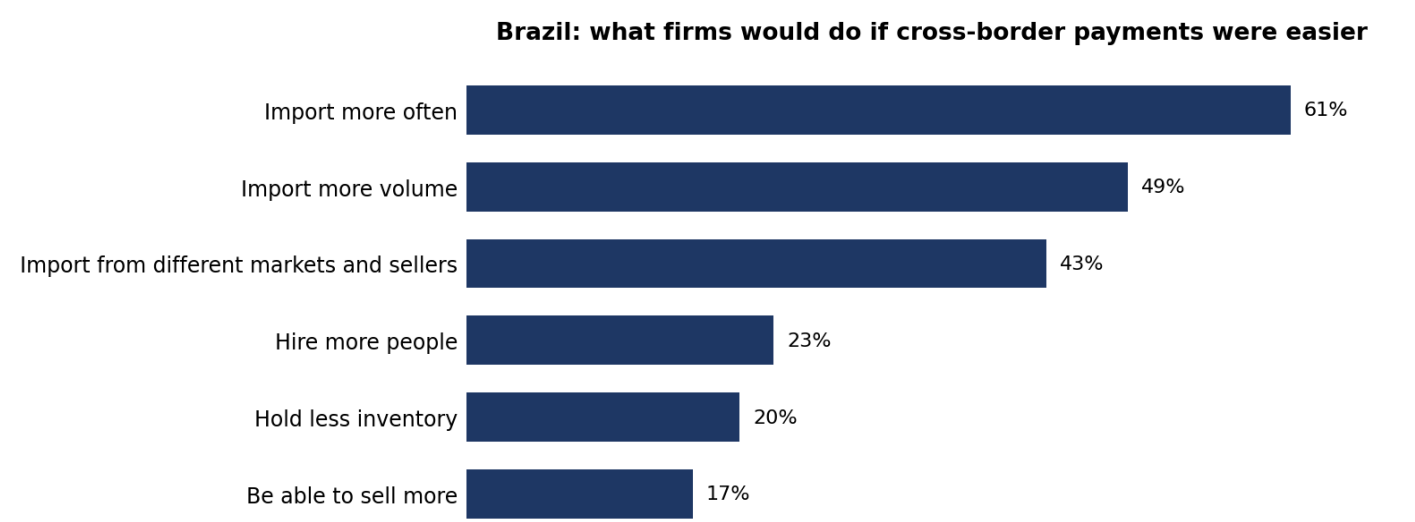
Brazil: how often cross-border payment challenges bind (share of importers, by frequency)



Source: Nextrade Group SME survey, 2026.

EXHIBIT 34

Brazil: what importers would do if cross-border payments were faster, cheaper, and simpler



Source: Nextrade Group SME survey, 2026.

Brazil is working the problem along two tracks: Law 14,286/2021 consolidated decades of dispersed FX rules into a single principles-based regime — cutting classification codes for transactions below US\$50,000 from about 180 to 10 and letting licensed payment fintechs raise their FX limit to US\$100,000 — and the central bank is interlinking Pix with instant payment systems abroad, from Pix in Argentina to a fuller international Pix under study.⁶³

Enable Pix for cross-border business use through partnerships with global networks and licensed processors.	Simplify and digitize the bank forms and government approvals that wire users report most.
Lower the fees and FX charges that push more than half of importers above 5% of transaction value.	Improve importer access to trade finance so payment friction stops diverting firms into informal workarounds.

APPENDIX 3 · COUNTRY CASE STUDIES

Country case study: South Africa

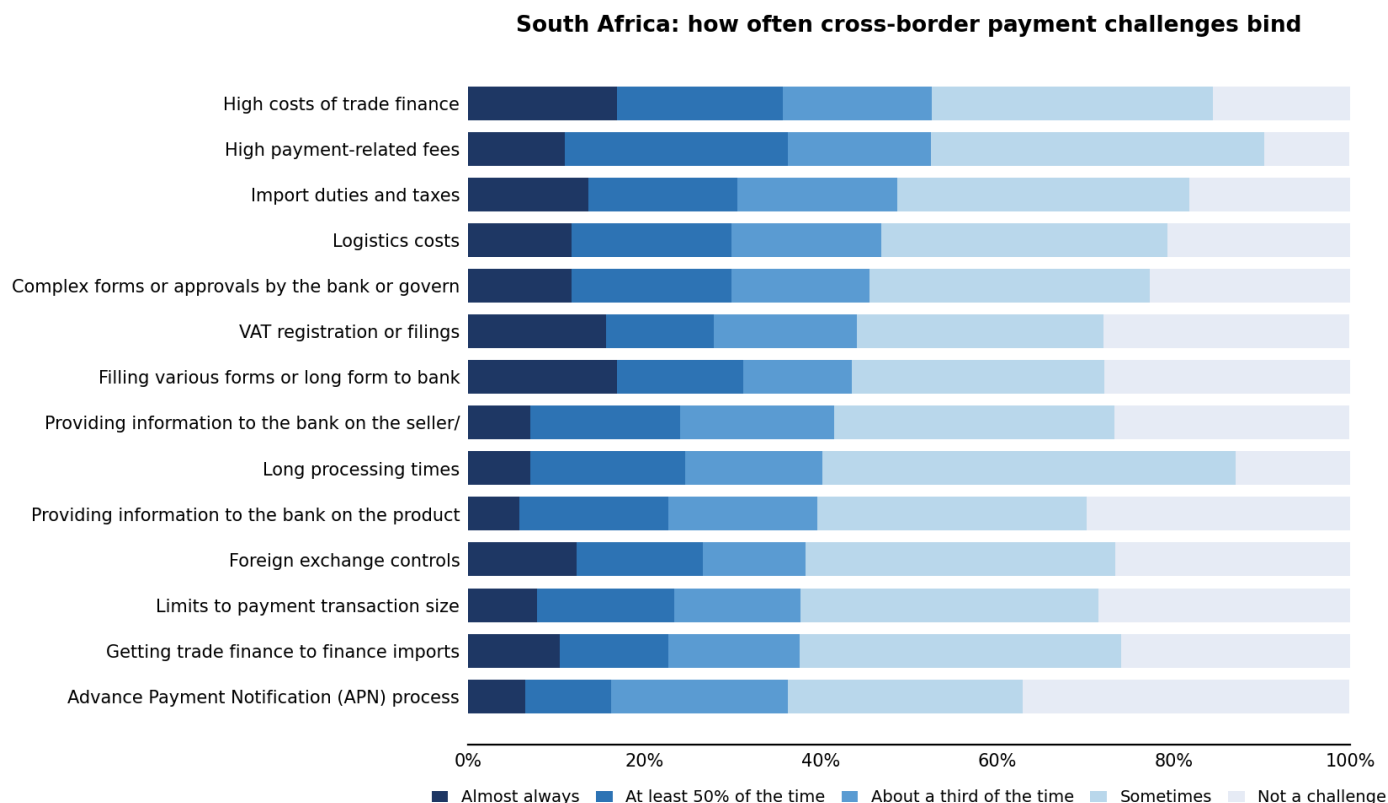
The percentages below describe respondents to the 2026 online survey in this country. They should not be interpreted as population prevalence estimates for all national SMEs.

South Africa's payment market is modernizing but relies more on cards and cash than instant transfers: importers use debit cards (74 percent), bank wires (66 percent), and credit cards (64 percent) most; PayShap, launched in 2023, is used by 44 percent with gradual uptake.⁶⁵ Exchange control shapes cross-border payments — authorized-dealer banks apply Reserve Bank rules, and every cross-border payment is reported through the Balance of Payments system, adding documentation domestic transfers do not require.⁶⁶

High payment fees and high trade finance costs are each cited by 53 percent of importers; 52 percent pay 5 percent or more of transaction value. Wire-reliant firms report more correspondent-banking frictions: complex forms (51 vs. 38 percent), seller information demands (48 vs. 34), long processing (45 vs. 34) (Exhibit 35). Some 29 percent say payment problems have led them to consider or reduce importing — yet 66 percent import because products are unavailable at home. If payments were easier, 58 percent would import more volume and 38 percent say they could sell more (Exhibit 36).

EXHIBIT 35

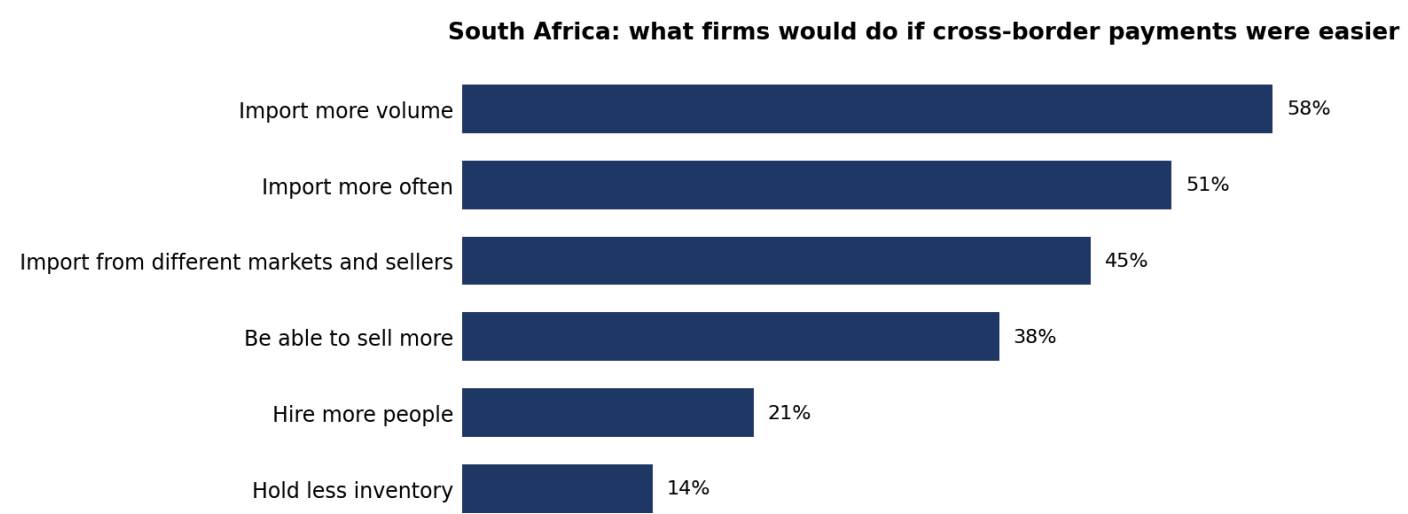
South Africa: how often cross-border payment challenges bind (share of importers, by frequency)



Source: Nextrade Group SME survey, 2026.

EXHIBIT 36

South Africa: what importers would do if cross-border payments were faster, cheaper, and simpler



Source: Nextrade Group SME survey, 2026.

Reform is under way: South Africa exited the FATF grey list on 24 October 2025 after a 22-item action plan; the SARB’s Payments Ecosystem Modernisation Programme defines eight activity-based licensing categories for non-banks, with first licenses expected in 2026; and in November 2025 the SARB took a 50 percent stake in PayInc (formerly BankservAfrica) to convert it into open, low-cost payment infrastructure serving banks and non-banks alike. February 2026’s Vision 2030+ consultation extends the agenda toward inclusive growth and regional integration.⁷³

Streamline exchange control for small importers, reducing per-payment documentation and BoP reporting.	Open the national payment system to non-bank providers on schedule. ⁷¹
Digitize the bank and government forms that wire users report most, cutting multi-visit steps.	Convert FATF reforms into lower payment costs via licensed, low-cost payment and remittance channels.

APPENDIX 3 · COUNTRY CASE STUDIES

Country case study: Thailand

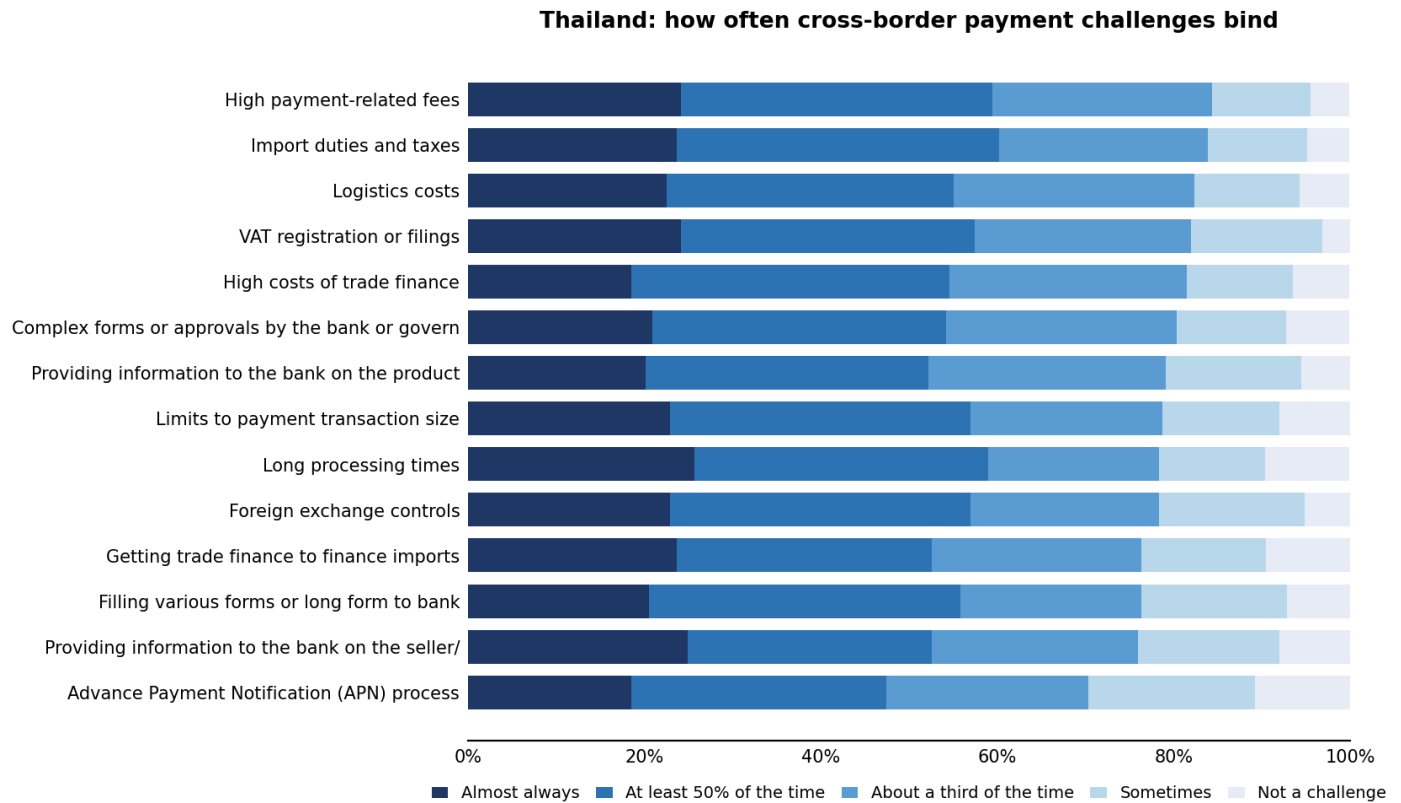
The percentages below describe respondents to the 2026 online survey in this country. They should not be interpreted as population prevalence estimates for all national SMEs.

Thailand has an active digital payment market, but its small importers report the heaviest cross-border payment difficulties in the survey. Importers use credit cards (91 percent), bank wires (88 percent), and providers such as PayPal and Wise (81 percent); use of newer instruments is high — 62 percent of Thai respondents report using cryptocurrencies and 58 percent stablecoins for business payments.⁶⁰ Thai firms are also the most AI-active surveyed: 92 percent report using generative AI and 62 percent report using AI agents.

Improvement is clear — 94 percent say payments have become faster — but more than four in five importers cite high payment fees, import duties, logistics costs, VAT filings, and high trade finance costs as recurring. Frictions drive heavy workarounds: 55 percent use cryptocurrency or stablecoins to complete payments and 53 percent pay through intermediaries abroad. Sixty-four percent say payment problems have led them to consider or reduce importing — the highest share surveyed (Exhibit 37) — even though most import for higher quality (77 percent) and better prices (70 percent). If payments were faster, cheaper, and simpler, Thai firms would import more and diversify further (Exhibit 38).

EXHIBIT 37

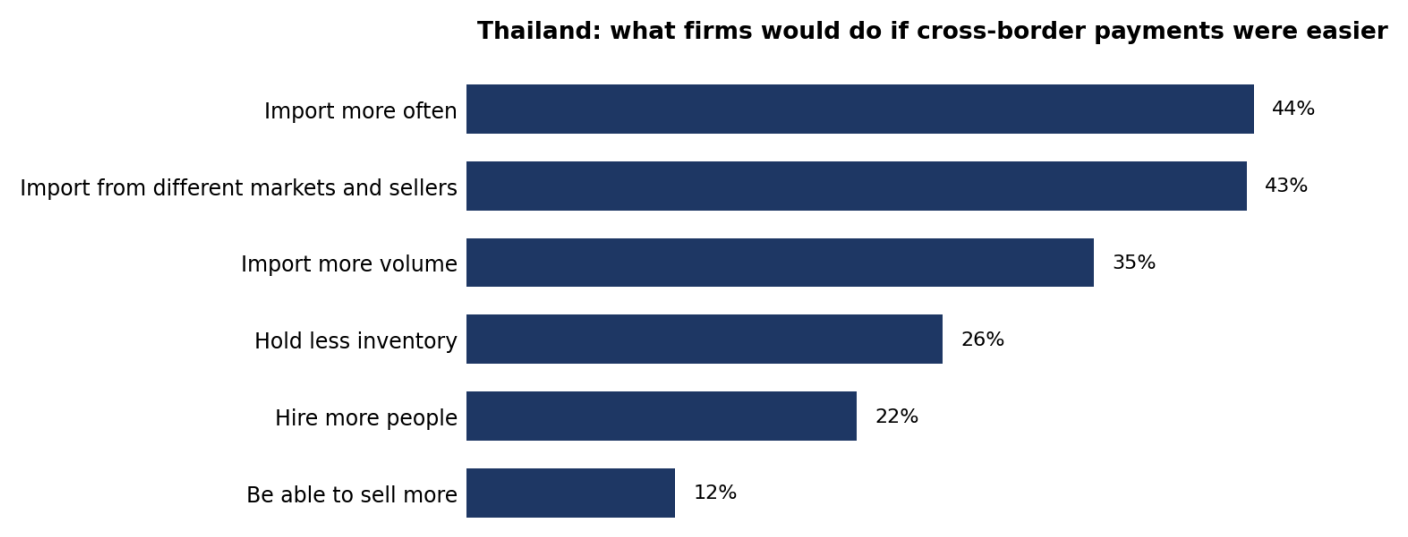
Thailand: how often cross-border payment challenges bind (share of importers, by frequency)



Source: Nextrade Group SME survey, 2026.

EXHIBIT 38

Thailand: what firms would do if cross-border payments were faster, cheaper, and simpler



Source: Nextrade Group SME survey, 2026.

The main reform effort is the National Digital Trade Platform (NDTP), a private-sector initiative led by the JSCCIB that digitizes purchase orders, invoices, packing lists, and bills of lading on UN/CEFACT standards — early trials processed documents more than 60 percent faster than paper. The platform integrates with the Trade Document Registry, letting banks check for double financing; six major banks were first participants, with links to Singapore’s and Japan’s trade platforms and the ASEAN Single Window in progress.⁷⁷ Thailand also approved its first virtual banks in 2025 and continues to test programmable payments and baht-backed stablecoins in a central bank sandbox.⁷⁹

- Digitize trade finance documentation through the NDTP, cutting paper letters of credit and manual checks.
- Improve SME access to trade finance, drawing on document verification to reduce lender caution.
- Extend PromptPay interoperability from retail and tourism toward business import settlement.
- Give importers a formal alternative to wires and informal workarounds.

ENDNOTES

Endnotes

REPORT (SECTIONS 1–6 AND APPENDICES 1, 3)

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8. Ordinary least squares regression of the challenge count on firm characteristics with size, sector, and country controls: bank-wire reliance +2.4 challenges ($p<0.001$); exporting to four or more markets +0.83 ($p=0.015$); exporter status and import frequency positive but not significant; new-exporter status not significant.
9. Findings on which firms face more challenges and which would gain most are from regressions on the Pollfish survey ($n=1,035$ importers) controlling for firm size, sector, and country. The challenge measure counts, for each firm, how many of 14 possible cross-border payment challenges it reports facing at least a third of the time. Gains are the firm's own stated responses to whether faster, cheaper, and simpler payments would change its behavior.
10. Findings on which firms face more challenges and which would gain most are from regressions on the Pollfish survey ($n=1,035$ importers), controlling for firm size and country. Online seller-exporters (firms that both sell online and export to four or more markets) are more likely than other firms to say better payments would let them import more often (odds ratio 2.22, $p<0.001$) and diversify their sourcing (odds ratio 2.17, $p<0.001$).
11. Logit regressions with size and country controls: many-market exporters (four or more export markets) are more likely to say better payments would let them diversify sourcing (odds ratio 1.75, $p<0.001$) and import more often (odds ratio 1.87, $p<0.001$).
12. Logit regressions with size and country controls: ecommerce sellers (own online store or marketplace presence) are more likely to say better payments would let them import more often (odds ratio 2.04, $p<0.001$) and diversify sourcing (odds ratio 1.56, $p=0.018$). Ecommerce sellers are 85 percent of surveyed firms.
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119. BIS, Annual Economic Report 2026, Chapter III, arguing for regulated forms of tokenised money and payment system improvements as alternatives to reliance on unregulated stablecoins.
120. Reserve Bank of India, FAQs on Master Direction on KYC, updated 9 June 2025: <https://www.rbi.org.in/commonman/english/Scripts/FAQs.aspx?id=3782>.
121. RBI Master Direction on KYC and the associated FAQs, recognising digital KYC, Aadhaar-related routes, equivalent electronic documents and the Video-based Customer Identification Process subject to specified conditions.
122. RBI KYC FAQs and Master Direction on the Video-based Customer Identification Process.
123. RBI KYC FAQs on retrieval from the Central KYC Records Registry and use of existing KYC records.
124. RBI Master Direction on KYC and the associated FAQs, prescribing controls around digital and video-based identification.
125. Synthesis from the RBI rules on V-CIP and the Central KYC Records Registry.
126. RBI KYC FAQs.
127. The cited RBI materials establish KYC procedures. They do not establish a causal effect on UPI adoption or on digital finance more broadly.
128. Banco Central de Chile, Recuadro III.3, Adopción del nuevo estándar ISO 20022, describing ISO 20022 as a common language for financial transactions supporting clearer and more detailed data exchange, greater interoperability and more automated processing, and setting out the SWIFT convergence period. <https://www.bcentral.cl/documents/33528/4387881/RIII.3.pdf/98b145bf-c358-4d53-7a46-5a5d376e665b>
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130. Banco Central de Chile, Carta Circular Bancos No 734 of 12 September 2024, setting out the message standard, usage identifiers and operational flows for the second migration phase in both the peso and US dollar LBTR systems (<https://www.bcentral.cl/documents/d/banco-central/carta-circular-734-pdf?download=true>); Cartas Circulares Bancos No 739 and No 752, updating the operational continuity procedures of the LBTR system for Phase 1 and Phase 2 messaging respectively (<https://www.bcentral.cl/en/content/-/detalles/carta-circular-739> and <https://www.bcentral.cl/contenido/-/detalle/carta-circular-752>); and Circular 3013-972, amending the operating regulations of the peso and US dollar LBTR systems in Chapters III.H.4.1.1 and III.H.4.2.1 of the Compendio de Normas Financieras for the ISO 20022 implementation (<https://www.bcentral.cl/contenido/-/detalle/circular-3013-972>).
131. Synthesis from Banco Central de Chile, Recuadro III.3, and from the staged implementation documented in footnotes 129 and 130.
132. Payments Interoperability and Extension Task Force, Task Team 3, Fostering ISO 20022 harmonisation: follow-up report, February 2026, Chile/LBTR entry in section 3.2.1. The report says the initial migration was like-for-like, lacks pacs.004, and is not aligned with requirement 1: https://www.bis.org/cpmi/pietff/iso20022_2026.pdf. This industry task-force report states that its views are not those of BIS or CPML.
133. Synthesis from the Chile migration sequence and the industry task-force implementation findings.
134. The cited official materials describe capabilities and implementation rather than causal estimates of costs or correspondent banking outcomes.
135. Central Bank of Nigeria, CBN Reforms and Initiatives, listing the PAPSS documentation circular of 28 April 2025 and the Non-Resident BVN platform launch of 13 May 2025 among other measures. <https://www.cbn.gov.ng/AboutCBN/Reforms.html>
136. Central Bank of Nigeria, Nigeria Foreign Exchange (FX) Code, January 2025 (<https://www.cbn.gov.ng/Out/2025/CCD/Nigeria%20FX%20Code%20.pdf>), formally launched on 28 January 2025 (https://www.cbn.gov.ng/FeaturedArticles/2025/FX_Code_Launch.html). The Governor described it as an enforceable framework, following the launch of the Electronic Foreign Exchange Matching System in December 2024.

- 137.** NIBSS unveiled the National Payment Stack on 17 June 2025 as the successor to NIBSS Instant Payments, built on the ISO 20022 messaging standard. NIBSS reported the first live transaction at 11:56 on Friday 7 November 2025, between PalmPay and Wema Bank. See the NIBSS statement of 9 November 2025 as reported in Nairametrics (<https://nairametrics.com/2025/11/09/palmpay-wema-bank-complete-first-live-transaction-on-nibss-national-payment-stack/>) and The Cable (<https://www.thecable.ng/nibss-executes-first-live-transaction-on-national-payment-stack/>). For the subsequent rollout, see NIBSS, 12 August 2026: <https://nibss-plc.com.ng/nibss-new-payment-system-records-26-5m-transactions-worth-n1-4trn/>.
- 138.** NIBSS, 12 August 2026, reported 26.55 million transactions, NGN 1.4 trillion in value and 48 participating institutions during rollout: <https://nibss-plc.com.ng/nibss-new-payment-system-records-26-5m-transactions-worth-n1-4trn/>. The figures do not measure cross-border cost or SME outcomes.
- 139.** Central Bank of Nigeria, Circular TED/FEM/PUB/FPC/001/006 of 28 April 2025, simplifying documentation for PAPSS transactions. Basic know your customer and anti-money laundering documentation applies up to US\$2,000 per month for individuals and US\$5,000 for corporates, with full foreign exchange documentation required above those thresholds, and Nigerian commercial banks may source foreign exchange for PAPSS transactions through the official market. See Central Bank of Nigeria, CBN Reforms and Initiatives. <https://www.cbn.gov.ng/AboutCBN/Reforms.html>
- 140.** Central Bank of Nigeria in collaboration with NIBSS, Non-Resident Bank Verification Number platform, launched 13 May 2025, enabling Nigerians in the diaspora to obtain a BVN remotely without physical presence in Nigeria. The platform is located within a wider framework including the Non-Resident Ordinary Account and the Non-Resident Nigerian Investment Account. <https://www.cbn.gov.ng/AboutCBN/Reforms.html>
- 141.** Synthesis from the separate foreign exchange, infrastructure, PAPSS and identity reforms documented above.
- 142.** IMF, Stablecoins in Nigeria: A Growing Cross-Border Channel, 16 June 2026, <https://www.imf.org/en/news/articles/2026/06/16/stablecoins-in-nigeria>, estimating approximately US\$59 billion in Nigerian crypto-asset inflows between July 2023 and June 2024 and finding that Nigeria has accounted for roughly 60 percent of stablecoin inflows into sub-Saharan Africa since 2019.
- 143.** Ibid., on the drivers and uses of stablecoins in Nigeria, including inflation, currency depreciation, constrained foreign exchange access, remittances and payments to overseas suppliers.
- 144.** Synthesis from the Central Bank of Nigeria reform package and the IMF evidence on remaining demand for alternative channels.
- 145.** Synthesis from the RBI foreign exchange reforms, the UPI and Nexus linkages and the Payment Aggregator Cross Border framework described below.
- 146.** RBI notifications dated 14 January 2025: Foreign Exchange Management (Deposit) (Fifth Amendment) Regulations, 2025, FEMA 5(R) (5)/2025-RB; Foreign Exchange Management (Foreign Currency Accounts by a Person Resident in India) (Fifth Amendment) Regulations, 2025, FEMA 10(R)(5)/2025-RB; and the amendment to the Mode of Payment and Reporting of Non-Debt Instruments Regulations, FEMA 395(3)/2025-RB. Overseas branches of authorised dealer banks may open Special Non-Resident Rupee accounts for persons resident outside India for all permissible current and capital account transactions, the previous seven year limit on holding such accounts is removed, units in International Financial Services Centres may open such accounts with authorised dealers in India, balances in repatriable rupee accounts may be used for foreign investment in non-debt instruments, and Indian exporters may open foreign currency accounts overseas. Summarised in EY India, Liberalization of FEMA Regulations for encouraging settlement of cross-border transactions in Indian Rupee. https://www.ey.com/en_in/technical/alerts-hub/2025/03/liberalization-of-fema-regulations-for-encouraging-settlement-of-cross-border-transactions Primary RBI texts include the Deposit (Fifth Amendment) Regulations, https://www.rbi.org.in/Scripts/BS_FemaNotifications.aspx?Id=12766, and Foreign Currency Accounts (Fifth Amendment) Regulations, https://rbi.org.in/scripts/BS_FemaNotifications.aspx?Id=12767.
- 147.** BIS, Project Nexus completes comprehensive blueprint for connecting domestic instant payment systems globally and prepares for work towards live implementation, press release, 1 July 2024. <https://www.bis.org/press/p240701.htm> See also the BIS press release of 23 March 2023 on the Nexus prototype linking the test systems of the Eurosystem, Malaysia and Singapore. <https://bis.org/press/p230323.htm>
- 148.** Nexus Global Payments was established on 26 March 2025, and its incorporation in Singapore as a company limited by guarantee was announced on 3 April 2025 by the Reserve Bank of India, Bank Negara Malaysia, Banko Sentral ng Pilipinas, the Monetary Authority of Singapore and the Bank of Thailand, together with their domestic instant payment system operators. Bank of Thailand press release No 13/2025, 3 April 2025 (<https://www.bot.or.th/en/news-and-media/news/news-20250403.html>); Nexus Payments documentation (<https://docs.nexusglobalpayments.org/>). Indonesia joined as the sixth participating jurisdiction in 2026 (<https://www.nexusglobalpayments.org/about-nexus/>).
- 149.** Bank of Thailand press release No 13/2025, 3 April 2025: rather than an instant payment system operator building custom connections for every new country to which it connects, the operator makes only one connection to Nexus, which allows it to reach all other countries in the network. <https://www.bot.or.th/en/news-and-media/news/news-20250403.html>
- 150.** RBI, Regulation of Payment Aggregator – Cross Border (PA-CB), circular CO.DPSS.POLC.No.S-786/02-14-008/2023-24, 31 October 2023: <https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=12561>.
- 151.** Synthesis from footnotes 146 to 150.
- 152.** The cited materials establish legal changes, institutional connectivity and regulatory arrangements. They do not establish universal domestic-equivalent cross-border performance.
- 153.** CPMI, Improving access to payment systems for cross-border payments: best practices for self-assessments, Bank for International Settlements, May 2022, on transparent and risk-based access criteria for payment systems, including access by non-bank payment service providers. <https://www.bis.org/cpmi/publ/d202.htm>
- 154.** Bank of England, Bank of England extends direct access to RTGS accounts to non-bank payment service providers, 19 July 2017, publishing a revised Settlement Account Policy under which non-bank payment service providers became eligible to apply for a settlement account, enabling direct access to the sterling payment systems that settle in central bank money, including Faster Payments, Bacs, CHAPS, LINK and Visa. <https://www.bankofengland.co.uk/news/2017/july/boe-extends-direct-access-to-rtgs-accounts-to-non-bank-payment-service-providers>

155. Bank of England, First non-bank payment service provider (PSP) directly accesses UK payment system, 18 April 2018, recording that on 13 April 2018 TransferWise, an FCA-regulated payment service provider, became a direct participant in Faster Payments.
<https://www.bankofengland.co.uk/news/2018/april/non-bank-psp-access-to-the-payments-system-announcement>
156. Bank of England, 18 April 2018: wider access is expected to bring financial stability benefits through increasing the proportion of settlement in central bank money, diversifying the number of settlement firms and driving greater innovation in risk-reducing payments technologies. <https://www.bankofengland.co.uk/news/2018/april/non-bank-psp-access-to-the-payments-system-announcement> In 2024 the Bank noted that it was the first G7 central bank to offer settlement accounts to non-bank payment service providers. <https://www.bankofengland.co.uk/paper/2024/dp/reviewing-access-to-rtgs-accounts-for-settlement>
157. Eligibility criteria and policies for admitting account holders into RTGS are specified in the Bank of England published Settlement Account Policy, which is reviewed periodically; non-bank payment service providers are eligible subject to meeting appropriate standards of resilience. It is eligibility to apply, not an unconditional right of access. Bank of England, Self-assessment of RTGS and CHAPS against the Principles for Financial Market Infrastructures.
<https://www.bankofengland.co.uk/payment-and-settlement/rtgs-and-chaps-2022-pfmi-self-assessment>
158. Monetary Authority of Singapore, Non-Bank Financial Institutions to have Access to FAST and PayNow, 30 November 2020, announcing access for eligible licensed major payment institutions from February 2021 through an API gateway: <https://www.mas.gov.sg/news/media-releases/2020/non-bank-financial-institutions-to-have-access-to-fast-and-paynow> .
159. MAS described the reform as enabling transfers between bank accounts and participating non-bank e-wallets through FAST and PayNow.
160. Synthesis from the United Kingdom and Singapore access conditions in footnotes 154 to 159.
161. The official sources state the intended competition and interoperability benefits but do not provide causal estimates of their magnitude.
162. Synthesis from the direct access mechanisms documented in the two jurisdictions.