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Bank-Intermediated Trade *and* Supply Chain Finance

This chapter discusses results based primarily on a 2024 survey of 30 CAM-3 banks. The online bank survey was conducted by the International Finance Corporation (IFC), in collaboration with the World Trade Organization, with support from several local partners. The reference year for the reported trade and supply chain finance is 2023 (see Annex Box B1.1 for details about the bank survey, data limitations, and complementary data sources analyzed).

KEY FINDINGS

- Local bank-intermediated trade and supply chain finance assets for 2023 are estimated at \$91.3 billion for Mexico, \$5.3 billion for Guatemala, and \$3 billion for Honduras. Mexican banks financed 8 percent of the country's total merchandise (imports and exports) trade, corresponding to 11 percent of total bank assets in the country. Guatemalan and Honduran banks financed, respectively, 12 percent and 10 percent of merchandise trade, accounting for 8 percent (Guatemala) and 9 percent (Honduras) of total bank assets. In contrast, previous WTO-IFC studies focusing on West Africa and Southeast Asia found that TSCF supported larger shares of trade there—21 percent in Nigeria and Viet Nam, for example. Limited TSCF access is a challenge, especially for smaller traders.
- Mexico records a high share of supply chain finance (SCF) in overall trade finance, while Honduras and Guatemala still rely heavily on traditional instruments such as letters of credit (LCs) and trade loans. For Mexico, related-party trade with the US can explain the limited TSCF use: 56 percent of the US' total trade with Mexico, and 65 percent of its imports from Mexico are between related parties that often use open account transactions.
- Payment and transaction risks persist in trade between unrelated parties. Even within related-party trade, payment lags and mismatches can create working capital shortfalls. Payment lags, mismatches, and risks can be mitigated by international SCF instruments, which account for 17 percent of all TSCF in Mexico, compared to just 4 percent in Guatemala and 1 percent in Honduras. The higher share of SCF in Mexico is associated with enabling regulations and digital innovations. Yet, SCF supported only 1 percent of Mexico's international trade in 2023.
- Trade loans account for 31 percent (Mexico), 40 percent (Honduras), and 66 percent (Guatemala) of total TSCF with a higher share for the latter two due to their having smaller SCF markets. LCs and other unfunded instruments account for 11 percent (Honduras), 40 percent (Mexico), and 45 percent (Guatemala) of TSCF. Secondary data show a high incidence of open account transactions in the three countries.
- Honduran banks report severe constraints associated with macroeconomic volatility, regulatory barriers, and lack of liquidity. Guatemalan banks identify shortage of low-cost funding, internal risk ratings, and collateral requirements as severe constraints. Limited institutional readiness and correspondent bank processing delays are the main constraints in Mexico. Previous evidence shows that the number of CAM-3 counterparties abroad declined between 2011 and 2022 due to rising compliance costs and stricter regulations.

- Relative to monetary policy rates, trade loans are more expensive in Guatemala and Honduras than in Mexico, which has a more mature banking sector. Yet, certain traders may pay up to 16 percent interest rates for trade loans in Mexico, substantially higher than in other emerging markets. LC fees are comparable across the CAM-3.
- All in all, there is significant potential to grow and diversify the currently concentrated market for TSCF. Although SCF has made a dent in Mexico, it is unclear the extent to which SCF is channeling financing to deeper tiers in the supply chain. International factoring accounts for a small fraction of the factoring flow in Mexico, indicating moderate use even among bigger traders. The SCF market in Guatemala and Honduras remains underdeveloped. Given its potential to support smaller suppliers by mitigating payment risks and enhancing working capital management, SCF has the potential to play a pivotal role in the region.

2.1 Trade Finance Markets

Based on the survey data, total bank-intermediated TSCF is estimated¹⁶ at \$3 billion for Honduras, \$5.3 billion for Guatemala, and \$91.3 billion for Mexico (**Table 2.1**). Expressing trade finance assets as a share of total merchandise trade helps illustrate how intensely trade finance is used, proxying the coverage of trade by bank-intermediated trade finance.¹⁷ Estimated TSCF assets account for 12 percent (Guatemala), 10 percent (Honduras), and 8 percent (Mexico) of each country's total merchandise trade (imports and exports). In the case of Mexico, total merchandise trade amounts to \$1.2 trillion (68 percent of GDP), for Guatemala \$45 billion (44 percent of GDP), and for Honduras \$29 billion (84 percent of GDP). CAM-3 banks supported trade with multiple trading partners, with the US, Europe, and China the banks' main partners for TSCF-supported trade.

Although Mexico's share of TSCF in total merchandise trade is 8 percent, its estimated trade finance as a share of total bank assets is about 11 percent, marginally higher than in Honduras (9 percent) and Guatemala (8 percent). Developments in the volume and composition of trade in the CAM-3 increased the demand for trade finance in general, as well as for specific financing instruments such as trade credit insurance, guarantees, and supply chain finance (Hernández

¹⁶ See Annex B2 for methodology used to estimate trade and supply chain finance assets for banks that did not participate in the IFC survey.

¹⁷ Given their short-term tenor, the ratio of assets (stock) against trade (flow) is empirically consistent. IFC Survey data shows that the average tenor ranges between five and seven months for Letters of Credit and between seven and eighteen months for trade loans depending on the country.

TABLE 2.1

Bank-Intermediated Trade and Supply Chain Finance

	Guatemala	Honduras	Mexico
Total number of banks	18	17	57
Number of survey respondents	13	7	10
Bank assets of respondents (\$, billions)	\$65	\$15	\$580
Respondents' assets (% of total bank assets in country)	98%	44%	68%
Respondents engaged in trade finance (% of respondents)	69%	100%	100%
Respondents' bank-intermediated trade and supply chain finance (TSCF) assets (\$, billions)	\$5.2	\$1.5	\$70.7
Estimated TSCF (\$, billions)	\$5.3	\$3	\$91.3
	[5.28; 5.39]	[2.5; 3.4]	[76.5; 106.1]
Estimated TSCF (% of total bank assets)	8%	9%	11%
	[7.9%; 8.1%]	[7%; 10%]	[9%; 12%]
Total merchandise trade in 2023 (\$, billions)	\$44.5	\$28.9	\$1,214.5
Estimated TSCF (% of merchandise trade)	12%	10%	8%
	[11.9%; 12.1%]	[9%; 12%]	[6%; 9%]

Source: 2024 IFC survey except for merchandise trade which is obtained from the World Trade Organization (WTO, 2024).

Note: Data on total bank assets are obtained from publicly available bank annual reports and refer to bank assets as of December 2023. Confidence intervals (90 percent level) for estimated total TSCF assets and shares of TSCF of total merchandise trade and bank assets are shown in brackets.

2024). CAM-3 countries significantly differ from one another in the value of TSCF assets reported by surveyed banks, with such assets in Mexico amounting to approximately \$71 billion, compared to \$5.2 billion in Guatemala, and \$1.5 billion in Honduras. This difference not only reflects Mexico's larger economy but also its more developed banking sector (see **Annex Box B1.2** for a fuller description of the CAM-3 banking sectors).

The relatively low share of merchandise trade in the CAM-3 supported by trade finance—just 8 percent in Mexico compared to 21 percent in Viet Nam (IFC and WTO 2023)—confirms previous findings of trade finance scarcity in Latin America relative to other emerging regions such as Asia and the Pacific (ALIDE 2018; Pérez-Caldentey et al. 2014). When trade finance is available, it tends to be offered by large foreign banks, particularly European banks that have traditionally been the

main sources of TSCF globally (Pérez-Caldentey et al. 2014). The depth of the banking system in the region—measured as the ratio of private sector credit to GDP—is shallower than that of other emerging regions (Jiménez and Manuelito 2011). Despite many of the countries in the region undertaking financial sector reforms in recent decades, both access to finance and financing costs, including for trade, remain a challenge, especially for micro, small, and medium-sized enterprises (Nassar, Martinez and Pineda 2022; Shibli 2024; Pérez-Elizundia, Delgado-Guzmán and Lampón 2020).

2.2 Bank-Intermediated Trade Finance and Open Accounts

The capacity of the local banking sector to offer and facilitate financing for cross-border trade depends both on how well developed the sector is and how integrated businesses are into regional or international trading networks. In this regard, we observe cross-country differences in the CAM-3 with Mexico standing out in several respects.

In Mexico, subsidiaries of international banks play a particularly prominent role, offering financing to large trading businesses, with the latter often being subsidiaries of multinational firms producing in Mexico for international markets. These international banks offer a wide spectrum of trade finance solutions, either locally or internationally financed. They remain major providers of trade finance even when they hold a small share of local assets as they can supply trade finance to local clients out of their international balance sheet. As they consider the growing role of Mexican-owned firms in international production and trade,

Mexican-owned banks and financial institutions are expanding their international operations.

Overall, bank-intermediated trade finance markets are highly concentrated, especially in Guatemala and Honduras. In fact, although all but four of the thirty responding banks offered trade finance, the three largest (based on self-reported trade finance assets) accounted for about 70 percent (Mexico), 75 percent (Guatemala), and 80 percent (Honduras) of total TSCF reported in each country. This pattern aligns with previous findings in the literature, which show that trade finance concentration can be higher in smaller markets that may face higher market entry costs (Niepmann and Schmidt-Eisenlohr 2013).

Related-party trade—meaning trade among the subsidiaries of multinational enterprises—accounted for 56 percent of the total trade (imports and exports) between the US and Mexico in 2023 (**Annex Table B3.1**) (US Census Bureau 2024a). About 65 percent of the US \$473 billion imports from Mexico and 39 percent of its \$252 billion exports to Mexico are related-party in nature. The prominence of related-party trade, particularly on the import side, indicates a strong network of intra-firm trade or closely affiliated trading relationships. This could partially explain the relatively limited use of local bank-intermediated TSCF in Mexico compared to comparator countries like Viet Nam. Related-party trade is more likely to occur through open account arrangements, reflecting a reduced perception of transactional and payment risks, and because trade finance is often already provided by foreign banks. Evidence from the World Bank Enterprise Surveys shows that Mexican cross-border traders finance

a higher share of working capital through open accounts (suppliers' credit and customer advances) relative to their counterparts in comparator countries such as Colombia, Malaysia, Poland, Türkiye, and Viet Nam (**Annex Figure B3.1**).

In contrast, the relatively low share of related-party trade in US trade with Guatemala and Honduras (28 percent and 35 percent, respectively) indicates limited use of trade finance within closely affiliated parties, potentially leaving more space for TSCF through the local banking system. As highlighted in previous trade finance studies (IFC and WTO 2022; IFC and WTO 2023), there may be greater scope to expand domestically provided trade finance in countries and sectors with low levels of related-party trade, as foreign banks are less likely to offer this type of financing (see **Annex Box B1.2** for additional notes on the banking sector of the study countries).

2.3 Trade Finance Instruments Offered by Banks

The surveyed banks reported offering various trade finance instruments (**Figure 2.1**). LCs (commercial or standby), guarantees¹⁸ and counter guarantees are widely offered, more so in Honduras, the poorest of the CAM-3. Guarantees are essential tools for mitigating counterparty risk in international trade, yet concessional access to them provided by government agencies is unavailable in Honduras and Guatemala.¹⁹

LCs are often required when one of the counterparties resides in a poorer economy, an economy with weaker institutions for contract enforcement, or one with a lower level of financial development (Dicaprio and Yao 2017). All surveyed banks in Honduras provide pre-export and post-shipment financing, equipment imports financing, and working capital loans. These instruments are offered by over two thirds of banks in Mexico and Guatemala.

All responding banks in Mexico provide SCF, a product offered by less than half the responding banks in Honduras (43 percent) and Guatemala (33 percent) (**Figure 2.1**). This can be partly explained by the large presence of international banks in Mexico, as discussed above, some of which are pioneers in the international SCF market. It can also be explained by regulatory developments, such as the requirement of electronic invoicing for large taxpayers in 2011 (extended to all businesses in 2014) and digital innovation, which together facilitated new SCF business models in Mexico (Bickers 2023). As shown later, SCF assets account for a relatively large share of Mexico's trade finance assets. According to interviews conducted with some Mexican banks during a scoping mission to Mexico City, pre-shipment financing, export factoring, and the extension of SCF solutions deeper into supply chains were identified as significant growth opportunities for Mexico.

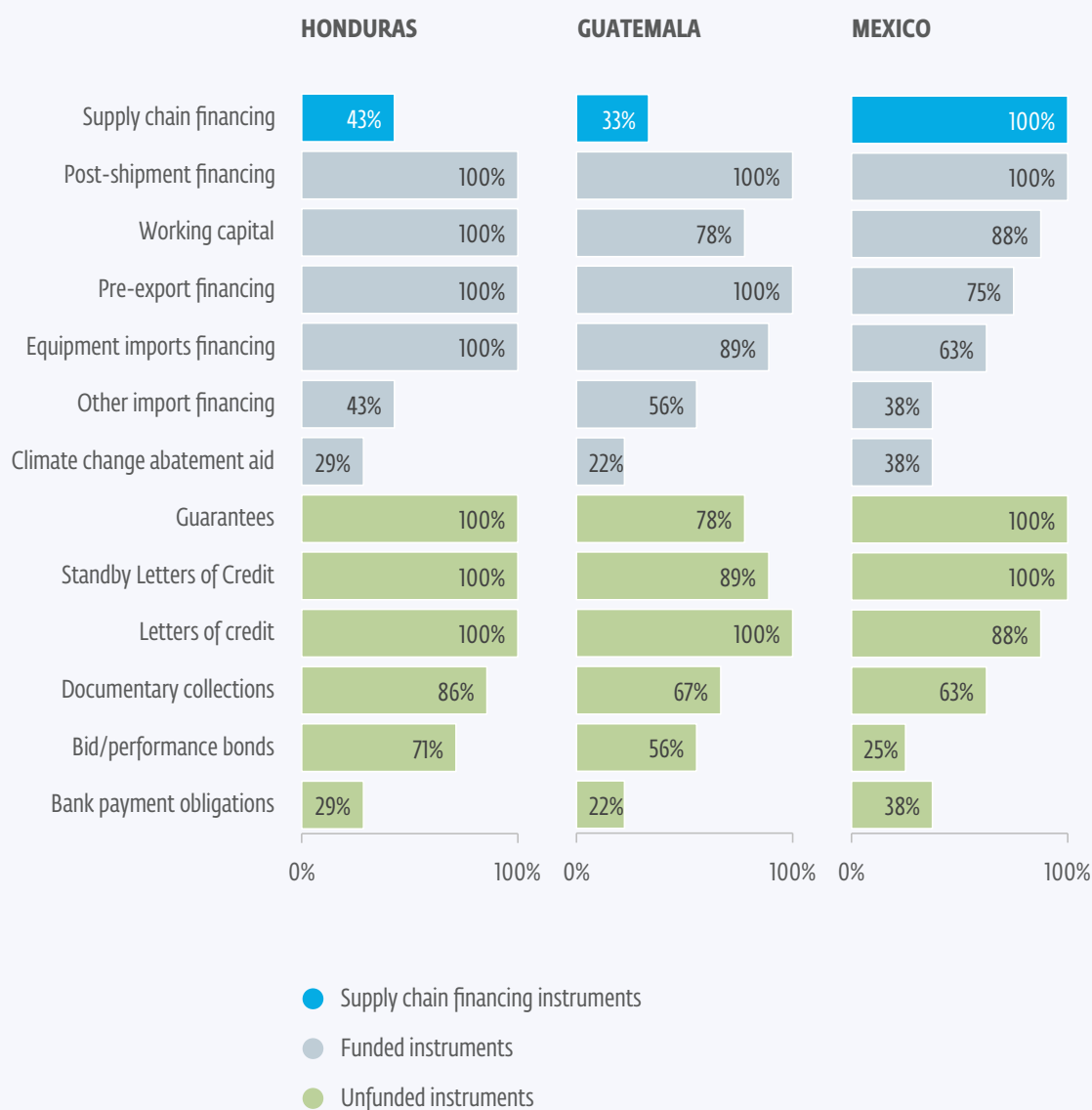
¹⁸ They can address risks related to defaults or unwillingness to pay by trade counterparties (OECD 2021) and can help mitigate information frictions (Agarwal et al. 2023). As a result, they are particularly important for smaller, liquidity-constrained traders such as small- and medium-sized enterprises.

¹⁹ Government agencies in Honduras and Guatemala provide advisory services to small- and medium-sized enterprises similar to some of the services that the Mexican development bank offers. Honduras has a guarantee program for various sectors but not yet for trade.

FIGURE 2.1

Supply Chain Finance Is Offered by All Mexican Banks but by Only Some in Guatemala and Honduras

Share of respondents offering instrument



Source: 2024 IFC survey.

2.4 Share of Trade Finance Assets by Instrument

Of the total TSCF reported by the surveyed banks, most went on financing for imports: 80 percent in Guatemala, 64 percent in Honduras, and 52 percent in Mexico (**Figure 2.2**). SCF and export financing accounted for the rest of TSCF assets (20 percent in Guatemala, 36 percent in Honduras, and 48 percent in Mexico). SCF for international trade includes SCF financing provided to cross-border traders as well as payables/receivables finance, confirming, and reverse factoring provided to domestic suppliers when the anchor firm is engaged in international trade. Evidence from selected developing and emerging markets in Africa and Asia shows that the majority of banks' trade finance assets are

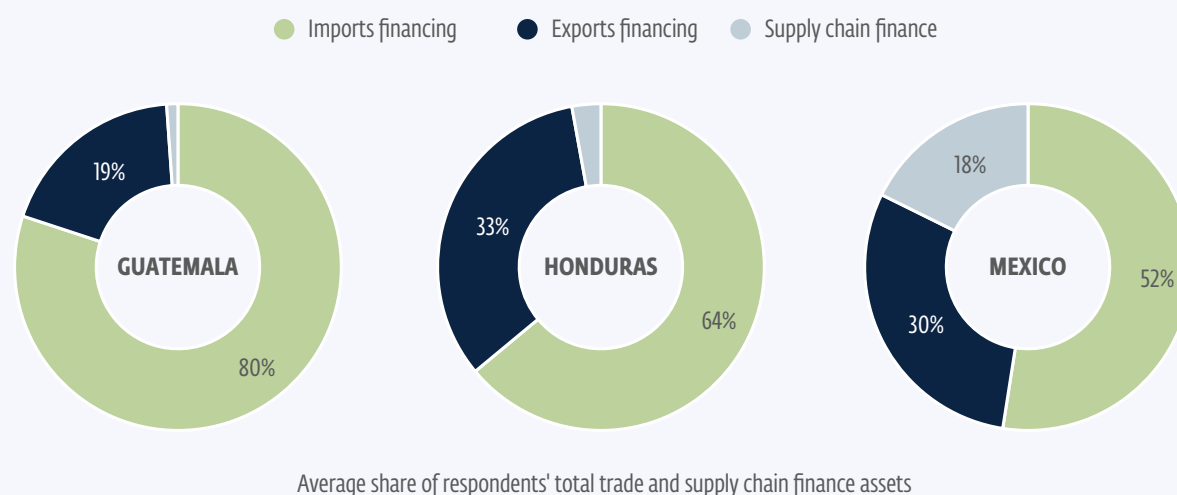
unfunded, risk-mitigating products such as LCs and documentary collections (ADB 2022; IFC and WTO 2022; IFC and WTO 2023; AfDB and Afreximbank 2020).

In Mexico, widespread use of SCF effectively reduces reliance on LCs on the import side. This is because SCF typically involves open account transactions, where payment is made after the goods are shipped, rather than requiring the security and guarantees that LCs provide. A priori, SCF is offered both on the import and export sides. However, in the case of Mexico, it relates much more to the discounting of receivables by sellers (exporters) and financing received on the back of the supply chain "anchor" credit rating (Pérez-Elizundia et al. 2020). Although not absolute

FIGURE 2.2

Banks' Trade Finance Portfolios Are Weighted More Toward Importers Than Exporters

Trade finance instruments by trade activity



Source: 2024 IFC survey.

substitutes, SCF on the export side can add to the spectrum of facilities available to exporters (in addition to export loans, against purpose orders, or equivalent export-related working capital lending).

Further breakdown of the composition of TSCF assets by trade activity and funding status is shown in **Annex Figure B3.2**. Funded instruments such as trade loans account for a higher share of TSCF assets than unfunded instruments such as LCs and documentary collection, especially for imports. In Honduras, for example, the share of funded instruments that supports imports is 36 percentage points higher than the share of unfunded instruments (45 percent versus 9 percent) and 24 percentage points higher for exports (26 percent versus 2 percent). The funded/unfunded difference for imports financing is less stark in Guatemala and Mexico (about 10 percentage points).

2.5 Trade Loans

Trade loans, both on the import and export side, account for two-thirds of TSCF assets reported by Guatemalan banks, compared to 31 percent and 40 percent reported in Mexico and Honduras, respectively (**Table 2.2**). The survey captured loans associated with the financing of imports and exports, including pre-export financing (working

TABLE 2.2

Trade Loans

	Guatemala	Honduras	Mexico
Total trade loans (\$, billions)	\$3.5	\$0.6	\$21.9
Total trade loans (% total trade finance assets)	66%	40%	31%

Source: 2024 IFC survey except for merchandise trade which is obtained from the World Trade Organization (WTO, 2024). **Note:** The share of trade loans is computed as the ratio of the total value of bank-declared trade loan assets to the total value of trade and supply chain finance assets of responding banks for each country.

capital financing expenditures before export deliveries take place) and post-shipment financing. Trade loans can be secured (when borrowers pledge inventories, accounts receivables, or other collateral) or unsecured (when offered based on borrowers’ creditworthiness, financial stability, and cash flow potential). They can be offered as part of other financing instruments such as LCs or as a standalone product. Structured trade finance products such as pre-export trade loans are among the mostly commonly used instruments in Latin America (Pianese 2022).

Traders across the developing world often meet their working capital needs through trade finance loans. Such loans offer more flexibility to traders with limited access to sophisticated trade finance products. They are particularly useful in the context of international trade due to the long time-lags between production, shipment, and receipt of payment, as well as the various risks associated with cross-border trade. Although flexible, working capital loans can be expensive (IFC 2022; IFC and WTO 2023).

2.6 Supply Chain Finance for International Trade

As noted above, all surveyed banks in Mexico and less than half of the banks in Guatemala and Honduras offered SCF. The latter accounts for about 17 percent of the TSCF assets of responding banks in Mexico, a significantly higher share than in Honduras (1 percent) and Guatemala (4 percent) (Table 2.3). The divide in SCF assets among banks that serve global customers and those that do not has been documented previously (ICC Banking Commission 2020). Mexico’s SCF flows for international trade account for a little over half of trade loans reported in Table 2.2. Totaling \$11.7 billion in 2023, these are the largest flows reported among the emerging markets surveyed in recent IFC surveys (IFC and WTO 2022; IFC and WTO 2023), reflecting the growing popularity of financial solutions such as “anchor-backed lending,” international factoring, reverse factoring, loans against receivables, and others. The emergence of a whole ecosystem of firms producing for value

chains has created a large pool of trade finance demand in Mexico beyond traditional instruments.

SCF solutions help leverage the creditworthiness of large and established buyers to provide financing to their suppliers. SCF mitigates payment risks and enhances access to working capital, which is especially important for micro, small, and medium-sized enterprises with potentially low credit ratings and limited integration into supply chains (ICC 2024; Saleem, Hommes and Sorokina 2017). SCF solutions are transaction-based and cover instruments such as invoice discounting (factoring and reverse factoring) and other working capital finance programs extended by financial institutions using invoices as collateral. For example, with pre-shipment SCF, financial institutions lend a percentage of the purchase order to meet suppliers’ working capital requirements. SCF solutions promote trade by enabling an earlier payment for trading businesses. This can be particularly useful for smaller traders who often suffer from chronic late payments and for customer segments

underserved by more traditional finance instruments such as bank loans (European Commission 2024). The importance of SCF for cross-border trade has grown significantly in recent years (Botta et al. 2020; ICC Banking Commission 2020). Recent trade disruptions, the push to enhance agility and resilience in supply chains in

TABLE 2.3

Supply Chain Finance Helps Smaller Traders Especially

	Guatemala	Honduras	Mexico
Supply chain finance (SCF) for international trade (\$, billions)	\$0.19	\$0.015	\$11.7
SCF for international trade (% of total trade finance assets)	4%	1%	17%

Source: 2024 IFC survey except for merchandise trade which is obtained from the World Trade Organization (WTO, 2024). **Note:** The share of trade loans is computed as the ratio of the total value of bank declared trade loan assets to the total value of trade and supply chain finance assets of responding banks for each country.

response, technological innovations such as digital invoicing and payments, and a greater emphasis on environmental, social, and governance requirements are among the enablers of SCF growth (Bickers 2023).

International SCF flows have grown against the backdrop of the development of a successful operational infrastructure for expanding local factoring and reverse factoring such as the reverse factoring model called Productive Chains Program created by Mexico's development bank NAFIN (**Box 2.1**). The uptick in factoring was facilitated by digital technology as Latin America, in general, and Mexico, in particular, have become extensive users of e-invoicing and e-billing, a movement mandated by tax and customs authorities since the 2010s. Increasingly, the use of e-invoicing is being consolidated across Latin America, creating a scalable market of recognizable, reliable, and formatted invoices based on which factoring markets for international trade can develop. In Mexico, for example, 6.7 billion e-invoices were generated between October 2020 and September 2021, of which 18.8 million were for imports (Calijuri, Corcuera-Santamaria and Zambrano 2022).

According to the International Factoring Association (FCI), factoring turnover in 2022 is estimated at around \$35.7 billion in Mexico, significantly higher than the volumes in Honduras (\$0.08 billion) and Guatemala (\$0.31 billion)²⁰ (FCI 2024). For the CAM-3, domestic factoring accounted for the highest share of total factoring

BOX 2.1

Factoring and Reverse Factoring Platforms in Mexico

In a context of limited access to credit and working capital, especially for smaller business in Mexico, the national development bank NAFIN created an online platform in 2001 for financial intermediaries to provide factoring services. This multi-funder platform facilitates factoring transactions between large buyers and their smaller and riskier suppliers. The platform expanded rapidly until the global financial crisis in 2007/08, helping small suppliers access early payments by leveraging the creditworthiness of their larger buyers. By 2009, it operated with 700 buyers, over 60 percent of whom were from the private sector. This accounted for 7 percent of the total factoring transactions in Mexico, benefiting close to 20,000 small and medium-sized enterprises across 300 supply chains. At that time, NAFIN helped broker over 8 million transactions, 98 percent of which involved micro, small, and medium-sized enterprises, averaging a rate of about 4,000 operations per day. The program is ongoing, with the most prominent Mexican financial institutions participating in and supporting it.

After the financial crisis, a new platform, the E-Factor Network, emerged as a significant player on the Mexican receivables finance and working capital market. This growing network includes over 20,000 companies, comprising buyers, suppliers, financial institutions, and technology partners. Here, users can choose to work with several potential funding partners or to use their own cash through a funding entity, eFactor Diez, resulting in lower costs and risks. An enabling legal and regulatory environment, and supporting electronic signature and security laws are among the factors crucial for the success of reverse factoring programs like NAFIN's (Aparicio, Carreras and Garone 2022; IFC 2021).

²⁰ Factoring turnover volumes reported in euros are converted into dollars using the average exchange rate for 2022 (1.0513 euros per dollar).

flows (98 percent, 94 percent, and 62 percent in Mexico, Honduras, and Guatemala, respectively). The same source shows a compound annual growth rate in total factoring flows of 20 percent in Honduras and 7 percent in Mexico from 2016–2022, and 1.6 percent in Guatemala from 2018–2022.

2.7 Trade Finance by Sector

All the surveyed banks in Honduras finance trade in the food products and beverages sector, motor vehicles and transport equipment, as well as the textiles sector (**Table 2.4**). This reflects the large share of exports comprised by garments (including sweaters and t-shirts), vegetables and animal products (coffee, bananas, crustaceans), and import goods such as yarn and fibres, and vehicles and vehicle parts. About 86 percent of Honduran banks reported financing trade in the agriculture, forestry and fishing, pharmaceuticals, transport, and Information Technology and Communications sectors. Honduras' energy, extractive, and construction industries can receive financing from a relatively small share of the banks.

All Guatemalan banks offer trade finance in the textile and plastic sectors (**Table 2.4**). A large share (86 percent) of Guatemalan banks also offers trade finance to companies in the pharmaceuticals, chemicals, food products and beverages, motor vehicles, and transport equipment sectors, as well as the electricity, gas, steam, and air sectors. About 57 percent of the responding banks reported financing trade in agriculture, forestry, and fishing. It is notable that few Guatemalan banks finance trade in extractive industries goods including mining (14 percent) or coke and refined petroleum products (43 percent), despite refined petroleum being the most imported good by

value. Commodity trade finance has faced global challenges in recent years, such as price volatility, financial risks, the substantial documentation needed for each transaction, and complex regulatory compliance requirements (Trade Finance Global 2024).

About three quarters of responding Mexican banks offer bank-intermediated TSCF to the motor vehicles and transport equipment sector, whereas 86 percent and 100 percent of the banks in, respectively, Guatemala and Honduras financed this sector (**Table 2.4**). The automotive industry, as mentioned in Chapter 1, is one of the more integrated and dynamic sectors in Mexico, and exporters operating in it may benefit from intra-firm financing in addition to traditional bank-intermediated financing. For example, enterprise survey data for Mexico show that the share of working capital of traders in the manufacturing sector financed through supplier credit and advances from customers is almost twice the amount financed through bank loans: 26 percent versus 14 percent (World Bank 2024). Wholesale and retail trade, as well as trade in food products and beverages, is covered by trade finance offered by all surveyed Mexican banks. Trade finance instruments are generally offered across all sectors, with at least 50 percent of the surveyed banks in Mexico offering trade finance to all 18 industries covered in the survey.

2.8 Trade Finance by Customer Segment

Previous evidence from emerging markets shows that selected market segments such as small businesses and women-owned firms tend to have more difficulty accessing affordable finance

TABLE 2.4

Trade Finance Availability by Sector

Percentage of respondents mentioning each sector as recipient of bank trade finance

		Guatemala	Honduras	Mexico
Food and agriculture	Food products, beverages	86%	100%	100%
	Agriculture, forestry, fishing	57%	86%	63%
Manufacturing	Motor vehicles and transport equipment	86%	100%	75%
	Textiles	100%	100%	75%
	Plastics	100%	57%	75%
Technology and electronics	Computer, electronics	71%	43%	88%
	Information technology and communications	71%	86%	63%
Chemicals and healthcare	Pharmaceuticals	86%	86%	50%
	Chemicals	86%	57%	75%
Energy, extractive and construction industry	Metals	71%	43%	88%
	Coke and refined petroleum	43%	57%	50%
	Mining	14%	29%	63%
	Construction	57%	71%	75%
Trade, transport, and utilities	Wholesale and retail trade	71%	71%	100%
	Transport	71%	86%	88%
	Electricity, gas, steam, and air	86%	57%	75%

Source: 2024 IFC survey.

in general and trade finance in particular. Yet, detailed and systematic data about supply- and demand-side constraints to accessing trade finance are scarce (Cavoli, Christian, and Shrestha 2019). At its basic level, closing this data gap requires banks to more carefully categorize their clients, including by leadership (such as identifying women-owned/led firms) and by size of trading businesses. However, 50 percent of surveyed banks in Mexico and 57 percent in Honduras reported

not keeping gender-disaggregated trade finance data (**Figure 2.3**). The remaining 43 percent of banks in Honduras and 38 percent in Mexico reported that they did provide trade finance to women-owned businesses. Additionally, about 25 percent of the banks in Mexico and 29 percent in Honduras reported not keeping track of how much of their trade finance supported SMEs. Among the Honduran banks, 29 percent did not offer trade finance to SMEs whereas 43 percent did, and

almost two thirds of surveyed banks in Mexico served SMEs.

Although survey data for Honduras and Mexico pinpointed gaps in the diversity of trade finance clients, this is less pronounced for Guatemala, with about 89 percent of banks providing trade finance to SMEs and 63 percent to women-owned firms. About 89 percent of responding Guatemalan banks reported offering trade finance to businesses with at least 50 percent foreign ownership, compared to just 50 percent in Honduras and 38 percent in Mexico. The lower share in Mexico confirms that foreign subsidiaries of multinational enterprises in Mexico likely benefit from open account transactions, in addition to bank-intermediated trade finance, to manage risk.

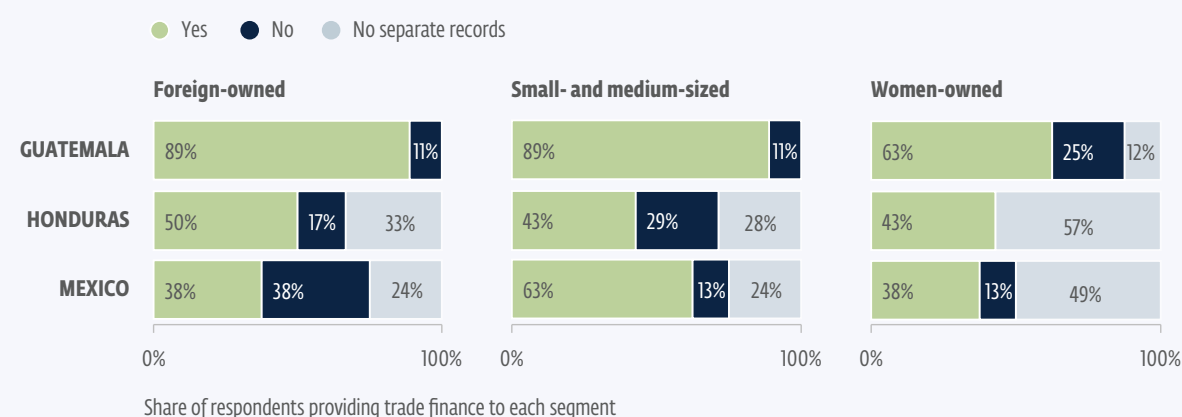
2.9 Constraints Facing Banks Providing Trade Finance

The survey also explored constraints on banks' ability to meet the trade finance needs of their customers, rating constraints from 1 (not a constraint) to 5 (top constraint) (**Table 2.5**). On average, banks in Honduras faced more severe constraints, with macroeconomic, regulatory, and liquidity constraints being the strongest stressors. Honduran banks highlighted that lack of sufficient US dollar/euro liquidity from their central bank and a limited availability of low-cost funding were hampering their ability to meet customers' trade finance needs. Uncertainty and liquidity shortages are particularly problematic for its smaller banks (**Annex Table B3.2**). Macroeconomic or political instability also played an important role for

FIGURE 2.3

Some Indications Women-Owned and Led Firms Are Underserved

Trade finance by customer segment



Source: 2024 IFC survey.

TABLE 2.5

Constraints Facing Banks to Meet Trade Finance Demand

Average by country, 1 = not a constraint; 5 = top constraint

		Guatemala	Honduras	Mexico
Macroeconomic and regulatory constraints	Macroeconomic/political instability	2.3	3.6	2
	Regulatory constraints	2.4	2.6	2.3
	Internal risk ratings / collateral requirements	2.6	2.9	2.4
Liquidity and funding challenges	Insufficient liquidity from financial institutions	1.9	1.8	1
	Insufficient liquidity from central bank	1.2	3.7	1
	Shortage of low-cost funding	2.9	3.4	1.9
	Inadequate capital to meet clients' needs	2	2.1	1.3
Correspondent Banking Relationship (CBR) issues	Insufficient tenors from CBR	2	2.7	1.6
	Delays in CBR processing	1.7	1.6	2.4
	Insufficient clearing accounts with CBR	1	1.2	1.6
	Stringent CBR requirements	2	1.4	2.3
	Insufficient line limits from CBR	2.3	1.4	1.6
Institutional and information gaps	Lack of information on market segments	1.8	1.9	1.7
	Limited institutional readiness	2.1	2	2.6

Source: 2024 IFC survey.

Honduran banks.²¹ Guatemalan banks similarly identified the limited availability of low-cost funding as a major constraint but also cited internal risk ratings/collateral requirements as a severe constraint.

For Mexican banks, limited institutional readiness—banks not being able to offer new trade finance

products entering the market—constituted the most severe constraint. They also stressed that correspondent bank processing delays, along with internal risk ratings and/or collateral requirements for their customers, prevented them from adequately serving their customers. Interviews with Mexican banks revealed a need for more financial education, especially targeting smaller

²¹ The bank survey did not request specifics, but several policy changes likely contributed to Honduran banks' perceptions about macroeconomic and political instability. Most notably, in April 2023, the central bank shifted from an interbank allocation system to an auction-based method for foreign exchange, aiming for fairer distribution and to prevent preferential US dollar assignments (Rodríguez 2024b). This shift has created economic uncertainty and a shortage of foreign currency, impacting firms (Rodríguez 2024a). Additionally, delays in obtaining external funding have reduced hard currency supply and international reserves (S&P Global Ratings 2024).

traders, to enhance awareness of available trade finance instruments.

More generally, the type and intensity of constraints facing banks may vary by bank characteristics such as size. Acknowledging the limitations of the survey's sample size, smaller banks tended to report slightly more severe constraints (**Annex Table B3.2**), with macroeconomic challenges in Honduras and correspondent banking relationships in Mexico and Guatemala appearing more constraining for them.

2.10 Rejection Rates for Trade and Supply Chain Finance Requests

The amount of rejected trade finance applications is estimated²² at \$0.57 billion for Guatemala (1.3 percent of merchandise trade), \$0.3 billion for Honduras (0.9 percent of merchandise trade), and \$13.2 billion for Mexico (1.1 percent of merchandise trade) (**Table 2.6**). These estimates should be treated as approximations. Some banks noted that their trade finance department provided financing to almost all clients that had been pre-screened by another department. This means that bank-declared rejection rates likely underestimate actual overall rejection rates in these countries. Compared to previous IFC-WTO studies, CAM-3 rejection rates are relatively low, resembling those in Viet Nam and Laos (12 percent and 10 percent, respectively). They are significantly lower than those in the Economic Community of West African States (ECOWAS) and in Cambodia (**Annex Figure B3.3**). The limitations with the rejection rates data are explored in **Annex Box B1.1**.

In addition, rejection rates often vary based on client characteristics, as documented in previous studies. For instance, data from the International Chamber of Commerce on trade credit and bank survey data from the Asian Development Bank both show higher rejection rates among micro, small, and medium-sized enterprises than larger companies (36 percent vs 21 percent, according to the International Chamber of Commerce, and 45 percent vs 31 percent, according to the Asian Development Bank) (ICC Banking Commission 2020; Beck et al. 2023). If there are systematic differences in bank rejection rates stemming from survey participation status and client size, using average rejection rates from responding banks to estimate the value of rejected applications could bias the trade finance gap estimate downwards. This could occur, for example, if smaller non-responding banks mostly financed smaller businesses, which traditionally face higher rejection rates.

Previous studies quantifying trade finance gaps based on trade finance rejection rates show varying shares of merchandise trade across different regions. For example, the Asian Development Bank estimated the global trade finance gap at \$2.5 trillion in 2022, or 10 percent of global merchandise trade (Beck et al. 2023). Rejections of trade finance requests in Africa are estimated at \$82 billion for 2019, accounting for 8 percent of total merchandise trade (African Development Bank and Afreximbank 2020). Similar estimates for select countries in the West Africa and Mekong regions range from 0.34 percent in Lao People's Democratic Republic and 14.3 percent in Ghana (**Annex Figure B3.3**).

²² See Annex B2 for methodological details.

TABLE 2.6

Bank-Intermediated Trade and Supply Chain Finance

	Guatemala	Honduras	Mexico
Overall average rejection rate of TSCF requests	10%	8%	13%
<i>clients</i>	4%	n/a	12%
<i>non clients</i>	23%	n/a	15%
Estimated TSCF (\$, billions)	\$5.3	\$3.0	\$91.3
Estimated TSCF rejections (\$, billions)	\$0.57	\$0.3	\$13.2
	[0.57; 0.58]	[0.2; 0.3]	[11.0; 15.3]
Estimated TSCF rejections (% of merchandise trade)	1.3%	0.9%	1.1%
	[1.3; 1.3]	[0.8; 1.0]	[0.9; 1.3]

Source: 2024 IFC survey except for merchandise trade which is obtained from the World Trade Organization (WTO, 2024).

Note: n/a means not available. We did not use bank-declared rejection rates for Honduras due to data quality and instead used previous estimates for Central and Latin America (Auboin and Dicaprio 2017). Confidence intervals (90 percent level) for estimated value of TSCF rejections and the share of rejections of total merchandise trade are shown in brackets.

2.11 Correspondent Banking Relationships and Their Constraints

Correspondent Banking Relationships (CBRs) are arrangements wherein one bank (the correspondent) holds deposits and provides services such as international payments, foreign exchange, and trade finance on behalf of another bank (the respondent), typically located in another country (EBRD 2023). CBRs allow banks to engage in global financial markets without needing to establish a physical presence in a different jurisdiction. The correspondent bank facilitates trade by enabling payments between exporters and importers' local banks, which usually lack a

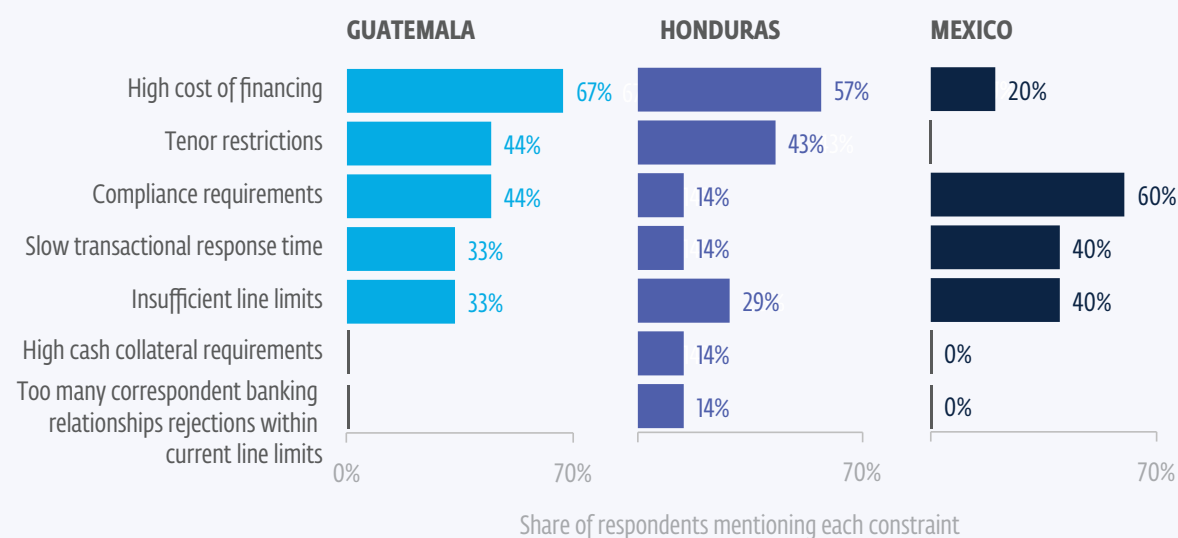
direct account relationship. As such, CBRs form the backbone of the international payment system, with a significant proportion of payments to facilitate international trade flowing through the correspondent banks (ECB 2020; Rice et al. 2020).

A higher share of Guatemalan banks (especially the smaller ones) reported facing more CBR-related stressors than banks in Mexico and Honduras (**Figure 2.4**). The high cost of funds is the most common CBR-related constraint reported in Guatemala and Honduras, followed by tenor restrictions, and, in the case of Guatemala, requirements to comply with anti-money laundering, terrorism financing, and know-your-

FIGURE 2.4

In Guatemala, Honduras, High Costs Hamper Forging of Cross-Border Ties Between Banks

Correspondent banking relationship-related constraints



Source: 2024 IFC survey.

client regulations. For responding Mexican banks, such compliance requirements are the most common CBR-related stressor. CBRs remain a bottleneck for smaller banks in all three countries (**Annex Table B3.2**).

The high cost of regulatory compliance and concerns about possible sanctions—for example, for not complying with money laundering or terrorism financing regulations—can force banks to terminate or restrict CBRs, thereby increasing the cost and availability of cross-border trade finance. More specifically, high compliance costs and stricter regulations have caused banks to

reconsider CBR strategies, as these increased costs and fine risks require higher revenue to meet required returns in this typically low-margin business line. Markets that do not provide sufficient volume are at risk of CBR reduction, which is detrimental especially to smaller local and regional banks that are already less integrated into global financial markets.

Despite their importance for global trade flows, the number of CBRs has decreased globally since 2012 even as the volume and value of cross-border transactions increased during the same period (BIS 2024a). Although the cumulative

volume of transactions²³ increased substantially for the countries studied between 2011 and 2022 (by 84 percent for Guatemala, 113 percent for Honduras, and 59 percent for Mexico), the number of counterparties abroad fell by 15 percent in Guatemala, 33 percent in Honduras, and 24 percent in Mexico during the same period [ibid]. A higher concentration of payment flows among a smaller number of correspondents can increase the vulnerability of counterparties to disruptions, limit financial inclusion and intermediation, and ultimately hinder the growth prospects of affected countries (IMF 2017).

According to one estimate, the decrease in the number of CBRs due to anti-money laundering and counter-terrorism financing regulations may have reduced Mexican exports to the US by about 2 percent between 2011 and 2021, compared to neighboring countries with less CBR loss (Shapiro and Yoder 2022). Some of the surveyed subsidiaries in Mexico noted that they exclusively relied on CBRs within their corporate network, which might pose other challenges such as limited access to broader CBR services and dependency on the parent network.

Various efforts are underway to address CBR-related stressors. For example, in Mexico, regulators have implemented a centralized cross-border transaction database that consolidates transactional and customer due diligence data,

as well as a database of know-your-customer information (Banco de México 2017). Efforts are also underway to develop the “next-generation” correspondent banking model, leveraging efficiency-enhancing technologies to set the foundation for a financial market infrastructure that can facilitate cross-border payments through tokenization²⁴ and smart contracts (Garratt, Wilkens and Shin 2024). Banco de México is among the seven central banks participating in a BIS-led Project Agorá, an initiative to test the desirability, feasibility, and viability of the multi-currency unified ledger for wholesale cross-border payments (BIS 2024b).

2.12 The Cost of Trade Finance

The range for LC confirmation and issuance fees charged by most of the responding banks in the study countries is comparable, at between 1 percent and 3 percent (**Figure 2.5**). More specifically, Honduran banks show minimal differences between confirmation and issuance fees, whereas in Guatemala and Mexico, confirmation fees are generally slightly lower than issuance fees. The price distributions (as indicated by the size of the boxes) in Honduras and Guatemala are narrow, reflecting consistent pricing among banks for both services. In contrast, Mexico’s prices exhibit a slightly wider distribution, suggesting greater variability in pricing for both LC issuance and confirmation. This variability may

²³ This refers to the total number of transactions sent via SWIFT message type MT 103 and MT 202, excluding message type MT 202 COV. SWIFT (Society for Worldwide Interbank Financial Telecommunication) is a widely used messaging platform through which a significant portion of global cross-border financial transactions are conducted.

²⁴ Tokenization refers to the automation of transactions involving real or financial assets by recording asset claims onto a common programmable ledger (Aldasoro et al. 2023). Unlike a traditional ledger with separate components for a database of assets recordings and an application governing assets recording and their updating, a programmable ledger embeds self-executing codes that activate when a pre-specified event occurs (smart contract) and combines different smart contracts in a single system (composability). Transactions on a programmable ledger are based on tradable digital assets (tokens) that comply with predefined standards and rules of smart contracts.

reflect more diverse market conditions or flexible pricing strategies adopted by Mexican banks.

As shown in **Table 2.2**, trade loans account for a significant share of TSCF assets, especially in Guatemala and Honduras. The cost of trade (export and import) loans includes interest on advances taken out to facilitate international trade, along with various fees, including bank processing fees, shipping fees, and potentially insurance premiums.

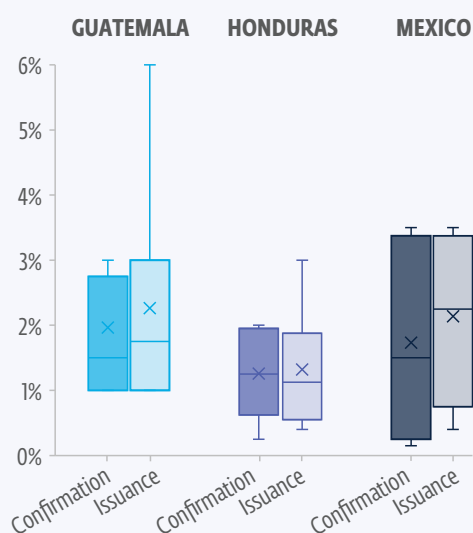
These premiums, in turn, can depend on factors such as the political and macroeconomic risks of trading countries, the cost of funds, and transaction risk. These costs cover the expense of bridging the gap in time between shipping goods and receiving payment for them.

Trade loans in Mexico are more expensive than in Guatemala and Honduras, with an average interest rate of 13 percent in Mexico compared to 8 percent in the other two (**Figure 2.6**). This nominal difference is due to Mexico's higher monetary policy rate.²⁵ However, the spread—the difference between the interest rate on trade loans and the monetary policy rate—is, as expected, smaller in Mexico than in the other two, meaning Mexican banks charge a relatively lower markup over the policy rate. A lower spread in Mexico may be attributed to its more mature and integrated financial sector with several subsidiaries of large global banks competing for clients. Previous evidence suggests that interest rate spreads are shaped by a variety of factors including administrative costs, credit risk, and inflation—factors that generally widen the spread—and liquidity and regulatory efficiency, which generally narrow the spread (Guamán et al. 2022). The higher spread in Guatemala and Honduras is in line with

FIGURE 2.5

On Average, Bank Fees for Letters of Credit Are Lowest in Honduras

Letters of credit fees



Source: 2024 IFC survey. **Note:** Figure shows the distribution of bank-declared fees (both minimum and maximum) for letters of credit. Cross marks (with value labels) and horizontal lines inside the boxes show averages and medians, respectively. The bottom and top edges of each box indicate the 25th percentile (p) and 75th p, respectively. The bottom "whisker" below the boxes equals the 25th p minus 1.5 times the interquartile range (IQR), the difference between the 75th and 25th p. The upper "whisker" above the boxes equals the 75th p plus 1.5 times the IQR. LC fees outside the whiskers are not shown.

²⁵ The central bank of Mexico (Banco de México) increased its policy rate from 5.5 percent to 10.5 percent in December 2022 faced with surging inflation due to global value chain disruptions. In March 2023, Banco de México further raised the policy rate to 11.25 percent to stabilize prices (Banco de México, 2023) which prevailed until February 2024 when the central bank began to gradually ease the policy rate as inflation continued to slow. The central bank of Guatemala (Banco de Guatemala) began 2022 with a policy rate of 1.75 percent but incrementally raised it, reaching 4.25 percent by December 2022. This rate was further raised to 5 percent by mid-2023 due to inflation and uncertainties (Banco de Guatemala 2024). The central bank of Honduras maintained a policy rate of 3 percent throughout 2023 but raised it in 2024 by one percentage point in response to inflationary pressures (Banco Central De Honduras 2024).

what is observed in Central America and the Caribbean generally, where larger spreads are driven by market power, operating costs, elevated credit risk, weaker macroeconomic conditions, and less developed institutional frameworks (Guamán et al. 2022; Bravo et al. 2021). Improvements in market conditions, tackling entry barriers to the banking sector (including for foreign banks), and enhancing financial transparency could strengthen the performance of the banking sector and reduce interest rate spreads (Birchwood, Brei and Noel 2017).

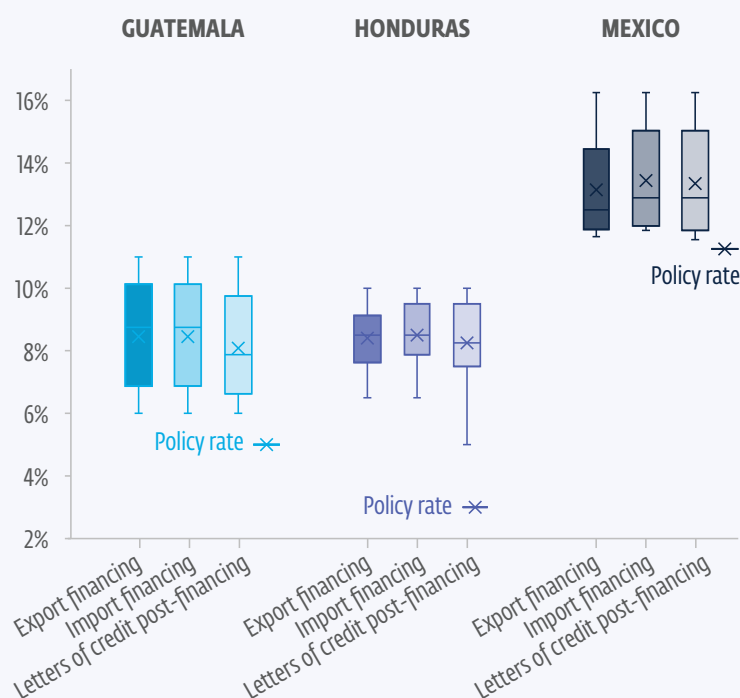
LC post-financing is a financial instrument in which the bank in the exporter's country issues a medium-term loan (up to two years) to the importer's bank issuing the LC. The cost of this instrument averages around 8 percent in Honduras and Guatemala but is noticeably higher in Mexico at around 13 percent. While differences in monetary policy rates partly explain this gap, LC post-financing fees, like trade loan costs, are also influenced by factors such as credit risk, market conditions, and institutional frameworks, as discussed above.

The spread also varies based on the characteristics of banks' clients. Some banks offer competitive market rates, whereas others apply international rates, which are generally lower than domestic

FIGURE 2.6

Trade Loans Priciest in Mexico Due to Country's Higher Interest Rates

The cost of trade loans and letters of credit post-financing



Source: 2024 IFC survey. Monetary policy rates (2023) were retrieved from central banks' websites: Banco de México, Banco de Guatemala, and Banco Central de Honduras. **Note:** Figure shows the distribution of bank-declared costs (both minimum and maximum) for trade loans and letters of credit post-financing, along with the policy rate. See Figure 2.5 for description of boxes and whiskers. Trade loans costs outside the whiskers are not shown.

rates (Pérez-Caldentey et al. 2014). For example, although not directly related to trade loans, evidence from Mexico indicates that loans extended to non-financial firms by banks with greater market power are approximately 11 percent more expensive than the average interest rate, with more pronounced spreads observed for small and micro-enterprises, as well as for firms located in the south of Mexico (Cañón, Cortés and Guerrero 2022).



Photo: Modern highway against silhouette of mountains in Guatemala © by Byron Ortiz via Shutterstock