TRADE, INVESTMENT AND COMPETITIVENESS

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EQUITABLE GROWTH, FINANCE & INSTITUTIONS INSIGHT

Financing More Resilient Trade and Value Chains

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Authors:
Arnaud Dornel
Jakob Engel
Mariem Malouche

WORLD BANK GROUP

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Abbreviations

AfDB	African Development Bank
Afreximbank	African Export-Import Bank
AML	Anti-Money Laundering
ATI	African Trade Insurance Agency
BA	Banker's Acceptance
BIS	Bank of International Settlements
EBRD	European Bank for Reconstruction and Development
EU	European Union
GDP	Gross Domestic Product
IBRD	International Bank for Reconstruction and Development
ICC	International Chamber of Commerce
ICISA	International Credit Insurance and Surety Association
IDA	International Development Association
IFC	International Finance Corporation
IMF	International Monetary Fund
JLGC	Jordan Loan Guarantee Corporation
KYC	Know Your Customer
LC	Letter of Credit
MENA	Middle East and North Africa
MNE	Multinational Enterprise
MSME	Micro, Small, And Medium Enterprises
OECD	Organisation for Economic Co-Operation and Development
SBLC	Standby Letter Of Credit
SMEs	Small and Medium Enterprises
SOE	State-Owned Enterprise
TA	Trade Acceptance
TFP	Trade Facilitation Program
WTO	World Trade Organization

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Executive Summary

Why the financing of trade matters?

The COVID-19 crisis poses major challenges to global trade, value chains, and their financing. Firms are under financial and liquidity stress across sectors and countries because of unprecedented lockdowns and travel restrictions. It is also affecting the capacity of banks in emerging markets to supply trade finance and their customers' access to it, particularly in the poorest countries and fragile states.

This assessment is also supported by emerging evidence. An estimated trade finance gap of US$1.5 trillion already existed before the crisis (Starnes and Nana 2020) and more recent estimates from 2020 have now placed this gap as high as US$6.5 trillion (Wreford and Louat 2021). Across successive multinational enterprise pulse surveys carried out during the current COVID-19 crisis by the World Bank, availability of trade finance is consistently listed as "critically important" for most affiliate respondents (Saurav et al. 2021).

However, even in "normal" times, the financing of trade and value chains is of major importance to developing countries. It affects a country's competitiveness, its export performance, and ultimately its employment and growth. Yet this topic is prone to fall between the cracks because it cuts across different disciplines: financial inclusion, value chains, private sector development, and trade facilitation, among others. Concerted efforts are needed to ensure that this important agenda is well understood and pursued comprehensively, at the country and multilateral levels.

This report aims to improve the knowledge base on the financing of trade and related data, institutions, and instruments. An improved knowledge base can support interventions that strengthen the infrastructure and the flow of funds underpinning the financing of trade in the context of value chains in client countries and regions. First, it defines trade finance and other ways in which trade is financed. Second, it provides an overview of trade financing supply and demand dynamics, including during the two recent global economic crises: the 2008–09 financial crisis and the 2020 COVID-19 crisis. Third, it discusses a policy agenda focused on how the World Bank Group and other international institutions and donors can more effectively support developing countries in meeting the growing demand in this area, including for (a) country-level technical assistance and diagnostic work, (b) improvement of the data infrastructure, and (c) global engagement and advocacy.

What do we mean by trade financing, and what is the role of the financial sector and the government? A prerequisite to engaging in a meaningful policy agenda that facilitates the financing of trade is to understand the different instruments, their roles, and responsible players. At the firm level, firms finance their trade activities in two major ways: (a) "interfirm trade credit," meaning deferred payments from buyers to suppliers, known as "trade credit"; and (b) "trade-related financing" from financial institutions. The working capital required by trade can also be financed from shareholder funds and other long-term sources. Although important, these financing sources are not specific to trade and are not addressed in this report. Like firms, value chains finance their activities in two major ways: (a) "internally," through the credit that buyers and sellers extend each other; and (b) "externally," from funds raised from third parties, especially banks and other financial institutions. Value chains are reverse payment chains: whereas value chain processes move goods from upstream input suppliers through midstream transformers to downstream customers, payments and cash flow circulate from downstream consumers to upstream suppliers. Finally, in developed and emerging markets, trade credit—and to some extent trade-related finance—are often underpinned by trade credit insurance.

Trade credit, market power, and the public sector

Estimates indicate an aggregate volume of trade credit at around 42 percent of world gross domestic product (GDP), with most of it for domestic transactions (Boissay, Patel, and Shin 2020). Aggregate trade credit is believed to be approximately 80 percent domestic (buyer and seller in the same country) and 20 percent cross-border. Moreover, the United Nations Conference on Trade and Development has estimated that approximately one-third of global trade is intragroup trade,[1] and the rest is estimated to be trade between unrelated firms (most commonly in textiles, apparel, and leather products, and food and beverages) and gives rise to arm's-length trade credit (Lakatos and Ohnsorge 2017).

Trade credit is a factor of international competitiveness and often reflects the respective market power of buyers and sellers. Larger firms tend to benefit disproportionately from favorable payment conditions for both sales and purchases, whereas small and medium enterprises (SMEs) are frequently squeezed. Buyers in advanced markets expect their suppliers based in developing countries to sell on open credit terms. However, exporters are exposed to credit risk on their buyers. During severe market downturns (such as the current COVID-19 crisis), even reputable buyers and large firms may experience cash flow difficulties or even become insolvent. Large retail chains in developed countries enjoy strong market power and can impose credit terms (typically 60–90 days) on their suppliers in developing countries. These receivables weigh heavily on the exporters' balance sheet and need to be financed by financial institutions. Advance payment helps exporters but places them in a dependent position compared with importers. In countries with weaker credit infrastructure and legal enforcement, trade credit may be predicated on information, trust, or social enforcement flowing along family, clan, or ethnic lines.

In many developing countries, payment delays from customers are often the single largest source of mortality for SMEs, and public sector agencies and state-owned enterprises (SOEs) are the main source of payment delays. Slow payments from SOEs can create a negative ripple effect on value chains and hit SMEs hardest, harming investment, employment, and business growth. Public sector payments may be slow because (a) state-owned agencies may be cash-strapped, (b) SOEs are typically larger than their suppliers and are hard to sue for payment, and (c) payment processes in the public sector are inefficient. Concerted efforts of the ministry of finance and relevant line ministries are required to ensure that public sector payables are settled on time. Where payment delays have arisen, as a transitional measure it may be possible to implement a suitable mechanism to have the banking sector refinance them.

As such, the mismatch between the supply and demand of trade financing results from both market failures and government failures.

Trade-related financing and the role of the financial sector

Financiers have two major types of roles in international trade. On the one hand, they provide "trade finance services" that do not involve financing: they effect payments between buyers and sellers in the value chain, and handle and ensure the integrity of the flow of trade documents required for payment. On the other hand, they provide trade-related financing: they fund working capital and take credit risk on trade

1 Trade credit arrangements in international trade include (a) "intrafirm" (also known as intragroup) trade credit and (b) trade credit between unaffiliated firms ("interfirm trade"). Intragroup trade refers to transactions arising between firms linked by a degree of common ownership and control (for example, different subsidiaries of the same group).

transactions and counterparties. Financing can take the form of general banking facilities (not specific to trade but used to finance trade) and specialized financing instruments specific to trade—trade finance. The precise definition of trade finance may vary, but essentially banks provide three types of trade finance products.

1. **Corporate trade finance** involves traditional trade finance instruments in which the issuing bank takes a credit risk, at least nominally, on a local firm. These instruments include import letters of credit, bank guarantees, bid and performance bonds, among others, which mitigate the execution and payment risks between trading entities. Besides imports, these instruments are also used to secure the performance of contractors in procurement transactions.

2. **Financial institution trade finance,** such as letter of credit confirmations, in which a bank takes a credit exposure on other banks, in an effort to balance risk with market revenue potential. In particular, local banks confirm letter of credits issued by foreign banks, which support export trade.

3. **Supply chain and other structured trade finance products,** in which the security provided to the financier is "internal" or "organic," that is, relates to the assets financed (notably receivables). These products include factoring, in which sellers sell the receivables and outsource their collection to factoring companies.

The International Chamber of Commerce's Banking Commission estimated the aggregate trade finance exposure between 2008 and 2018 at around US$9 trillion and the global factoring market at around US$3.5 trillion (ICC 2019).

For many entrepreneurs in developing countries, access is often limited to basic trade finance services (payment remittances, documentary collections), which do not require banks to provide financing. By default, these entrepreneurs finance their trade activities through general banking credit facilities—often a simple overdraft or a general-purpose short-term loan secured by a mortgage on residential or commercial real estate ("external collateral"). However, mortgage loans can be expensive for borrowers and can increase the costs of switching to another bank.

The reasons for the large "trade finance gap" faced by developing countries are both local and international and relate to both market failures and governance failures (Auboin and DiCaprio 2017). Local constraints include insufficient credit infrastructure, crowding out by public sector borrowing, conservative lending practices, unsuitable regulations, and so on. This situation leads to an undersupply (gap) hampering SMEs versus what would be economically optimal, even though trade credit and finance are generally perceived to expose trade lenders and creditors to lower levels of risk compared with other types of finance. In addition, the financing of trade is highly procyclical. During a downturn, liquidity disappears and markets overreact so that trade credit and finance may be unavailable, whatever the price, except to the strongest firms or financial institutions. Firms are, in turn, often crowded out by the public sector both through large-scale borrowing from the financial system and through late payments to their domestic suppliers.

Compliance costs and risks associated with anti-money laundering (AML) and know-your-customer (KYC) requirements are leading global correspondent banks to curtail business relations with banks in poor and fragile countries.[2] Even before the crisis, KYC and AML standards led international banks to be wary of correspondent banking business with developing countries. This trend is likely to accelerate for some poorer countries that may face foreign exchange liquidity shortages because of smaller export volumes, lower commodity prices, or supply chain disruptions. Similarly, some of the international banks may become more reluctant to extend the trade loans that banks in poorer countries need to provide trade finance and foreign exchange liquidity to their own clients locally. When credit and liquidity are constrained, banks may opt to retrench business with their SME clientele to continue serving their larger corporate clients.

Rejection rates in SME applications for trade finance are generally higher in poorer countries, partly because of the difficulties faced by some SMEs in providing the documentation that lenders require to meet KYC and AML standards. In Africa, only a few countries (notably the Arab Republic of Egypt, Cameroon, Nigeria, and South Africa) allow e-signature and electronic authentication of documents. The requirement for physical authentication of KYC, AML, and transactional documents has become particularly burdensome in the pandemic.[3] This burden leads to increased cost and rejection rates and slower processing of transactions.

2 AML regulations refer to a range of regulatory processes firms must have in place, whereas KYC is a component part of AML that consists of firms verifying their customers' identity.

3 The International Finance Corporation conducts important advocacy and technical assistance in many of these areas.

Trade credit insurance

Overall, trade credit insurance underpins 15 percent of world exports, and up to 20 percent in some countries, such as China and the Republic of Korea. Trade credit insurance covers policyholders (insured sellers) against the risk that their customers (buyers) might not pay for the goods or services delivered to them. In 2019, the global trade credit insurance industry covered flows estimated at more than US$5 trillion (more than 6 percent of world GDP), split evenly between cross-border and domestic trade. In more advanced markets, notably Europe, insured trade flows are on the order of 15 percent of GDP. Approximately 90 percent of the annual cross-border credit insurance volume relates to short-term transactions (usually less than 180 days) and 10 percent supports trade in capital goods.

Trade credit insurance has a multiplier effect on trade. For firms, especially SMEs, trade credit insurance brings benefits beyond pure risk mitigation. It facilitates the exporters' business development and sales diversification, strengthens their balance sheets (on average, trade receivables account for 40 percent of the total assets of a company, and payment default by large buyers is usually the single largest cause of SME insolvency), and supports financial inclusion (sellers may use receivables backed by credit insurance as a borrowing base). It facilitates trade integration by allowing firms to trade freely with clients in other countries on open credit terms. Trade credit insurance stabilizes cash flows and enhances value added, market penetration, and geographic diversification.

Credit insurance is procyclical. When faced by a deteriorated credit environment, private sector credit insurers and their reinsurers reduce their risk exposure. This action leads to more-than-proportional reductions in trade credit (attributable to the multiplier effect of credit insurance), squeezes working capital, and edges firms toward insolvency. Firms that continue deliveries on open credit terms without insurance will face customer defaults and might no longer be able to use uninsured receivables as a borrowing base. Importantly, it takes time to restore credit lines once they have been cut. Financial statements—on the basis of which underwriting decisions are made—reflect the past situation of firms; it might take over a year until improvements are reflected in new financial statements. As a result, the credit scores of obligors will be lower than warranted, and credit limits might not be reinstated as quickly as they should once a recovery is underway.

Firms and value chains in developing economies need better access to credit insurance. Whenever possible, basic credit insurance should be left to private sector insurers to provide. However, trade credit insurance creates positive externalities, and is a significant element of the credit infrastructure. For this reason, states have a vested interest in facilitating its provision, whether through structural policies, or in times of global crisis, through countercyclical interventions.[4]

4 The World Bank's most significant involvement in credit insurance has been the financing of two successive Africa regional trade facilitation projects between 2001 and 2015. These projects developed the African Trade Insurance Agency, which provides trade credit and investment insurance in the agency's 18-member countries. The World Bank occasionally includes an export development component in its export development projects and has conducted various diagnostics and technical assistance in Algeria, Jordan, Mongolia, and Tunisia.

Trade financing during the COVID crisis

Global downturns, such as the COVID-19 crisis, affect the demand and supply for trade finance in several ways. The riskier environment prompts exporters to secure a higher proportion of their sales through letters of credit as security for borrowing. During previous crises, the proportion of cross-border trade conducted through letters of credit—typically 10 percent in normal times—rose to 30 percent of global trade flows. Because of credit concerns, banks become more reluctant to extend unsecured lines. High-quality borrowers who may no longer access unsecured borrowing might migrate to forms of trade finance secured by "internal" collateral (assets related to the transaction financed, such as receivables and inventory). Commodity exporters may also migrate from clean unsecured borrowing to structured finance, pledging future sales under long-term export contracts.

The trade finance gap becomes wider in poorer developing countries. The crisis generally increases the demand for trade finance and hampers its supply. On the import side, developing country firms that previously enjoyed access to purchase goods or services on open credit terms will be required to switch to letters of credit issued by banks in the importing country and confirmed by banks in the exporting country. Shrinking trade credit insurance covers will also prompt exporters in developed and emerging economies to require letters of credit from importers in developing countries with lower credit scores.

During the initial stages of the COVID-19 crisis, supply chain disruptions slowed down production processes and delayed the settlement of trade transactions between firms. This situation increased overall working capital needs and the demand for trade finance. Lower demand and levels of activity in some of the global value chains may dampen demand for trade-related financing. But overall, the demand for trade finance is likely increasing because of the higher share of secured transactions in global trade. In response to the COVID-19 crisis, credit insurers—in cooperation with their regulators and professional associations—have undertaken a wide range of measures to cushion the impact of the pandemic on firms and to avoid the death spiral of reductions in trade credit insurance, trade credit, and trade flows. Measures include more flexible handling of defaults, shorter waiting periods for the indemnification of claims, increased emphasis on amicable settlement, and fast-track approvals.

Governments in the European Union (EU) and the Organisation for Economic Co-operation and Development (OECD) moreover have been intervening at a massive scale to support credit insurance. France and Germany have both implemented large state schemes (commitments of between 0.5 and 1.0 percent of GDP) to reinsure the main private sector credit insurers operating in their respective national markets. Similar schemes have been implemented in other countries, both within the European Economic Area (Belgium, Denmark, Italy, the Netherlands, Norway, Slovenia, and Spain) and outside (Canada, Israel, Turkey, and the United Kingdom). State reinsurance schemes leave management and underwriting in the hands of private sector credit insurers but require them to maintain the overall level of credit lines. In East Asia (notably in China, Japan, and Korea), state budget support is channeled through a dedicated national fund backstopping the national export credit insurance agency. In Singapore, the government supports the credit insurance market by subsidizing the premium charged to SMEs.

Existing schemes in the EU and the OECD support credit insurance in their home markets. Some of these schemes can be expanded, or new schemes could be implemented, to support credit insurance in a manner that benefits poor countries. The types and focus of the interventions suggested in this report vary, depending on the level of economic and institutional development, the quality of credit infrastructure, and the maturity of their respective credit insurance markets.

A trade financing policy agenda for developing countries

With globalization, the expansion of value chains, and the increased trade elasticity of economic growth during the past three decades came rising financing volumes and credit exposure related to trade. The present crisis has brought to the fore the credit and finance vulnerabilities arising from longer global value chains. Unlike the previous global economic crisis, the COVID-19 crisis has hit the real sector and trade directly, rather than working its way primarily through the financial system. This means that, even more than during the 2008–09 global financial crisis, countercyclical measures supporting trade credit and finance cannot be limited to the financial sector. These policies need to address vulnerabilities in the real sector.

Trade credit, credit insurance, and trade finance require a functioning enabling environment. This environment includes corporate governance, insolvency law, accounting systems, and credit bureaus. However, even in the most conducive environments, trade credit and finance are susceptible to market failures. Structural or countercyclical interventions could be pursued in the following areas:

1. **Monitoring of trade credit and payment delays.** This activity entails giving policy makers the ability to understand the scale of issue, to spot problems earlier, and to more accurately assess the impact of measures taken. Monitoring would target government procurement, SOEs, SMEs, and more broadly key national value chains.

2. **Trade credit discipline.** Such discipline can be achieved through regulation and oversight, and by encouraging larger enterprises—starting with SOEs—to pay their SME suppliers on time.

3. **Trade credit insurance.** This may involve
   a. facilitating the creation of national credit insurance markets by establishing the required regulatory, institutional, and credit infrastructure building blocks;
   b. deepening existing markets—for example, in small and nascent markets, pooled schemes could help state providers access international reinsurance, and during crises, countercyclical provision of state reinsurance may help cushion the reduction in trade credit insurance lines in relatively mature markets; and
   c. incentivizing the downscaling of access to trade credit insurance by relatively smaller firms.

4. **Traditional trade finance.** On the international front, multilateral agencies and donor governments need to take action to ensure that poorer, fragile developing economies continue to be "plugged" into international trade finance. A key part of this agenda is to ensure that banks in these countries continue to have access to the credit lines (notably for the confirmation of import letters of credit), foreign exchange liquidity, and correspondent banking services they need to carry out trade finance activities.[5]

5. **Specialized trade finance.** Policies can be pursued to develop the use of trade receivables as a borrowing base, including factoring (through regulations, establishment of registries of movable collateral, and so on). Other types of specialized secured lending can be developed, such as inventory finance. Banking regulations may need to be amended to recognize the value of internal collateral (collateral related to the transaction financed, such as receivables and inventory), besides traditional lending secured by a mortgage on real estate assets.

6. **State schemes.** To expand SME access to export finance, including preshipment export finance, state schemes can be established to complement general banking facilities and help SMEs in export value chains raise financing for their production cycle and the procurement of inputs required for exports. In some cases, rapid-response facilities could be implemented to provide liquidity or risk sharing to encourage banks to provide certain trade-related financing to local firms, for example, for the refinancing of overdues from state-owned enterprises.

7. **Digitalization.** On the banking side, national banking regulations need to allow the digitalization of trade finance processes. Countries may fast-track their adoption of the Model Law on Electronic Transferable Records by the United Nations Commission on International Trade Law. Among SMEs, the digitalization of accounts receivable and payable could enable several positive developments, such as (a) facilitating KYC and AML procedures, which have until now hindered SME access to trade finance; (b) facilitating the production of quick digital accounts, which can help lenders assess and monitor credit risk in real time; and (c) employing credit scoring methodologies and other fintech solutions, which would allow SMEs to access new financing products.

5 This agenda is already being actively pursued by IFC (with the support of the International Development Association's Private Sector Window), as well the commercial arms of other international development agencies.

Countries or categories of firms at different levels of access may require different types of public policy and state intervention instruments. As previously indicated, countercyclical interventions might be possible and desirable in certain categories of countries but might not be realistic unless certain building blocks are in place (notably credit infrastructure). Structural policies and interventions would be required toward this end. The report in turn details the types of domestic and international countercyclical and structural interventions that could be viable for both middle- and low-income countries. Finally, country-specific diagnostics are needed to assess the suitability of different types of interventions depending on the level of development and specific challenges faced by the beneficiary countries.

Policy recommendations should reflect the specific situation and challenges faced by target countries and should be based on country diagnostics assessing the financing of trade and value chains. These diagnostics would identify available information sources, review the relevant regulations, credit infrastructure and state schemes, and assess the market gaps for the country as a whole, and for different types of firms (informal SMEs, formal SMEs, small corporates, and large corporates) and activities (import, export, public sector contracts, and so on). In turn, these diagnostics could be the basis for a benchmarking exercise assessing the extent of market development and access across our developing countries, and the policy pursued in the respective markets.

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Introduction

The COVID-19 crisis poses major challenges to global trade, value chains, and their financing. A decade ago, in the wake of the global financial crisis, the international community scrambled to investigate the relationship between trade and its financing. The World Bank, for example, explored this topic at length in the flagship publication *Trade Finance during the Great Trade Collapse* (Chauffour and Malouche 2011).

Even in "normal" times, the financing of trade and value chains is of major importance to developing countries because of its impact on competitiveness, export performance, and ultimately on employment and growth. Yet this topic is prone to fall between the cracks, both because of its technical complexity and because it cuts across different disciplines: financial inclusion, value chains, private sector development, trade facilitation, among others.

This report aims to build on these foundations to improve the knowledge base on the financing of trade and related data, institutions, and instruments to support operations that strengthen the trade financing infrastructure in client countries and regions. The report explains these issues in terms understandable by nonspecialists focusing on key characteristics and data sources for trade credit, trade credit insurance, and trade-related financing. It then provides an overview of trade finance supply-and-demand dynamics during the two recent global economic crises: the 2008–09 financial crisis and the 2020 COVID-19 crisis. The report concludes with a policy agenda focused on how in particular the World Bank Group and other international institutions can more effectively support developing countries on this agenda.

This report aims to identify the types of interventions that could be implemented to support the financing of trade and value chains. Meeting the growing demand throughout the developing world for support in this area includes (a) country-level technical assistance and diagnostic work, (b) improved data infrastructure, and (c) global engagement and advocacy.

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Key Concepts and Quantification Challenges

2.1. How is trade financed?

2.1.1. Difference between trade credit and trade financing

Firms finance their trade activities in two major ways. They use (a) payment facilities from suppliers and prepayments from clients, known as interfirm trade credit (in short "trade credit"); and (b) credit facilities from banks and other financial institutions ("trade financing"). Interfirm trade credit is simply the deferred payment facilities that suppliers (sellers) grant to their customers (buyers) to settle invoices in their sales of goods or services. Trade credit is an essential form of financing in both cross-border and domestic trade transactions. Access to trade credit and trade financing has major implications for financial inclusion and for the viability of small and medium enterprises (SMEs). Besides short-term credit facilities, the working capital required by trade can also be financed from shareholder funds and other long-term sources. Long-term sources are important for trade but are not covered in depth in this report.

Similar considerations apply at the value chain level. Value chain processes move goods from "upstream" input suppliers through midstream "transformers" to "downstream" customers. These processes involve a variety of stakeholders: producers and manufacturers, traders, wholesalers, forwarders, transporters, warehouse operators, custom authorities, retailers, and financiers, among others. Value chains may be domestic (for example, local production for local retail consumers, or local firms, or for the public sector) or cross-border, involving transit through one or more countries. In global value chains, raw materials are imported from various countries, or when production or assembly requires consecutive, increasingly complex stages, each is likely to take place in a particular country based on its international competitiveness. Value addition along the value chain is split between various sellers and intermediaries, extending from upstream suppliers to downstream customers. Conversely, payments and cash flow circulate from downstream consumers to intermediary wholesalers, producers, and service providers, and ultimately to upstream suppliers. In other words, value chains are reverse payment chains. Typically, firms need to pay input suppliers and service providers before they can sell their goods and collect payments from their customers. Thus, supply chains are mirrored by trade credit chains between suppliers and customers.

Much of the financing used in value chains does not come from financial institutions, or only comes indirectly. Like firms, value chains finance their activities in two major ways: (a) "internally" (organically), through credit (that is, the deferred payment terms) that buyers and sellers extend each other; and (b) "externally," from funds raised from third parties, especially banks and other financial institutions. In developed and advanced developing markets, trade credit is underpinned by trade credit insurance. External financing of value chains—that is, their financing by banks and other financial institutions—provides liquidity, notably to producers and sellers, allowing them to (a) purchase and procure inputs, (b) fund costs incurred during the production and manufacturing process until the goods are sold ("preshipment," also known as "predelivery" financing), and (c) monetize the amounts invoiced (receivables) until buyers actually effect payments ("postshipment" financing, also known as "postdelivery" or "receivable" financing). It also allows buyers to pay for the goods after delivery, which allows them, in turn, to provide credit payment facilities to their own clients.

Most international trade transactions involve not only cross-border trade financing, but also domestic financing. Exporters require export finance to fund both their production cycle before shipment and their trade receivables after shipment. When bidding for construction and engineering contracts, exporters often need a local bank to issue a performance bond, which will, in turn, be reissued by an international bank in the importer's country. Importers, among others, need to find a local bank that is able and willing to issue import letters of credit, which will, in turn, be confirmed by the exporter's bank overseas. Thus, the supply of finance for international trade may be constrained not only by international factors (such as the local banks' access to international correspondent banking relationships), but also by domestic factors (such as the willingness of local banks to extend trade finance or related working capital facilities to local SMEs).

In their principle, domestic and international trade financing instruments are largely similar but their respective prevalence may vary. For example, factoring services may be available for domestic sales but not for export sales. Letters of credit are common in international trade, but relatively uncommon in domestic trade. Export transactions may be perceived as riskier and more challenging than domestic transactions (to the extent they involve different jurisdictions to ensure enforcement in case of default, and it may be more challenging to access information on trade partners located overseas). But the opposite can be true for sales to overseas buyers with strong credit ratings. In the case of trade credit insurance, globally the volume of insured international flows is roughly similar to the volume of insured domestic flows, but in some countries the market consists mostly of domestic volumes, whereas in others export flows predominate.

Beyond financing (funding or guaranteeing) transactions, financiers also provide payment and documentary services that are essential for the completion of these transactions. Such services include several key functions related to de-risking that are becoming increasingly essential to support the provision of credit following a surge of regulatory activity since the 2007–08 financial and 2010–11 eurozone crises (Starnes et al. 2017). These reforms are intended to quantify systemic risk, promote greater transparency, and combat money laundering and terrorism.

2.1.2. Trade credit

Trade credit in international trade

Different types of credit arrangements underpin global trade flows. They include (a) "intrafirm" (also known as intragroup) trade, (b) trade between unaffiliated firms ("interfirm trade") conducted on open credit terms, (c) interfirm trade paid by cash in advance, and (d) trade transactions intermediated by financial institutions.

Intragroup trade refers to transactions arising between firms linked by a degree of common ownership and control (for example, different subsidiaries of the same group). The volume of intragroup trade is not tracked by international statistics. As an indication of size, in 2016 the United Nations Conference on Trade and Development estimated—based on a survey data set on US firms—that approximately one-third of global exports are intragroup trade (UNCTAD 2016; cited in Lakatos and Ohnsorge 2017). The same survey indicates that intragroup trade has a higher incidence in sectors such as transportation equipment, electronics, and chemicals. Intragroup trade nominally gives rise to trade credit, but in practice the volume and terms of the credit arrangements are largely determined by the group's internal policies. The trade credit facilities that different subsidiaries grant to each other effectively net out once consolidated into group accounts. Approximately 65–70 percent of global trade is believed to be conducted between unrelated firms, most commonly in textiles, apparel and leather products, and food and beverages (Lakatos and Ohnsorge 2017). Interfirm trade gives rise to "arm's-length" trade credit. Trade credit usually takes the form of deferred payment facilities extended by sellers to buyers on open credit terms.

Alternatively, buyers pay for purchases before shipment ("sales on cash-in-advance terms"), which creates a reverse trade credit from buyers to sellers. Trade on advance payment terms often arises between firms with contrasting levels of market power. Sellers with strong market positions may be able to impose advance payments on weaker buyers overseas. However, the opposite situation may also arise. Instead of exacting open credit and differed payment terms, leading firms in global value chains with good access to finance are at times willing to prefinance (pay before delivery) trusted suppliers that do not have sufficient access to finance from local banks or from their own suppliers. Advance payment arrangements help the finances of exporters, but also place them in a dependent position compared with importers who provide this financing. This is particularly the case in a credit crunch, such as the one arising from the COVID-19 crisis.

Trade credit plays an essential role in global trade and value chains. This situation is especially true for the external trade of our client countries. Creditworthy buyers in the more advanced markets (such as Western Europe or North America) typically expect their suppliers based in developing countries to sell on open credit terms. When selling to advanced markets, the ability to offer trade credit is an important part of the exporters' competitive offering. However, it creates major challenges for exporters in developing countries.

1. **Exporters are exposed to credit risk on their buyers overseas.** Generally, exporters may not be well equipped to assess the financial situation of their buyers in distant markets. During severe market downturns (such as the current COVID-19 crisis), even reputable buyers may experience cash flow difficulties or even become insolvent. The default of a major client may in turn cause its suppliers to become insolvent.

2. **Exporters will need to grant deferred payment facilities to the buyers.** Major importers in developed countries (such as large retail chains) enjoy strong market power, and are able to impose credit terms (typically 60–90 days) on their suppliers in developing countries. Doing so will expand the size of accounts receivable on the exporters' balance sheet. This increase in assets will, in turn, need to be financed by banks or other financial institutions. The associated challenges are discussed in section 2.1.4.

Trade credit in domestic trade

Besides cross-border trade credit, countercyclical policies and interventions also need to focus on domestic trade. Indeed, the size of domestic trade is significantly larger than global trade. Although the volume of international trade is a fraction of global gross domestic product (GDP) (about half), the volume of domestic trade is a multiple of GDP.[6] There are only a few very open economies in which external trade is a multiple of GDP. Note also that global value chains combine firms and segments that finance their trade transactions locally.

Ideally, buyers prefer to conduct their domestic trade on open credit terms with differed payment facilities. Alternatives for firms that wish to reduce their exposure to credit risk—whether because the customer is not financially strong or because the parties don't know each other well—include cash in advance or other types of security, such as postdated checks.

Central bank data, when available, indicate that trade credit conditions vary by sector and depend on firm size. Typically, larger firms tend to be in a better position to benefit from favorable payment conditions for both sales and purchases. Trade credit arrangements also reflect the respective market power of buyers and sellers. As pointed out by Fisman and Love (2003), in many emerging countries, credit information and legal remedies are weak. As a result, trade credit tends to arise disproportionally in sales to large organizations. In countries with weaker credit infrastructure and legal enforcement systems, trade credit may be predicated on information, trust, and social enforcement means flowing along family, tontine, clan, or ethnic lines.

2.1.3. Trade credit insurance

Trade credit insurance is a risk management instrument that private insurance companies and national export credit agencies offer businesses. It covers policyholders (mostly sellers of goods and services) against the risk that their customers (mostly firms buying goods and services sold by policyholders) might not pay for the goods or services they receive. The industry initially arose as a competitive business; however, over the years it has received considerable attention from policy makers because of the externalities it generates and the market failures to which it is prone. This awareness led to significant state intervention in both developed and de-

6 Domestic trade includes the sum of wholesale trade and retail trade. Domestic trade is not as precisely or systematically tracked as international trade, but it can be estimated from (a) national accounting data (national output) and (b) aggregate enterprise accounts (enterprise sales). In the case of France, for example, the total sales of enterprises with turnover greater than €750,000 was approximately 2.8 times GDP. This figure is underestimated because it does not include the sales of the smallest enterprises.

veloping economies. State intervention took place after World War I (the United Kingdom's Export Credit Guarantee Department established in 1919), during the Great Depression (US Export-Import Bank in 1934), toward the end of World War II (Canada's Export Development Corporation in 1944, France's COFACE in 1946, Germany's Hermes in 1949, and Japan's export credit scheme in 1950). State intervention was also used as a tool to support the expansion of national exports (the Republic of Korea's K-Sure in 1992 and China's Sinosure in 2001) and regional trade integration (African Trade Insurance Agency in 2001 and Common Market for Eastern and Southern Africa in 1994).

The global trade credit insurance industry covered flows estimated at over US$5 trillion in 2019, of which approximately half is in cross-border trade and half in domestic trade (Berne Union 2020c). Overall, trade credit insurance underpins 15 percent of world exports and up to 20 percent in China and Korea. In more advanced markets, notably Europe, insured trade flows are equivalent to around 15 percent of GDP (Dornel, Ait Ali Slimane, and Mohindra 2020). Approximately 90 percent of the annual cross-border credit insurance volume relates to short-term transactions (trade credit with maturities of less than 180 days, occasionally up to one year), and about 10 percent supports trade in capital goods, such as planes, ships, power plants, refineries, and heavy industrial equipment (Berne Union 2020c).

Market penetration varies across regions and sectors. Penetration is higher among developed countries than in developing countries. Among developed countries, market penetration is highest in Europe and East Asia; among developing regions, credit insurance is least developed in Sub-Saharan Africa. Box 2.1 outlines the credit insurance offering and challenges arising in the Middle East and North Africa (MENA) region. Market penetration is also higher for manufactured goods and agro-industry exports, but lower for hydrocarbons and minerals. Credit insurance is less relevant for intragroup trade flows except to cover the currency transfer and other state-related risks arising in the countries of the entities purchasing goods or services from other group entities. The availability of trade credit insurance varies considerably in the developing world.

Credit insurance is available from three main types of underwriters: (a) a handful of global, privately owned insurers cover the trade transactions of insured firms on a "whole-turnover" basis (meaning that insured firms cover the value of total sales over a specified time, such as one year); (b) specialized insurers, such as Lloyd's of London, provide specific covers to more sophisticated clients (covering selected transactions and risks rather than the whole sales turnover, under more flexible risk-sharing arrangements that are not necessarily prorated); and (c) state agencies and schemes. All three types of providers are reinsured by reinsurers specializing in credit insurance, and at times by domestic reinsurers (notably to comply with national regulations).

For firms, especially SMEs, trade credit insurance brings benefits beyond pure risk mitigation:

1. It facilitates the exporters' business development and sales diversification (credit opinions from credit insurers can be a major market intelligence tool).

2. It strengthens the balance sheet (on average, trade receivables account for 40 percent of the total assets of a company, and payment default by large buyers is usually the single largest cause of SME insolvency (Dornel, Ait Ali Slimane, and Mohindra 2020).

3. It supports financial inclusion, given that receivables backed by credit insurance may be used by sellers as a borrowing base to raise finance without pledging cash or fixed assets to their banks.

However, trade credit insurance also comes with some limitations. For example, it is not optimal for retailers as it only covers business-to-business accounts receivable and not retail sales. Similarly, suppliers that sell exclusively to governments and those that do not sell on open account terms may not benefit from trade credit insurance. Furthermore, for many SMEs, trade credit insurance is often unavailable in low-income countries.

At country and value chain levels, trade credit insurance is a significant factor of trade integration; it allows firms to trade freely with clients in other countries on open credit terms with limited exposure to credit risk. Notably, trade credit insurance has been a significant enabling factor facilitating trade integration in Europe. Insuring receivables against credit risk increases the stability and predictability of sales cash flows, thus reducing the likelihood of insolvencies and their knock-on effect on the supply chains. Trade credit insurance has positive implications on value added, market penetration, and geographic diversification. Econometric studies have estimated the short-term multiplier effect of credit insurance on export trade within a range of 2.3 to 3.2 (van

der Veer 2015). The long-term multiplier effect of credit insurance on export trade is estimated to be higher than the short-term multiplier.

The World Bank's most significant involvement in credit insurance to date has been the successive Africa regional trade facilitation projects between 2001 and 2015. The two projects financed US$150 million and provided technical assistance for the creation and development of the African Trade Insurance Agency (ATI), which provides trade credit and investment insurance in the agency's 18 member countries. As of the end of 2019, ATI had shareholder funds of US$349 million supporting gross exposure of US$6.4 billion in trade and investment transactions in Africa.[7] Besides African regional integration, the World Bank also occasionally includes an export development component in export development projects. In Tunisia, the bank financed a pre-export finance scheme insuring banks that finance SME exporters. This component was implemented by the national credit insurer. In Jordan, market penetration by the national credit insurer is one of the indicators tracked by the bank's developing policy loans. Besides lending, in recent years the bank has conducted various diagnostics and technical assistance activities in Algeria, Jordan, Mongolia, and Tunisia.

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BOX 2.1 - Trade Credit Insurance in MENA Countries

Among the World Bank Group's Middle East and North Africa (MENA) client countries, Morocco has a relatively deep and competitive credit insurance markets. About 600 firms in Morocco use trade credit insurance. Morocco has two international credit insurers, plus a partly state-owned domestic provider. Insured trade flows are equivalent to 7 percent of gross domestic product (GDP)—approximately half the level observed in Europe or South Africa. Insured trade flows are estimated at approximately US$5 billion in domestic trade (5 percent of GDP) and US$2 billion in export trade (2 percent of GDP). Among MENA countries, Tunisia ranks second, with an insured volume of approximately 4 percent of GDP—approximately half export and half domestic. The market is dominated by one partly state-owned player (Cotunace), which is, in turn, reinsured by a leading international credit insurer.

Beyond Morocco and Tunisia, trade credit insurance is still nascent in other MENA countries. Egypt—with a market penetration estimated at less than 1 percent of exports—probably has the largest undertapped potential in the region. In Jordan, national authorities have identified credit insurance as a key step to enhance the competitiveness and growth of exports. The main provider, Jordan Loan Guarantee Corporation (JLGC), created in 1994, is 49 percent owned by the central bank. The JLGC has been upgrading its capabilities and has increased its market penetration in national exports to approximately 2 percent. Lebanon, before the current crisis, had an active local provider in which the International Finance Corporation initially had an equity stake. In addition to domestic providers, two regional agencies provide trade credit insurance across MENA countries: ICIEC (a subsidiary of the Islamic Development Bank, based in Saudi Arabia), and Dhaman (based in Kuwait).

Several challenges are hindering the provision of trade credit insurance in MENA countries. They include relatively weak credit infrastructure, with regard to credit information, especially in the informal sector (to be insurable, firms must have acceptable governance, invoicing and accounting practices, and claims enforcement) and the relatively small size of entrepreneurs in developing MENA countries (credit insurers tend to target firms with annual sales of at least US$1 million). As a result, the size of national markets in developing MENA countries is at times too small to attract direct investment from international credit insurers. Smaller markets can be covered by domestic state-owned or private providers, but they also need a minimum scale of operation to cover operating cost, invest in systems, and attract quality reinsurance.

Sources: Dornel, Ait Ali Slimane, and Mohindra (2020); Dornel et al. (2018).

7 See ATI's website (https://www.ati-aca.org/) for more information.

2.1.4. Trade-related financing

This section summarizes the role played by financial institutions in financing the trade and production cycles of firms and value chains. Note that financing from banks is intertwined with interfirm trade credit. Credit facilities extended by the financial sector can help make short-term funding available to meet seasonal fluctuations or short-term obligations. In turn, interfirm trade credit facilitates the transmission, through the supply chain, of the bank financing received by the more creditworthy firms. Financiers play several major roles in trade transactions. Notably, they (a) effect payments between buyers and sellers in the value chain, (b) handle and ensure the integrity of the flow of trade documents required for payment ("trade finance services"), (c) extend liquidity and funding, and (d) take credit risk on trade transactions and counterparties ("financing").

Entrepreneurs in many developing countries have limited access to trade finance instruments. Instead, they finance their trade activities through general banking credit facilities—often a simple overdraft or a general-purpose short-term loan secured by a mortgage on residential or commercial real estate ("external collateral"). Mortgage loans can be expensive for borrowers and can increase the costs of switching to another bank. Besides general banking facilities, entrepreneurs need access to specialized financing instruments—trade finance—to conduct cross-border trade transactions, participate in public sector procurement locally, and finance their trade and production cycles. There are five types of trade finance products that entrepreneurs may require (a more detailed description is included in the appendix).

1. **Trade finance services**, such as payment remittances and documentary collections, which are necessary to notify, document, and settle trade transactions but do not require banks to extend liquidity or credit.

2. **Traditional trade finance instruments** in which the issuing bank takes a credit risk, at least nominally, on a local firm. These instruments mostly apply to import transactions and consist of import letters of credit, bank guarantees, bid and performance bonds, and so on, which are designed to mitigate the execution and payment risks between trading entities (the "applicant" whose performance they guarantee, and the "beneficiary" of the guarantee). Besides imports, these instruments are also used to secure the performance of bidders and contractors in procurement transactions. They can also be used when a local bank takes credit exposure on other banks, especially in the case of export trade.

3. **Supply chain and other structured trade finance products**, in which the security provided to the financier is typically "internal" or "organic," meaning that it relates to the assets financed (notably receivables) instead of "external" collateral unrelated to the transaction financed, such as a cash deposit or a real estate mortgage. Unlike traditional trade finance products, supply chain financing is usually based on open account trading. Financing events (drawdown, risk mitigation, repayment) are triggered by underlying transaction events in the supply chain (purchase orders, shipment, and so on).

4. **Import letters of credit** are issued by local banks and require cross-border global correspondents to confirm. They represent the commitment of the bank, on behalf of an importer that guarantees payment to the exporter provided the terms and conditions specified in the import letter of credit are met.

5. **Structured trade and commodity finance** is a flexible instrument that facilitates the financing of trade for critical commodities, especially in emerging markets.

The availability of trade finance products varies widely from market to market. In advanced emerging markets, banks and specialized financial institutions offer a broad range of trade finance instruments; although in times of crisis, these products might become less widely available (or they might be available on very unfavorable terms). For many SMEs in MENA and Africa, access is limited to basic trade finance services (payment remittances, documentary collections), which do not require banks to provide financing. In dealing with SME importers, local banks often struggle to provide clean (unsecured) credit terms when issuing import letters of credit because they lack sufficient information or do not perceive economic viability. Instead, they usually require full cash collateral as a prerequisite before they open a letter of credit for an importer. The cash deposit will remain blocked at least for several weeks until the goods are shipped and paid for. Likewise, SME exporters in MENA seldom have access to export finance. Domestically, SMEs need trade finance to meaningfully participate in public procurement: when bidding for projects, they need to provide bid bonds, performance bonds, advance payment bonds, and so on. Once awarded a public procurement contract, SMEs need to be able to finance or discount the receivables due from their public sector clients. Table 2.1 summarizes the benefits and drawbacks of different payment terms and associated instruments.

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TABLE 2 - Typical Payment Terms and Associated Instruments

Typical payment terms and instruments	Pros	Cons
Cash in advance	Is secured and simple and provides working capital for the supplier.	• Can be onerous for the buyer. It is the riskiest form, ties up working capital, and may require buyer to borrow to finance the trade. The buyer may opt to transact with other suppliers that do not require cash in advance.
Letter of credit (LC)	Provides security to the supplier by ensuring timelypayment. Serves as standard instrument in international trade for sales to distant or risky markets.	Involves LC fees. • For import transactions, the bank may decline to open the LC for SME buyers, or may require the buyer to deposit cash in advance. • For export transactions, buyers in advanced markets prefer to avoid the cost and hassle of LCs and often favor suppliers able to transact on unsecured terms. Uncommon in domestic trade.
Documentary collections	Are less costly and more secure than LCs. Are more widely available to SMEs from banks than LCs.	For the supplier, riskier than an LC, unsuitable for the riskiest markets.
Open credit terms	Are flexible and low risk for the buyer, have no transaction fees, and are administratively least cumbersome (and receivable management can be outsourced to factoring, if available). Are preferred by buyers; make the supplier more competitive.	The supplier takes credit risk on the buyer and incurs collection cost and loses working capital in case of default (though this risk can be mitigated by credit insurance if available).

Source: World Bank.
Note: SMEs = small and medium enterprises.

Studies conducted by the International Finance Corporation (IFC) and regional development agencies point to the very large "trade finance gap" faced by firms—especially SMEs—in developing countries. The factors causing these gaps are both local and international. Local constraints include insufficient credit infrastructure, crowding out by public sector borrowing, conservative lending practices, prudential requirements inconsistent with more advanced trade finance products, and so on. Internationally, growing compliance costs and risks associated with anti-money laundering (AML) and know-your-customer (KYC) requirements are leading global correspondent banks to curtail or even terminate business relations in poorer, smaller, or conflict-affected countries.

In addition, buyers and sellers require "trade finance services" to settle, document, and secure their trade transactions. Trade finance services provided by financial institutions are essential to the processing and closing of trade transactions, regardless of whether these institutions actually finance traders or take credit risks on them. Aside from financing per se, trade finance services fall in two categories: (a) effecting payments between buyers and sellers and (b) acting as trusted intermediaries for the transfer of trade-supporting documents between sellers and buyers.

Addressing this gap requires interventions on several fronts. In developing countries, more needs to be done to help local banks better serve exporters and importers (especially SMEs) and the value chains in which they operate. Banks in developing countries also need support and facilitation to improve their access to international financing and trade finance services from their counterparts overseas.

Key players in trade finance

At the most basic level, banks in developing economies provide only general bank financing (which can be used to finance trade), in addition to trade finance services (such as fund transfer or documentary collection). Moreover, banks may also provide basic trade finance instruments (such as opening letters of credit for local importers, confirming and collecting the proceeds of letters of credit for local exporters, or issuing performance bonds for contractors). At a more advanced level of market development, banks and other financial institutions provide more sophisticated trade finance or supply chain services, such as the discounting of export bills, invoice factoring, warehouse receipt financing, and so on.

Local export-import banks and similar state-owned financial institutions may provide preshipment financing to exporters or serve as guarantor, making it possible for the importer to receive long-term international financing when importing capital goods. Their mandate is to expand the country's exports, preserve or create manufacturing jobs, increase economic value added, and bolster the international competitiveness of the host country. Instead of intervening through a full-fledged "policy bank" offering trade financing and services to firms, states may also do so wholesale through export-import "schemes" tasked with facilitating the trade finance offering of regular commercial banks. Other specialized local nonbank financial institutions include credit insurers that insure the domestic or export sales of local firms, and the factoring companies that purchase the sales invoices of local firms and manage their collection.

International financial institutions play several major roles. As "correspondent banks," they are the domestic banks' overseas bankers and they maintain on their behalf accounts in foreign currency, through which the domestic banks effect the money transfers associated with their own clients' import or export business. Correspondent banks may provide cash management facilities to the domestic banks, and may extend to them "trade loans," that is, wholesale foreign currency financing, allowing them to serve SMEs or other local clients that cannot be served by the international banks.

International financial institutions also finance, secure, or just handle the documentary flow for the international leg of a cross-border trade transaction. If they are present in both the exporting and importing countries, foreign banks may finance both sides of a cross-border trade transaction and multiple trade stakeholders in the overall value chain. International players my include specialized institutions, such as export-import banks, factoring companies, forfaiting companies, among others. Finally, some international financial markets and investors may be accessed to refinance or monetize trade finance portfolios.

2.2. Quantifying and measuring trade financing flows

2.2.1. Trade credit

To assess the appropriateness and impact of countercyclical trade credit policies, it is useful to measure the volumes of both trade flows and interfirm trade credit. Cross-border trade is well tracked by international statistics published by the World Trade Organization (WTO). In the case of domestic trade, statistical data are far less comprehensive. Key sources are, on the one hand, GDP input-output tables, and, on the other hand, the aggregation of corporate data performed by some central banks. In France, for example, domestic trade, as measured by the aggregate sales of firms (excluding firms with revenues of less than €750,000), was approximately 2.8 times GDP.

Interfirm trade credit is conveniently measured at the firm level, less so at the country or value level. At the enterprise level, trade credit is reflected in the accounts of sellers as trade receivables (measured as days of annual sales revenue); in the accounts of buyers, trade credit is reflected as trade payables (measured as days of annual cost of sales). The trade credit balance is the difference between the trade receivables and the trade payables, measured in days of annual sales revenues.

In a recent pioneering analysis (Boissay, Patel, and Shin 2020), the Bank of International Settlements (BIS) has attempted to measure the extent of trade credit relative to global GDP on the basis of data from a sample of 13 European countries, the United States, and Turkey. According to BIS estimates, aggregate trade credit comprises approximately 80 percent of domestic trade credit and 20 percent of cross-border trade credit. Total trade credit could be about 42 percent of world GDP, of which aggregate receivables are on the order of 22 percent of GDP, and aggregate payables about 20 percent (Boissay, Patel, and Shin 2020). In France, total trade credit (for firms with sales over €750,000) is approximately 50 percent of GDP (Banque de France 2020).

Few developing countries publish data on trade credit. In Morocco, the central bank has conducted annual surveys of payment delays since 2010, and in 2018 established an Observatory of Payment Delays. Extrapolating from a sample of 70,000 firms surveyed, the volume of interfirm credit in Morocco can be estimated at more than 40 percent of GDP. This amount is comparable to the total banking sector credit—45 percent of GDP—extended to nonfinancial enterprises, including financing unrelated to trade (Dornel, Ait Ali Slimane, and Mohindra 2020). In Tunisia, the central bank compiles accounting data on obligors of the banking system, which include data on payables and receivables. The World Bank is conducting technical assistance in association with the central bank to map the cash flow generation and financing of value chains. As a starting point, the technical assistance focuses on improving the extraction, management, and interpretation of trade credit data for a couple of pilot value chains.

Data from Morocco and Tunisia point to a deterioration of trade credit conditions for SMEs, even before the COVID-19 crisis. In Morocco, the number of insolvencies tripled during the past decade. About 40 percent of insolvencies are related to client payment delays or defaults, including late payment in public procurement contracts. Slow payment from clients seems to be the single most critical factor hindering the ability of SMEs to access markets. In Tunisia, slow payments from state-owned enterprises (SOEs) create a negative ripple effect on value chains and hit SMEs the hardest, harming investment, employment, and business growth.

Further work needs to be done to update the data and expand to other developing countries, as well as global value chains cutting across several countries. One can expect that the statistical data, once available, are likely to indicate that the COVID-19 crisis has severely deteriorated the trade credit situation, not only in Morocco and Tunisia but also in many (or most) developing countries.

2.2.2. Trade credit insurance

Trade credit insurance is tracked by various statistical sources; however, more work is required to combine these data to form a meaningful comprehensive picture. Challenges to the compilation and interpretation of statistical data include (a) confidentiality requirements (the credit insurance equivalent of banking secrecy requirements); (b) different concepts and methodologies used by different sources, which can be inconsistent and may evolve over time; and (c) lack of similar quality of information systems and reporting practices by the players involved.

At the global level, the Berne Union (the global association of export credit and investment insurers) publishes data on total commitments and insured trade volumes and claims. This information includes a breakdown by region and by type of product and maturity (for example, short-term and medium-term credit insurance, political risk insurance, and other cross-border products). The top five countries with new annual commitments are identified for each region. For example, out of US$2.3 trillion in new short-term commitments extended in 2019, US$59 billion (3 percent) went to Africa, where the top destinations were South Africa (US$12.7 billion, 22 percent of the regional total), Morocco (US$8.1 billion or 14 percent), Egypt (US$6.7 billion or 11 percent), Algeria (US$5.3 billion or 9 percent), and Tunisia (US2.9 billion or 5 percent) (Berne Union 2020c).

However, this exercise has limitations: (a) The definitions of regions and products have fluctuated over time, making time comparisons difficult. (b) At least for short-term business, new commitments are not necessarily used and do not all give rise to new transactions. (c) Statistical data track exposures on importers rather than export flows. (d) Domestic trade is usually excluded (depending on geographies, domestic trade usually accounts for 50–70 percent of business underwritten by private sector credit insurers. (e) Not all local credit insurers are members of the Berne Union. Total trade credit commitments are reflected in BIS reports, and indicate for each importing country the size of short-term, medium, and long-term (capital goods) commitments. The other main global association—ICISA (International Credit Insurance and Surety Association)—discloses the aggregate volume covered by its members—almost US$3 trillion in 2020—but does not provide a breakdown by country.[8]

At the country level, insurance regulators collect data that could be useful to track market development; however, these statistics pose various problems: (a) State-owned credit insurers are often exempt from insurance reporting requirements. (b) The data are usually not published. (c) Data pertaining to credit insurance are prone to be aggregated with other types of insurance activities (such as surety insurance). (d) Insurance regulators tend view credit insurance as relatively unimportant because their professional focus is on systemic risk, not on trade or trade credit. Credit insurance has a major impact on trade, but this aspect does not fall within the purview of national insurance regulators. With regard to balance sheet size and prudential impact, credit insurance represents a relatively small percentage of the overall insurance sector.

Major international credit insurers extensively track commercial and risk data in their systems, but their annual reports often disclose only a very small part of this information. Their annual reports usually give an indication of the extent of their aggregate regional risks and of their top 10 country exposures. However, poorer countries, or the Sub-Saharan African region, represent only a relatively small part of the total risk exposure; hence, data are aggregated with other parts of the world, such as MENA or Southern Europe. Data on individual countries are often known to industry experts but are not in the public domain. Reinsurers also track premium and exposures, which can be used to estimate market penetration and the level of market development in relevant countries. This information is occasionally available.

2.2.3. Trade-related financing

In March 2009, the G-20 Summit noted that "the lack of a comprehensive international data set for trade finance during the crisis has been a significant and avoidable hurdle for policy makers to make informed, timely decisions." To help fill the data gap, the International Monetary Fund (IMF) and the Bankers Association for Finance and Trade conducted four surveys of banks between December 2008 and March 2010 focusing on volume, prices, and drivers of the trade finance market and covering developments from year-end 2007 to year-end 2009 (Asmundson et al. 2016). During this time, the World Bank undertook an ad hoc survey of banks and firms in 14 developing countries (Chauffour and Malouche 2011). These various initiatives provided broad useful insights at the time but could not be integrated into a comprehensive and consistent data set and were not continued subsequently.

The measurement of trade financing volumes is challenging for a variety of reasons: (a) non-trade-finance instruments (general banking) are used extensively to finance trade in developing countries but are not recognized as "trade finance"; (b) "trade finance" products are diverse, relate to dif-

8 See ICISA's website (https://www.icisa.org/icisa/).

ferent stages of the production and trade cycle (for example, preshipment versus postshipment), may be unfunded (for example, letters of credit), and are not considered balance-sheet items; and (c) trade finance instruments may or may not involve ownership transfer (invoice financing versus invoice factoring), which might be treated differently in different jurisdictions and involve various types of domestic and international players (for example, importers, exporters, banks, fintech, and other nonbanks) that may use different accounting methodologies, in addition to other reasons.

Considerable methodological challenges also arise when attempting to measure the "trade finance gap" in developing countries. The methodologies to measure this gap need to be further developed and applied in developing countries, but as an order of magnitude, the Asian Development Bank, IFC, and WTO estimated the annual volume of unmet demand for "trade finance" at US$1.5 trillion in 2019, of which US$700 billion was in developing Asia, and US$82 billion was in Africa. In addition, the IFC estimated the global gap in supply chain finance in emerging and development countries at more than US$900 billion (WTO and IFC 2019). This gap increased dramatically in 2020, with the International Chamber of Commerce estimating a global trade finance gap of up to US$6.5 trillion, though with a wide range (ICC 2020). This topic is discussed in more depth in sections 3.2. and 4.

In the wake of the global financial crisis, the International Chamber of Commerce's Banking Commission initiated the ICC Trade Register. This extensive database compiles data on the trade finance business conducted by major international banks (now numbering 25). Instruments tracked by the ICC Trade Register include (a) traditional trade finance products—import and export letters of credit, letter of credit confirmations, trade loans (for import or export), performance guarantees, and standby letters of credit; (b) supply chain payable finance; and (c) export finance backed by export credit agencies. For 2018, the ICC database reflected aggregate exposures of US$1.96 trillion (estimated to represent 28 percent of the total market for these products and 11 percent of global trade volumes), of which US$600 billion in import or export letters of credit (estimated to support 3 percent of global trade) and US$1.36 trillion in other trade finance products (estimated to support 7 percent of global trade) (ICC 2019). The ICC Trade Register covers a very large volume of transactions across relevant types of trade finance and related products. Its first intent is not to monitor market volumes, but rather to reflect risk indicators—specifically the probability of default, and loss given default—which can feed into the Basel cap. The most recent annual report, published in May 2020, provides data up to year-end 2018. Data for 2020, reflecting the impact of the COVID-19 crisis, might not be available until the 2021 report, expected to be published in May 2022.

At the global level, other than the ICC Trade Finance Register, SWIFT—the Society for Worldwide Interbank Financial Telecommunication—tracks transaction and credit volumes pertaining to letters of credit. However, it only publishes limited information pertaining to the number of messages flowing through the system related to letters of credit. Data published by the BIS on cross-border financing provide country-level totals for export credits, but for the most part do not identify whether the financings are associated with trade.

FCI (formerly Factors Chain International), the largest factoring association, publishes on its website the global volume of its members, including for each individual country, the volume of domestic and cross-border factoring and the number of factoring companies. The global factoring market is estimated to be approximately US$3.5 trillion, equivalent to 4.3 percent of global GDP (FCI 2019). In Western Europe, factoring volumes are around 15–20 percent of GDP. For a sense of the disparity between developed and developing countries, among MENA countries—besides Morocco where factoring volumes are close to the world average—factoring is barely available in other client countries (for example, volumes in Tunisia and Egypt are less than 0.5 percent of GDP).

At the national level, central banks typically report the exposure of the financial institutions they supervise to trade finance products, such as import letters of credit, confirmation or discounting of export letters of credit, export prefinancing loans, performance bonds, and trade loans that local banks may receive from international banks. Some countries might be interested in cooperating with the World Bank or other multilateral agencies to work out a system to track and interpret these data more systematically. Similar arrangements could also be implemented with national or regional development finance institutions engaged in trade finance, such as the African Export-Import Bank or the Eastern and Southern African Trade and Development Bank to track not only trade finance volumes, but also the underlying volume of trade facilitated by trade finance products.

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Trade Finance during the COVID Crisis

3.1. Lessons from the global financial crisis

Global downturns, including the current COVID-19 crisis, affect the demand and supply for trade finance in several major ways. Generally, the riskier business environment prompts exporters to secure a higher proportion of their sales through letters of credit. During previous crises, the proportion of cross-border trade conducted through letters of credit—typically 10 percent in normal times—rose to 30 percent of global trade flows. Because of credit concerns, banks become more reluctant to extend unsecured lines, especially for large amounts and over-long maturities. Good quality borrowers who can no longer access unsecured borrowing migrate to forms of trade finance secured by "internal" collateral (assets related to the transaction financed), such as receivables and inventory). Borrowers, such as commodity exporters, may also migrate to more structured forms of trade finance, in which lenders take security over long-term export contracts and future sales that will arise under these contracts, rather than existing assets. At the lower end of the spectrum of obligors, some borrowers deemed to have a high credit risk might find it more difficult, if at all possible, to access trade finance.

In the years since, significant research has been looking at trade finance supply-and-demand dynamics during the global financial crisis, as well as the impact of these dynamics on firms. Of 16 articles reviewed by Starnes and Nana (2020) on the "great trade collapse," 12 attributed it at least in part to financial constriction, accounting for as much as 15–20 percent of the trade decline. This conclusion is also supported by sector- and firm-level analysis using Belgian, Colombian, French, and US data.

A comprehensive volume by the World Bank distilled key lessons from the crisis related to trade finance (Chauffour and Malouche 2011). It found, among other things, that trade finance was not the main driver of the 2008 trade collapse but it did contribute significantly, with SMEs being particularly vulnerable. The authors furthermore highlight the swift response by the international community to the crisis, supporting both large commercial and multilateral banks. Finally, the lack of data capturing types of trade finance was a major constraint toward policy formulation, and it recommended investments in data collection capacity building on the ICC's new Trade Finance Register. As discussed in sections 3.2 and 4, many of these lessons remain salient to today.

3.2. Dynamics during the 2020 COVID crisis

3.2.1. Impact on trade credit

During the initial stages of the COVID-19 crisis, supply chain disruptions slowed down production processes and delayed the payment of trade transactions between firms. Initially, this outcome increased the overall working capital requirement and the demand for trade-related financing from the financial system. Eventually, lower demand and levels of activity in some of the global value chains dampened demand for trade-related financing, although overall the demand for trade finance seems to be increasing because of the higher share of secured transactions in global trade.

The trade finance gap has become steeper in poorer developing countries as firms are squeezed by a combination of higher demand, lower supply, and operational challenges brought about by the COVID-19 crisis. The crisis generally increases the demand for trade finance. On the import side, developing-country firms that previously enjoyed access to purchase goods or services on open credit terms will be required to switch to letters of credit issued by banks in the importing country and confirmed by banks in the exporting country. Shrinking trade credit insurance covers will also prompt exporters in developed and emerging economies to require letters of credit from importers in developing countries with lower credit scores. On the export side, some of the commodity producers who previously had access to unsecured bank loans may need to migrate to structured trade finance.

Prudential rules applicable to banks may also have a procyclical impact on the supply of trade finance. The riskier environment generally deteriorates the credit ratings of borrowers, thus increasing the risk-weighted assets and capital consumption under Basel III rules. To meet prudential ratios, some banks may have to look for quick ways to reduce their overall credit exposure. Since cutting down on existing stocks of long-term loans takes time, some banks may find it expedient to cut down on trade finance first since the maturities tend to be short term.

Meanwhile, the crisis has also dampened the supply of trade finance to firms in poorer countries. Even before the crisis, KYC and AML standards led international banks to be wary of correspondent banking business with developing countries. Compliance requirements represent a very real financial risk and have driven up costs, while Basel III capital requirements have increased the acceptable level of return on capital. As a result, banks are facing increased costs and risk while also having less capital to deploy. In many cases, that makes it infeasible to do business in smaller, riskier markets. This trend is likely to accelerate b the poorer countries may be deemed riskier, and some of them face foreign exchange liquidity shortages due to smaller export volumes, lower commodity prices, or supply chain disruptions. Similarly, some of the international banks may become more reluctant to extend the trade loans that banks in poorer countries need to provide trade finance and foreign exchange liquidity to their own clients locally.

When credit and liquidity are constrained, banks may opt to retrench business with their SME clientele to continue serving their larger corporate clients. Rejection rates in SME applications for trade finance are generally higher in poorer countries, partly because of the difficulties faced by some SMEs in providing the documentation that lenders require to meet KYC and AML standards. Traditionally, trade finance involves paper-intensive, person-to-person processes. In developed countries, digital processes have gained more acceptance with regulators and banks in recent years. In Africa, only a few countries (notably Cameroon, Egypt, Nigeria, and South Africa) allow e-signature and electronic authentication of documents. The pandemic has made the requirement for physical authentication of KYC, AML, and transactional documents more burdensome. This effect increases rejection rates, increases the cost, and reduces the speed of trade finance provision.

During the initial stages of the COVID-19 crisis, supply chain disruptions slowed down production processes and delayed the settlement of trade transactions between firms. This situation increased overall working capital needs and the demand for trade finance. Lower demand and levels of activity in some of the global value chains may dampen demand for trade-related financing, but overall, the demand for trade finance is likely increasing because of the higher share of secured transactions in global trade.

This outcome is also supported by emerging evidence. Before the crisis, an estimated trade finance gap of US$1.5 trillion already existed (Starnes and Nana 2020) and has been estimated to be as high as US$3.4 to US$6.5 trillion in August 2020, and is growing (Wreford and Louat 2021). Across successive multinational enterprise (MNE) pulse surveys carried out by the World Bank, availability of trade finance is consistently listed as critically important for most respondents. In the most recent survey in March 2021, 73 percent of the most affected MNE affiliates and 66 percent of the least-affected MNE affiliates listed government trade finance as critically important (Saurav et al. 2021).

3.2.2. Impacts on credit insurance

During the global financial crisis, policy makers in developed countries, especially Europe, became aware that countercyclical interventions might be needed to support the credit insurance market. However, because of the time required to conduct diagnostics and design new schemes, few interventions were actually implemented, and those interventions (notably in France) were implemented on a modest scale. As a result of the COVID-19 crisis, policy makers in developed countries revived, updated, and implemented the concepts they had mooted a decade earlier. Rich countries are now intervening on a massive scale to preserve the aggregate volume of trade credit insurance and avoid a possible death spiral in trade credit. These interventions support trade credit in the respective national economies of the developed world. Could similar schemes be implemented in developing economies? What could be done to support trade credit insurance in IDA (International Development Association) countries?

As illustrated by the global financial crisis a decade ago, credit insurance is a procyclical activity. When faced by an economic crisis and a deteriorated credit environment, the standard response of private sector credit insurers, similar to banks, is to reduce their overall risk exposure. In part, this reaction is a consequence of the Solvency II model (the insurance industry's equivalent of the Basel II prudential framework used by banks), which requires insurers either to set aside more capital (typically unavailable during a major crisis) or to reduce their exposure so as to be able to face an anticipated increase in risk and claims. Credit insurers are also under pressure to reduce their risk exposure because of the reduced capacity in the global reinsurance market, since the reinsurers themselves expect to face massive losses and need to cut their risk exposure.

Reductions in trade credit insurance covers lead to reductions in trade credit (which can be more than proportional because of the multiplier effect of credit insurance). This decline squeezes the volume of working capital, which firms need for their production and trade cycle, and increases the likelihood of firm insolvencies within value chains. In turn, this squeeze in working capital and increase in insolvencies are likely to saddle credit insurers with additional losses, triggering further reductions in insurance covers. Firms that opt to continue deliveries on open credit terms without insurance cover will face levels of credit risk that they might be unable to absorb on their balance sheets, and might be unable to use uninsured receivables as a borrowing base to raise specialized financing from banks.

Importantly, it takes time for credit insurers to restore credit lines once they have been cut. Among other factors, the financial statements on which underwriters must rely to make credit decisions are backward-looking. These financial statements reflect the financial situation of firms during the previous accounting period, and it might take another year until improvements are reflected in new financial statements. As a result, the credit scores of obligors might be lower than warranted, and credit limits might not be reinstated as quickly as they should once a recovery is under way.

In response to the COVID-19 crisis, credit insurers and the key states in which they operate, together with their regulators and professional associations, have undertaken a wide range of measures to cushion the impact of the pandemic on firms and avoid the death spiral of reductions in trade credit insurance, trade credit, and trade flows. These measures are detailed in recent publications of the Berne Union, ICISA, and the Organisation for Economic Co-operation and Development (OECD) and include on the one hand, (a) measures benefiting policyholders and their customers, and on the other hand, (b) state budget backstop to ensure that public and private credit insurers continue to service firms and facilitate trade.

Measures benefiting policyholders and their customers (mostly the firms buying the goods and services sold by policyholders) include (a) more flexible handling of defaults, claims, and waivers, including less stringent requirements for the notification of potential defaults; (b) shorter waiting periods for the indemnification of claims; (c) more emphasis on amicable settlement and less on legal enforcement; (d) discretionary powers granted to policyholders to extend the payment terms of buyers beyond the maximum credit period mandated by the insurance policy; and (e) fast-track approvals. These measures are generally industry-neutral, but they often aim to favor SME exporters, since they are particularly vulnerable in a crisis.

In addition to policy management measures benefiting firms, various European Union (EU) and OECD countries have committed considerable backstop budget support to the credit insurance industry so that it continues to underwrite credit risks and enable trade despite unprecedented levels of risk and likely losses. Indeed, claims paid by the global credit insurance industry will likely be a multiple of the premium received from policyholders. In the case of the Berne Union (2020b), preliminary estimates place aggregate claims in the range of two to six times the gross annual premium).

Under normal circumstances, the OECD and EU rules require states to refrain from intervening in the most competitive segments of the credit insurance market (short-term export trade to low-risk countries—so-called marketable risks) to keep a level playing field among countries, and between private and state-owned providers. To avoid a rapid contraction of credit insurance, the EU adopted a temporary framework in March 2020 allowing member states to intervene either directly through provision by a state agency or indirectly through state reinsurance or private sector providers. Among other measures, all short-term commercial and political export risks are now temporarily considered "nonmarketable" risks. To ensure regulatory convergence and consistent treatment of credit insurance across jurisdictions, the EU regulator (the European Insurance and Occupational Pensions Authority) recommends that state interventions take the shape of risk sharing reflected as reinsurance for the calculation of solvency capital requirements under the Solvency II prudential framework (EIOPA 2020).

Many OECD countries have implemented large state schemes. Germany has committed up to €35 billion (roughly equivalent to 1 percent of GDP), and France has committed up to €12 billion (roughly equivalent to 0.5 percent of GDP) to reinsure the main private sector credit insurers operating in their respective national markets (OECD 2020a, 2020b, 2020c). Similar schemes have been implemented in other countries both within the European Economic Area (including Belgium, Denmark, Italy, the Netherlands, Norway, and Spain) and outside (including Canada, Israel, Slovenia, Turkey, and the United Kingdom). In Norway, for example, the national credit insurance agency GIEK reinsures the four largest credit insurers (accounting for nearly 99 percent of the national market) under a three-tranche risk-sharing structure: credit insurers carry only 10 percent of the gross risks they underwrite until claims reach a limit of NKr 1.8 billion (US$215 million). Credit insurers are then 100 percent reinsured up to an aggregate claims limit of NKr 20 billion (US$2.4 billion), and bear 100 percent of the risks over that limit. The level backstop budget support committed by the Norwegian state is equivalent to approximately 0.5 percent of GDP, similar to France in relative terms.

These state reinsurance schemes leave management, risk management, and underwriting decisions in the hand of private sector credit insurers, but require a commitment from them not to shrink the overall level of credit lines. In East Asia (notably in China, Japan, and Korea), state budget support is channeled through a dedicated national fund backstopping the national export credit insurance agency. Typically, these national credit insurance funds cannot be accessed by private sector insurers. In Singapore, the government supports the credit insurance market by subsidizing the premium charged to SMEs rather than through a reinsurance scheme. All these schemes aim to support the provision of credit insurance in the respective national or regional markets. However, as will be discussed in the next section, scope exists for these schemes to be reoriented or expanded or similar concepts could be implemented to support credit insurance in a manner that benefits developing economies.

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The Policy Agenda for the Financing of Trade and Value Chains in Developing Countries

Firms and value chains in developing economies need better access to trade credit and finance. The severe challenges brought about by the COVID-19 crisis require concerted action to cushion the impact on developing countries and shorten the recovery period. Some "countercyclical" measures are temporary; others are more "structural": they may take more time to produce their effects and will need to address market gaps beyond the immediate crisis. This agenda has two essential legs: international and national.

On the international front, multilateral agencies and donor governments need to take action to ensure that poorer, fragile developing economies continue to be integrated into international trade finance. A key part of this agenda is to ensure that banks in these countries continue to have access to the credit lines (notably for the confirmation of import letters of credit), foreign exchange liquidity, and correspondent banking services they need to carry out trade finance activities. This agenda is already actively pursued by the IFC (with the support of the IDA private sector window), as well the commercial arms of other international development agencies (see box 4.1). Further adjustments or complementary actions may be required to address some of the remaining gaps. For example, the IFC can assist private sector banks but not state banks, even though state banks may be the single largest providers of trade finance to domestic firms. Further analytical work and advocacy, in cooperation with the ICC, would be helpful to avoid unintended adverse consequences of Basel III on the provision of low-risk trade finance in developing economies. A parallel agenda could also be developed for trade credit insurance. A corresponding agenda needs to be pursued at country level to facilitate provision of trade credit insurance, trade finance and interfirm trade credit.

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BOX 4.1 - Response to the COVID Crisis by Multilateral Development Banks

The world's large multilateral development banks already had substantial trade finance programs that—much like during the global financial crisis—were able to increase support considerably during the most recent crisis.

For example, the Trade Facilitation Programme (TFP) of the European Bank for Reconstruction and Development (EBRD) has existed since 1999 to promote foreign trade to, from, and within EBRD regions through a range of products, including guarantees and trade-related cash advances. From January 2020 to September 2020, TFP financing reached a record volume of €2 billion, with a particular focus on supporting trade in critical goods, including medical products and energy and food commodities through the program.

Among African institutions, both the African Development Bank (AfDB) and, in particular, the African Export-Import Bank (Afreximbank) have provided trade finance. In the case of the AfDB, it started with the Trade Finance Initiative in 2009, which became the Trade Finance Program in 2013. This program has supported 53 projects across 324 financial institutions with US$8 billion in underlying flows. As of December 2019, the Afreximbank has supported more than US$81 billion as part of its trade finance programs, which were launched in 1993. Both have significantly expanded their support in the past year. In the case of the AfDB, a US$10 billion COVID-19 Rapid Reaction Facility was set up; whereas the Afreximbank introduced the US$3 billion Trade Pandemic Impact Mitigation Facility, with the view toward alleviating the impact of COVID-19 on member countries.

Finally, the World Bank Group has likewise stepped up its support during the ongoing crisis. The International Finance Corporation (IFC) has invested over US$80 billion to date through its trade finance programs, with a significant increase during the past year. Overall trade and commodity finance programs have supported over 400 financial institutions and US$145 billion in global trade. In 2020, responding to the COVID-19 crisis, the IFC developed an US$8 billion, Fast-Track COVID-19 Facility, supported by the International Development Association's Private Sector Window. The IFC is also in the process of partnering with the Multilateral Investment Guarantee Agency to support state-owned banks.

Sources: AfDB 2020; Afreximbank 2021; Starnes and Nana 2020.

4.1. Policy implications for trade credit insurance

The development of trade credit insurance aims to facilitate and stabilize access to interfirm trade credit. It may involve (a) facilitating the creation of national credit insurance markets by establishing the required regulatory, institutional, and credit infrastructure building blocks where they do not already exist; (b) deepening existing markets (deepening can be measured by the ratio of premiums or insured flows to GDP or market penetration in exports); in small and nascent markets, pooled schemes could help state providers access international reinsurance; countercyclical provision of state reinsurance in markets that are sufficiently mature may help cushion the reduction in trade credit insurance lines in times of crisis; and (c) incentivizing the downscaling of access to trade credit insurance by relatively smaller firms (for example, through a premium subsidy scheme).

Whenever possible, provision of basic credit insurance should be left to private sector insurers. However, trade credit insurance creates positive externalities, and is a significant element of the credit infrastructure even though it has limitations, as discussed in the previous section. For this reason, states have a vested interest in facilitating its provision, whether through structural policies or, in times of global crisis, through countercyclical interventions.

The suitability of countercyclical or structural interventions in developing countries depends on their level of economic and institutional development, the quality of their credit infrastructure, and the degree of maturity of their respective credit insurance markets. The level of maturity of a credit insurance market can be assessed from two main perspectives: (a) the ability of local firms to access credit insurance as obligors in import transactions (that is, is the country risk acceptable, and how many local entities can be considered creditworthy by international credit insurers) and (b) local availability of credit insurance to support domestic or export sales (which can be measured by indicators such as the number of local policyholders, the aggregate premium collected by domestic credit insurers, or the estimated volume of insured sales relative to GDP). On the basis of these criteria, developing countries could be classified into four categories, depending on their market size, and the extent to which firms are acceptable as policyholders (sellers), are acceptable as obligors (buyers), or altogether are not served by credit insurers, whether as policyholders or as obligors.

Developing economies in the first (highest) category have a substantial credit insurance market in which countercyclical interventions could be possible and desirable. Such interventions could take the form of reinsurance schemes similar to those already implemented in OECD countries. Other than China and Turkey (which already have their own schemes), a dozen developing economies could fit in this category, including some upper-middle-income countries (such as Brazil, Colombia, Malaysia, Mexico, Peru, or South Africa) and a few lower-middle economies (such as India or Morocco), but probably not IDA countries. If required, the funds needed for such interventions could be financed by a loan from the International Bank for Reconstruction and Development (IBRD). Such schemes would support credit insurance facilitating the domestic or export sales of local firms.[9]

Countries in the second (next-to-best) category have credit insurance markets that are not yet fully mature. In these markets, insured firms (policyholders) are engaged in domestic or export trade, whether local subsidiaries of global firms already insured at group level or locally owned firms. These markets may not be ripe or large enough for the types of countercyclical interventions that have been used in EU or other OECD countries, but could warrant structural interventions. For these markets, priorities for the public policy agenda may include downscaling market access so that smaller firms are served by insurers; facilitating competition in the insurance market so that firms can choose their provider; using credit insurance to encourage sector (for example, capital goods), product, or geographic diversification of exports; or creating more synergies between credit insurance and trade financing.

This second category includes markets that are too small—or whose credit infrastructure is not sufficiently developed—to warrant direct investment by international credit insurers or attention from international reinsurers. In these markets, credit insurance is often provided by a national agency as is, for example, the case in Egypt or Jordan. These agencies often lack underwriting know-how, risk management systems, and access to reliable information on domestic or overseas buyers. Two outcomes need to be avoided: (a) some agencies may underwrite risks without sufficient know-how and systems, and accumulate unsustainable losses; (b) other agencies follow prudent approaches to risks but have no business or development impact. For markets that are too small to attract a sufficient level of interest and quality service from one of the major international reinsurers, one could explore the feasibility of a scheme to pool reinsurance across several smaller markets to achieve the necessary scale.

9 Regarding credit insurance for export trade, one might need to check the possible legal ramifications of the proceeds of an IBRD loan's being used to indemnify losses because of a credit default arising in another country.

In the third category of countries, the market might not be ripe yet for the domestic provision of credit insurance. This situation could be attributable to a weak credit infrastructure: poor credit information, unreliable enforcement of credit claims through the legal system, and so on., but it may be considered marginally creditworthy for import trade. At the most basic level, only a handful of enterprises (typically local subsidiaries of international groups, SOEs, or banks backed by a ministry of finance or central bank guarantee, or a major national mining or hydrocarbon exporter) can be underwritten by international credit insurers. For these importers, an international credit insurer overseas grants a credit limit and insures the overseas exporters against the risk that the importer might not pay for the goods or services it has purchased.

For the second and third categories of countries, the aggregate volume and number of obligors that international credit insurers can cover may shrink dramatically during a global crisis. For such countries, multilateral arrangements could be considered to help cushion reductions in credit insurance limits. These arrangements could take the form of risk-sharing schemes with reputable international credit insurers. In some of the more challenging of these markets, the country risk might be perceived as relatively high, and fronting by a multilateral agency might be a prerequisite without which private credit insurers will not consider taking a credit exposure.

The fourth and lowest category consists of fragile and conflict-affected countries, which are least ripe for credit insurance because of their high levels of perceived country risk and limited institutional capability. In some cases, under current circumstances schemes that could facilitate imports covered by letters of credit or central bank or ministry of finance guarantees may be more suitable or feasible than raising credit insurance for imports on open credit terms.

4.2. Policy implications for the financial sector

Developing countries can improve the availability of trade financing through general financial sector policies. This includes reducing crowding out, improving the credit infrastructure through the creation of credit information bureaus, and improving enforcement by the legal system. More specific measures could include the following:

1. **Monitoring.** Central banks require financiers to periodically report their aggregate commitments (whether funded or unfunded) outstanding per broad type of facility exposure and any defaults, new net facility approvals over the period, average usage of facilities, number of clients, risk provisions made, and so on. This reporting is usually broken down by sector and maturity. These data are usually tracked from a risk supervision perspective, but could also be used from a development perspective—both for the country as a whole and for different types of firms. Comparing aggregated data across a few countries would make it possible to initiate an international benchmarking.

2. **Digitalization.** Traditionally, trade finance relies heavily on manual, paper-based processes. Processes in the back offices of banks need to progressively become paperless to facilitate the validation of documents and reduce unnecessary delays. If this is not already the case, regulations may be revisited to eliminate the requirement for trade documents to be in hard-copy format. Countries may fast-track their adoption of the Model Law on Electronic Transferable Records of the United Nations Commission on International Trade.

3. **Specialized secured trade lending.** This agenda is already actively pursued by the IFC and could be more systematically supported by the IDA. Its aim is to foster the use of trade receivables as a borrowing base or collateral, to expand the availability of factoring services and finance (through regulations, establishment of registries of movable collateral, and so on), and to facilitate other specialized forms of secured trade lending, such inventory finance.

4. **State schemes.** To expand SME access to export finance, including pre-shipment export finance, state schemes can be established to complement general banking facilities to help SMEs in export value chains raise financing for their production cycle and the procurement of inputs required for exports. Such schemes can be implemented directly by a state agency—such as an export credit agency or an export-import bank ("retail" model also known as "direct" or "secondary")—or competitively through the financial system ("wholesale" model, also known as "indirect" or "secondary"). In some cases, rapid-response facilities could be implemented to provide liquidity or risk sharing to encourage banks to provide certain trade-related financing to local firms, for example, for the refinancing of overdues from state-owned enterprises.

4.3. Policy implications for interfirm credit

Trade credit, credit insurance, and trade finance require an enabling environment, including corporate governance, insolvency law, accounting systems, and credit bureaus, among others. However, even in the most conducive environments, trade credit and finance are susceptible to market failures, which call for specific state intervention to facilitate access to trade finance and credit for firms, in particular for SMEs. Policy measures can be pursued in various areas.

Policy makers need tools to monitor trade credit and payment delays. Monitoring tools are necessary to understand the scale of the issue, to spot problems promptly, to identify the weakest or most critical links in value chains and the associated trade credit chains, and to assess the impact of the policy measures taken by public authorities. Monitoring needs to be conducted at several levels. Within the public sector, the ministry of finance, in coordination with the respective line ministries, needs to monitor the payment terms of the state-owned enterprises and the other public entities they supervise. In some countries (such as Morocco), the parliament and external stakeholders are apprised of the financial situation of all state-owned enterprises, including the size of accounts payable and receivable, through a comprehensive annual report. In an economic crunch, the ministry of finance and line ministries may also require a more detailed monthly or quarterly report flagging any payment delays of the SOEs they supervise.

More comprehensively, payment delays can be monitored as part of the databases maintained by the central bank or an observatory of payment delays. Some countries already have a statistical apparatus in place and collect information that would allow them to monitor payment delays by firms, but do not use these data systematically. As a first step, these agencies can undertake a pilot project focusing on selected value chains. This approach, for example, is currently followed in Tunisia as part of the World Bank's technical assistance to the central bank. Government may also refer to reports periodically prepared by leading international credit insurers analyzing payment across different sectors, and benchmarking against the delays arising in other countries.

Payment discipline can be sought through several channels. They include regulations on trade credit and measures instructing public sector agencies to pay their suppliers and contractors on time. Regulations on trade credit—at times inspired by the practice followed in the EU—are already in place in some countries, and mandate the maximum allowable contractual credit terms and the extent of delay permissible in different sectors of the economy. These regulations are desirable although to comprehensively enforce their provisions through the legal system alone may prove challenging. Where possible, other means (for example, corporate responsibility) can be sought to encourage larger, more prominent enterprises to pay their SME suppliers on the due date.

In many developing countries, delays from customers are often the single largest source of SME mortality, and public sector agencies and enterprises are the main source of payment delays. Reasons for slow payments from the public sector include (a) the fact that state-owned agencies are often cash-strapped, a situation made even more acute by the COVID-19 crisis; (b) market power—SOEs are typically larger than most of their suppliers, and in many countries, it is at best difficult to sue them for payment; and (c) inefficient payment processes in the public sector. Concerted efforts of the ministry of finance and relevant line ministries are required to ensure that public sector payables are settled on time. Where payment delays have arisen, as a transitional measure it may be possible to implement a suitable mechanism to have them refinanced by the banking sector.

Policies can be pursued to develop the use of trade receivables as a borrowing base or collateral, thus expanding the availability of factoring services. This can be achieved, for example through regulations or the establishment of registries of movable collateral. Beyond receivable finance, other forms of specialized secured lending can be developed, such as inventory finance. Banking regulations may need to be amended to recognize the value of internal collateral (collateral related to the transaction financed, such as receivables and inventory) besides traditional lending secured by a mortgage on real estate assets.

Among SMEs, the digitalization of accounts receivable and payable enables several positive developments. They include (a) accelerating and facilitating KYC and AML procedures, which until now have hindered SME access to trade finance from financial institutions; (b) facilitating the production of quick digital accounts, which can help lenders assess and monitor credit risk in real time; and (c) applying credit scoring methodologies and other fintech solutions, allowing small entrepreneurs to access new financing products.

The potential for using e-commerce platforms to facilitate access to trade credit and finance can be further explored. Besides e-commerce giants such as Amazon and Alibaba, other large players having access to transactions and supply chain data of ministries of small and medium enterprises

(MSMEs) are entering the lending realm: logistics companies interested in financing their customers, thereby fueling their own business. This measure may help expand and diversify the financing of MSMEs and supply chains.

The credit infrastructure is another essential aspect. Credit infrastructure spans corporate governance, insolvency law, accounting systems, credit bureaus, and so on. These aspects are covered elsewhere and are beyond the scope of this report. Finally, trade credit can be facilitated and supported on the one hand by trade credit insurance, and on the other hand by banks and related financial institutions.

4.4. Access to trade credit and finance

A firm's degree of access to trade credit, trade credit insurance, and trade-related financing can be classified in broad-brush terms into four typical categories. These range from "no access" (level 0) to "advanced access" (level 3).

Level 0—no access. At the lowest level, firms have virtually no access to bank finance. Interfirm trade credit, if any, is largely based on personal trust along kinship, family, or patronage lines; other transactions are paid in cash on delivery. Trade credit insurance is unavailable. This situation typically prevails for small entrepreneurs in less advanced markets.

Level 1—basic access. Firms access some interfirm trade credit, although SMEs are squeezed by large firms and SOEs in this market. Sellers are exposed to substantial credit risk on buyers, which they cannot insure in the absence of a local trade credit insurance market. Bank credit is typically not in the form of trade finance, but rather as overdrafts or other general short-term facilities extensively secured by mortgages on real estate assets. Trade finance products are limited to basic services, such as payment remittances and documentary collection. This is a typical scenario for SMEs in intermediate markets, or for corporates in less advanced markets.

Level 2—intermediate access. Entrepreneurs can access some basic trade finance instruments, notably letters of credit for imports, albeit secured by external collateral (cash deposit or mortgage). Firms can access trade credit insurance as obligors (buyers) rather than policyholders (sellers) and insured flows mostly relate to imports.

Level 3—advanced access. Firms access a wide range of specialized trade finance products, both from banks (for example, nonrecourse discounting of receivables, warehouse receipt financing) and nonbanks (for example, domestic and export factoring). Receivables can be used as a borrowing base and create a potential for financial inclusion going beyond what would be possible with general trade finance. Banks can tailor their facilities on the basis of the trade cycle of their clients and offer transaction-specific financing instruments, in addition to standard, general banking facilities. The trade credit insurance market is well-developed, not only for imports but also for exports and domestic sales. This market allows SME sellers to insure the risk of payment default on their domestic transactions. Cross-border transactions are usually conducted on open credit terms. The export use of letters of credit is limited to the riskier or newer markets or counterparties.

In practice, of course, firms need not have the same level of access across trade credit, trade credit insurance, and trade-related finance. Also, the extent of access varies according to the size of the firms, and whether they operate in the formal or informal sector. Also, as trade finance markets are less stable than typical financial markets, level of access can change rapidly. A similar framework could be used to assess and compare the level of access to trade credit and finance across different countries. For example, in a given country, firms in the informal sector might not have access to trade credit insurance but might have access to general bank finance secured by residential collateral; most firms in the formal sector might have access to general trade finance products (import letters of credit) but not supply chain finance. A few large exporters might have access to bill discounting, factoring, or the global forfaiting market.

Countries could be compared on the basis of the diagnostics undertaken as part of technical assistance assessing the financing of trade and value chains. These diagnostics would identify available information sources; review the relevant regulations, credit infrastructure, and state schemes; and assess the market gaps for the country as a whole, and for different types of firms (informal SMEs, formal SMEs, small corporates, large corporates) and activities (import, export, public sector contracts, and so on). In turn, this analysis could be the basis for a benchmarking exercise assessing the extent of market development and access across our client countries, identifying the gaps faced by different types of entrepreneurs and the policies followed by national authorities to address these gaps, and making appropriate policy recommendations.

4.5. Policies and interventions to improve access to trade credit and finance

Countries or categories of firms at different levels of access may require different types of public policy and state intervention instruments. As indicated in earlier sections, countercyclical interventions might be possible and desirable in certain categories of countries, but might be unrealistic unless certain building blocks are in place (notably credit infrastructure). Structural policies and interventions would be required toward this end. Tables 4.1 and 4.2, respectively, summarize different types of domestic and international countercyclical and structural interventions that could be supported, including by the World Bank. Country-specific diagnostics will be needed to assess the suitability of different types of interventions, depending on the level of development and specific challenges faced by the beneficiary countries.

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TABLE 4.1 - Financing Trade and Value Chains: Domestic Interventions Benefiting IDA Countries

Trade credit	Trade credit insurance	Trade-related financing
Structural Improve credit infrastructure Monitor trade credit practices (payment delays) starting with selected pilot sectors and value chains Regulate payment delay standards Discipline the payment practices of large firms, especially SOEs Develop digital infrastructure in domestic and international trade **Countercyclical** Forbearance and flexibility in enforcing insolvency regulations State facilitation of bank schemes to refinance delayed SOE payables • Support SME access to credit insurance and supply chain finance (see next columns)	**Structural** Develop the provision of domestic trade credit insurance to • better credit infrastructure • revisit regulations affecting credit insurance • facilitate the reinsurance of state providers (technical assistance, incentives) **Countercyclical** Possible in IBRD countries with relatively developed credit insurance markets, less so in IDA countries; can be done through • risk sharing (reinsurance) with domestic providers to cushion the shrinkage of credit lines • forbearance and flexibility in policy management (for example, notification of claims) • subsidized credit insurance premium charged to SMEs	**Structural** Support digitalization to reduce paper and in-person processing Revisit enabling regulations (for example, movable collateral, RWA, supply chain finance) Conduct diagnostics to identify hurdles to trade finance and other bank financing of trade, whether specific or nonspecific (for example, availability of foreign exchange, crowding out by public sector borrowing) **Countercyclical** Central bank refinancing of specified domestic trade finance instruments • Flexible implementation of Basel III risk-weighting requirements

Source: World Bank.
Note: IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; RWA = risk-weighted asset; SMEs = small and medium enterprises; SOE = state-owned enterprise.

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TABLE 4.2 - Financing Trade and Value Chains: International Interventions Benefiting IDA Countries

Trade credit	Trade credit insurance	Trade-related financing
Structural Develop tools and surveys to monitor trade credit in global trade	**Structural** Extend technical assistance to national providers Support national providers in small and incipient markets operating below scale via reinsurance captives pooling capacity across markets **Countercyclical** Developed states have now massively reinsured and effectively nationalized the domestic provision of trade credit insurance. One could complement these schemes by credit limits or risk sharing for trade with IDA countries. Indicatively, this could take the form of an IDA first-loss facility for credit insurance, similar to the facility implemented by IFC for trade finance.	**Structural** Continue IFC initiative to support correspondent banking (for example, in relation with KYC management) for banks in IDA countries **Countercyclical** Ongoing IDA PSW support for IFC support of trade financing for the exports and imports of IDA countries (first-loss facility). This support could be supplemented by World Bank schemes for types of transactions not eligible for IFC support (for example, with state-owned banks).

Source: World Bank.
Note: IDA = International Development Association; IFC = International Finance Corporation; KYC = Know Your Customer; PSW = Private Sector Window.

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Appendix A: Overview of Financing Instruments Used in Trade

This appendix describes key instruments used in trade finance.[10] Most of them have been used for a very long time. Although the contractual features and risk profiles have not fundamentally changed, progress has been made on (a) the standardization of the legal documentation,[11] (b) the digitalization of the commercial paperwork, and (c) the automatization of payment flows.

Open Account

When the seller is sufficiently comfortable with a buyer and is not looking for third-party risk payment mitigation, the seller may decide to ship the goods on an open account basis, meaning that the seller takes both the goods' transport risk and the buyer's payment risk. The role of the financier is then limited to handling payments and crediting the sales proceeds to the seller's account, once received from the buyer's bank. Although no credit risk is taken (or funding made) by the financier, this type of transaction (as long as payments are made on time) builds up the financier's confidence in the seller's business and thus the financier's willingness to extend general credit facilities to the seller. The seller may, under certain conditions, monetize these open accounts using factoring facilities from specialist financiers (see "Factoring").

Documentary Collections and Remittances

If the seller is not fully confident in the buyer, the seller may ask the financier to send the buyer's bank the following documents, usually called a documentary remittance, for collection: a bill of lading (the document of title of the goods issued by the goods' carrier), a detailed invoice, and a draft (or bill of exchange), which is an irrevocable order drawn by the seller on the buyer direct-

10 This appendix is adapted from the background paper prepared by Patrick Blanchard, "Financing Trade and Value Chains: A Primer for Non-Specialists," August 2020.
11 This is particularly the case for letters of credit, under the Uniform Customs and Practice for Documentary Credits, 2007 revision, International Chamber of Commerce Publication No. 600.

ing the buyer to pay the face amount of the draft to the seller's bank. The buyer's bank is instructed by the seller's bank to remit the documents to the buyer only upon either (a) full and immediate payment of the draft amount (this is a "sight" remittance) or (b) the buyer's acceptance of the draft, which is a commitment to pay within a certain time after the acceptance date (this is a "usance" remittance).

Under such a trade arrangement, the seller's bank is the remitting bank, and the buyer's bank is the collecting (or presenting) bank. A usance remittance would typically allow the buyer (for example, a wholesaler) to resell the goods to its retailers and use the proceeds to honor the usance draft by its due date, without having to borrow money from its bank in the meantime. Timely processing and payment of such remittances—whether on the basis of a documents against payment or documents against acceptance—give confidence to both banks about the creditworthiness of their respective trading clients.

Documentary Letters of Credit

Buyers cannot be forced to accept and pay remittances, thus potentially exposing the seller to the risk of having to sell the shipped goods to another buyer at a loss, or to return the goods, which may be extremely costly for transborder transactions. A documentary letter of credit (LC) places the seller in a position of strength and is mostly used for international trade. However, depending on the buyer's bargaining power and on competitiveness issues, the seller may have no choice but to sell on a remittance basis to "close the deal." The LC is issued by the buyer's bank upon receiving an application from the buyer. Under the LC, the issuing bank irrevocably[12] commits to pay the LC amount to the seller's bank upon submission of precisely defined documents, including a "clean" bill of lading. The LC is separate from any underlying sale and purchase agreement between the buyer and the seller. Once the documents have been received, reviewed, and accepted, the issuing bank can then immediately debit the buyer's account in its books. This is the standard, "sight" LC. The LC is valid for a predetermined time (typically, a few months), long enough for the seller to prepare the documents and ship the goods. A documentary LC is, therefore, a quadripartite arrangement between a buyer (the applicant), its bank (the issuing bank), the seller (the beneficiary), and its own bank (the advising bank). The issuing bank's payment obligation under the LC may be voided if the documents submitted by the seller through the advising bank feature so-called discrepancies. The issuing bank cannot avail itself of the defectiveness of the goods to void its payment commitment under the LC.

In cases where the seller and its bank are not confident in the issuing bank's creditworthiness, the seller's bank may ask a third-party financial institution to "confirm" the payment obligation of the issuing bank under the LC. The confirming bank may be willing to backstop the issuing bank for the following reasons: familiarity with the issuing bank's risk profile and ongoing bank-to-bank relationship or (if the confirming bank is a bilateral or multilateral financial institution) general importing country support considerations (the confirming bank may separately secure a government counterguarantee if the issuing bank is state-owned). If the seller's documents conform with the LC's requirements and if the issuing bank is financially unable to pay the LC amount offshore in the designated currency, the confirming bank will have to step in and pay the beneficiary directly.

Commercially, the seller may have to accept delayed payments from the buyer after the submission of conforming documents. Just like for remittances, there are *usance LCs*, under which the issuing bank makes payments to the advising bank several months after the acceptance date of the documents. The beneficiary of the LC may also apply for a packing loan from the advising bank to fund all costs incurred in connection with the goods before shipment, using the LC as collateral.

In contrast to the usance LC, the *red (or green) clause LC* allows the buyer to make advance payments to the seller before shipment. This instrument is particularly suitable in situations where (a) the buyer has few options to source the goods at acceptable prices, and (b) the seller has limited financial resources and needs ad hoc funding to manufacture or deliver the goods.

In situations where the buyer and the seller are mutually interested in a prolonged relationship and not just a one-off transaction, a *revolving LC* can be issued to cover multiple shipments of the same types of goods over a longer period than that of a sight LC. Once the first shipment has taken place and the payment has occurred, the LC is automatically reinstated by the issuing bank to cover, consecutively, a second shipment, a third shipment, and so on.

A back-to-back LC is a trade finance instrument under which a trader's bank issues an LC in favor of a supplier on terms and conditions identical to those of a "master LC" already issued by its buyer's bank for a larger amount. The trader's bank may take comfort in the fact that (a) the documents that the sup-

12 A documentary LC may also be "revocable," that is, it may be amended with the prior formal approval of the seller (beneficiary).

plier will send under the back-to-back LC can be used under the master LC, thus reducing credit or operational risk; and (b) the transaction is intrinsically profitable for the trader.

Another type of LC is the *standby LC* (SBLC), whereby the submission of documents triggering the payment by the issuing bank is limited to the presentation of a certificate prepared by (preferably) an independent third party designated in the SBLC. This certificate may simply state that the issuer has failed to comply with the terms and conditions of the underlying sale and purchase contract. SBLCs are irrevocable and can be used as a substitute for performance guarantees.

Factoring

Factoring is a form of trade finance whereby the seller sells his open account receivables to a trade financier (the factor) at a discount. Factoring relieves the seller from the management of invoice receivables and generates working capital. In the case of nonrecourse factoring, the seller passes to the factor the risk of incurring bad debts. In turn, the factor may seek credit insurance to cover the credit risk in the invoices it purchases. The factor makes a profit if the buyer's payment exceeds the discounted value plus factoring and other associated costs.

Forfaiting

Forfaiting is similar in some ways to factoring, but (a) it applies to the export of capital goods; (b) transactions are larger, typically on stronger buyers; and (c) durations are longer, giving importers more time to pay for the capital goods. Financiers may also purchase sellers' receivables, with recourse, for their whole face value. This allows sellers to monetize these receivables as soon as the goods are delivered but, should buyers not pay amounts due in full and on time, the seller will have to refund the shortfall to the financier.

Export Credits

An export credit is a trade finance instrument supported by the exporter's national government. Typically, the exporter's commercial bank (or syndicate of banks) provides an export credit directly to the importer, which the national export credit agency or import-export bank guarantees (or insures) against the payment of a risk premium. Export credits allow exporters to offer long-term, deferred payment terms to importers, in line with the economic life of the goods. The guarantee (or insurance) covers political and commercial risks, that is, the risk that the importer may be unable or unwilling to repay the export credit for the following reasons: (a) financial difficulties faced by the importer and (b) adverse political or macroeconomic events in the importer's country, making it impossible to access and transfer foreign currency abroad to meet debt service obligations under the export credit. Residual risks, that is, those without cover, remain with the commercial banks and the exporters.

For each transaction, the amount of the export credit depends on the national content portion, and may include some local content. In member countries of the Organisation for Economic Co-operation and Development (OECD), terms and conditions of the export credit must be in line with the Arrangement on Officially Supported Export Credits (nicknamed the Consensus), a gentleman's agreement meant to ensure that exporters compete on quality and prices, rather than interest rates, risk premia, repayment schedule, tied aid, or the guaranteed or insured portion of the credit. The Consensus broadly defines what such terms and conditions should be, depending on the importing country's risk classification; it also includes seven sector-specific "understandings."

Most OECD countries and an increasing number of non-OECD countries have their own national export credit schemes. Export credits may also be directly provided and funded by specialist, government-owned, financial institutions, in lieu of commercial banks. Export credits are often provided in the form of trade credit insurance, described next.

Trade Credit Insurance

Various private and publicly owned insurance companies, in tandem with reinsurers, cover sellers (the policyholders) against the risk that buyers (the obligors) might not pay for goods or services they receive, whether because of political risk or the credit risk or bad faith ("commercial risk") of the buyer. Risk premia charged are freely set by the market, depending on the insurer's appreciation of the buyer's and the country's financial standing. Most of the trade credit insurance market relates to short-term day-to-day transactions (less

than 360 days) covered on a whole-turnover basis, although a specialized market also exists covering individual transactions, including medium- and long-term transactions. Credit insurance indemnifies sellers up to the insured percentage (usually between 85 percent and 95 percent) of the loss, with residual risks kept by the seller.

Trade Acceptances

A trade acceptance (TA) is a short-term (less than six months), negotiable instrument drawn by a seller or exporter and accepted by a buyer or importer, which may be sold by the seller to a bank or a financial investor at a discount, thus becoming a marketable money market instrument. The TA may be accepted by a bank, in which case it is called a banker's acceptance (BA). Backing documents required as proof of the underlying trade transaction include invoices and bills of lading, stamped "accepted" by the bank. Although they represent a big and liquid market, the BAs do not trade on exchanges, but through large banks and securities dealers.

Trade Working Capital Finance

This type of trade finance facility is used by small and medium-sized manufacturers to purchase materials, pay labor, and fund inventories of finished goods. The facility must be repaid by the date when the buyer or buyers pay for the finished goods. Financiers providing such facilities often require non-trade-related collateral (such as personal guarantees and property mortgages) on top of high-value receivables (materialized by a purchase order from an acceptable buyer or an LC). These facilities are provided either on a programmatic basis, covering multiple buyers, or on a transactional basis (for a single large sale). Variations of such short-term facilities include preshipment finance and warehouse finance, which is particularly suited for (soft) commodities. In the latter case, goods may have to be placed in bonded warehouses controlled by a third party acting as collateral manager, and may be registered in the financier's name. If so, the financing cost for the seller may be lower than that of a trade working capital facility.

Supply Chain Financing

Some financiers also provide bilateral financing programs to key suppliers of trading clients (provided these clients have a strong, durable relationship with their suppliers). This arrangement has the following benefits: (a) it allows clients to lower their own working capital requirements, (b) administrative costs are lower (since the same financier "banks" both sides of the transaction), and (c) the bank develops a better understanding of its clients' business and, in the process, diversifies its risks. The development of this type of trade finance has resulted in LCs playing a lesser role in international trade.


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