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TRADE AND COMPETITIVENESS GLOBAL PRACTICE

LOW-INCOME DEVELOPING COUNTRIES AND G-20 TRADE AND INVESTMENT POLICY

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Low-Income Developing Countries and G-20 Trade and Investment Policy¹

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Executive Summary

This paper provides background information for the study on the Group of 20 (G-20) and challenges for low-income developing countries (LIDCs) that was prepared by the World Bank for the G-20 Forum under the Turkish presidency. The G-20 LIDCs study aims to analyze the development challenges of LIDCs and how the coordination of G-20 economic policies can contribute to creating an enabling environment for their development.²

This background paper focuses on the role that trade and investment policies of G-20 countries play in this context. The discussion is organized in three parts that identify (a) the characteristics of LIDCs' integration in the world economy, (b) the evolution of G-20 policies that affect LIDCs' integration, and (c) the potential for changes in the G-20 trade and investment policy landscape to benefit LIDCs.

1. LIDCs' integration in the world economy

Integration in the world economy through international trade and investment is a key element of the development process in LIDCs, but the current picture is mixed. The share of LIDCs in world trade (goods and service markets) is small with few and concentrated exports, and so is participation in global value chains, but there are exceptions among lower-middle-income economies. A combination of high trade costs and domestic factors constrain the ability of LIDCs to integrate into the world economy.

Trade in goods

The value of trade of LIDCs has increased substantially in recent years, driven by stronger integration with G-20 countries, but it still represents a small fraction of world trade. The total value of LIDC exports and imports increased more than fivefold between 2001 and 2013. Although the sum of exports and imports as a proportion of gross domestic product (GDP) also increased over time, this measure of trade openness remains very low for most LIDCs—on average 0.22 percent.

G-20 countries are the main trading partners of LIDCs. About 70 percent of LIDC imports come from the G-20 and about 80 percent of LIDC exports are directed to the G-20. Data at the industry level show that LIDCs import mainly machinery and electrical equipment from G-20 countries. Almost half of the exports from LIDCs to G-20 comprise mineral products.

¹ This report was coordinated by Michele Ruta and included contributions by Yago Aranda Larrey, Marcus Bartley Johns, Roberto Echandi, Martin Molinuevo, Gaurav Nayyar, Alberto Osnago, Jose Daniel Reyes, Sebastian Saez (all of World Bank). The analysis has benefited from comments and inputs from Varapat Chensavasdijai and Christian Henn (the International Monetary Fund), Raed Safadi (the Organisation for Economic Co-operation and Development), and Diwakar Dixit, Hubert Escaith, Alexander Keck (coordinator), Peter Morrison, Nora Neufeld, Cédric Pene, Taufiqur Rahman, Roy Santana, and Robert Teh (all of the World Trade Organization).

² See Annex I for the list of low-income developing economies.

There are important differences in the ability of LIDCs to export, especially between low- and middle-income economies. Low-income economies experienced some success in diversifying exports across products starting in the mid-1990s, whereas the speed of product diversification was much faster in lower-middle-income economies, resulting in a higher gap between those two groups. At the same time, the LIDCs group as a whole has made substantial progress in export diversification across partners. With regard to “quality” of exports, ample scope still exists to upgrade the LIDCs’ existing export basket, to introduce new higher value-added products, or both, not only in manufacturing but also in agriculture.

Trade in services

Exports of services have increased for all LIDCs, but their market share as a group has remained stagnant. World services exports have multiplied fourfold since 1990. Some low- and middle-income developing economies have been taking advantage of that expansion. Examples include exports of professional services to Europe by Kenya, exports of medical services by the Philippines, or expansion of tourism in countries like Cambodia, Nepal, and Tanzania. However, only upper-middle-income economies have been successful in expanding their market share. The share of LIDCs exporting in the global services market, instead, has remained stagnant and negligible in the past 35 years.

Global value chains

Although there are important data limitations, integration into global value chains (GVCs) by LIDCs appears to be limited despite some noticeable exceptions. LIDCs constitute only 3 percent of world imports in parts and components. However, countries like the Philippines and Vietnam have much higher shares, indicative of their participation in “Factory Asia.” Similarly, a study on Sub-Saharan Africa conducted by the International Monetary Fund (IMF) finds that although countries are at the start of their integration process in GVCs, a large degree of heterogeneity exists with some LIDCs in the region that have seen their GVC integration rise substantially (for example, Ethiopia, Tanzania).

Trade costs and domestic constraints

High trade costs and the resulting lack of connectivity help explain why LIDCs are less integrated in the world economy. Trade costs between LIDCs and any G-20 country are systematically higher than trade costs between G-20 countries or other non-LIDCs and any G-20 country. Over time, some G-20 countries became cheaper destinations for imports and exports of LIDCs. In general, however, the level of trade costs changed little between 2001 and 2010. Those costs reflect policy restrictions (discussed below), but also the quality of transportation infrastructure and other domestic variables.

Domestic factors that inhibit the productive capacity of LIDCs contribute to the low connectivity of LIDCs to GVCs and world trade more generally. The availability of basic infrastructure, such as good-quality ports and telecommunication services, is central to ensuring that goods reach the border. Institutional barriers to trade, such as red tape, customs procedures, laws, and access to services are equally important. Besides customs procedures, regulatory and contract-enforcing institutions play a key role in the development of the export sectors in both goods and services. From an investment policy perspective too, domestic constraints play a crucial role in inhibiting foreign direct investment (FDI) flows and, therefore, connectivity to GVCs.

2. *G-20 trade and investment policies toward LIDCs*

Tariff barriers faced by LIDCs have declined over time, more so for those imposed by G-20 countries. However, tariff uncertainty, tariff peaks and escalation, nontariff measures (NTMs), and domestic regulation in services are impediments to LIDCs' exports. Many provisions that shape the integration of LIDCs in the world economy are contained in bilateral trade and investment agreements.

Tariffs

G-20 most-favored-nation (MFN) (that is, nondiscriminatory) tariffs faced by least developed countries (LDCs) have declined over time and are currently at 9.9 percent, on average.³ Average MFN tariffs faced by LDCs declined by 2.1 points between 2001–03 and 2011–13. And that decline has been driven mainly by the reduction of tariffs imposed by G-20 developing countries, although they start from a higher level.

Tariff uncertainty faced by LDCs is still high, particularly with regard to G-20 developing countries. G-20 developed countries apply MFN tariffs that are much lower than MFN tariffs applied by G-20 developing countries. The difference is even more pronounced for bound rates: G-20 developing countries have bound rates that are five times the bound rates of G-20 developed countries. That large “binding overhang”—the gap between bound and applied MFN rates—allows countries to potentially raise tariffs up to the bound level without being taken to dispute settlement and creates costly policy uncertainty.

Tariff peaks and tariff escalation policies also affect market access and export diversification in developing countries, although not necessarily in LDCs that may benefit from preferential schemes in those areas. Tariff peaks—when tariffs on certain products are considerably higher than usual—in developed G-20 countries are especially prominent in agriculture, where 35 percent of agriculture tariffs in 2015 were tariff peaks. The same holds for tariff escalation, which penalizes value addition through higher tariffs on products at more advanced stages of the production chain; in 2015, there was a 9 percent difference in the tariffs on raw and finished agricultural goods.

Nontariff measures

NTMs are an important restriction to LIDCs' exports, but G-20 countries, for which data are available, are very heterogeneous with regard to the incidence of NTMs in imports. On the one side of the spectrum are the European Union (EU), India, the Russian Federation, and Turkey, which apply trade-related regulations to more than 90 percent of imports. On the other side are China, Indonesia, and Mexico, which use those measures on less than 65 percent of imports. Higher shares are associated with higher required levels of compliance with the trade-related regulations and, therefore, are an indication of the difficulty for exporters of entering into highly regulated markets.

Although, in general, G-20 NTMs do not penalize LIDCs relative to other trading partners, sanitary and phytosanitary (SPS) regulations in G-20 countries affect mainly LIDC partners. Although G-20 economies differ in the incidence of NTMs on imports, incidence is roughly similar between LIDC and non-LIDC partners. Looking at specific nontariff measures, SPS regulations in G-20 countries affect mainly LIDC partners. That circumstance reflects the fact that many LIDCs specialize in agricultural products that are more susceptible to SPS regulation, whereas non-LIDC partners have a more diversified export basket.

³ The country groups used in certain parts of this discussion (for example, on tariff analysis and on multilateral trade issues) are those commonly used at the World Trade Organization; therefore, where appropriate, the group of least developed countries is used instead of LIDCs.

Services measures

Services exports by LDCs, in their trade with G-20 economies, are more heavily affected by general domestic regulatory policies than by formal trade restrictions. Except for China, India, Indonesia, Saudi Arabia, and South Africa, all other G-20 members score an overall restrictiveness index of less than 30 points over a total of 100. Yet that does not mean that services exports from LDCs are free from restrictions into G-20 markets. The movement of individual services suppliers (mode 4) stands out as the most restrictive mode of supply in all G-20 members, often several times more restrictive than the most open mode of service supply.

Preferential arrangements

LDCs have benefited from a series of preferential market access schemes. Preferential tariffs imposed by G-20 developed countries are much lower than those applied by G-20 developing countries. Preferential market access to developed countries has been promoted under the generalized system of (nonreciprocal) preferences or through bilateral or regional agreements. The average preferential tariff of G-20 developed countries is 2.6 percent, whereas that of G-20 developing countries is 8.1 percent. However, some large developing countries, such as China and India, are also moving (or have already moved) toward granting extensive unilateral preferences to LDCs. Almost all (98 percent) agricultural exports from LDCs are exempt from duties by developed countries, whereas only 74 percent are exempt in the case of developing countries.

Both preference erosion and preference utilization rates are a concern. Over time, there has been some erosion of the preference margin of duty-free treatment received by LDCs exports in advanced economies relative to products exported by the other developing countries that may also benefit from various preferences or from further reduction of MFN duties. Moreover, indicators based on best applicable tariffs are established on the hypothesis that available preferences are fully used by the exporters. Complex rules of origin (RoOs), however, can make it difficult for LDC exporters to benefit from preferential access schemes, resulting in utilization rates of 70 percent with regard to some G-20 advanced economies.

Preferential trade agreements (PTAs) and bilateral investment treaties (BITs) between the G-20 and LDCs are not as “deep” as the agreements between the G-20 and other non-LDCs. PTAs are used to provide preferential market access, but they also increasingly rule over a wide series of other policy areas. On the one hand, a significantly smaller share of G-20–LDC agreements includes “deep” provisions in areas such as competition policy or investment. On the other hand, provisions on standards and regional cooperation are included in relatively more G-20–LDC agreements. Similarly, BITs between LDCs and G-20 countries are common, but they are generally limited in scope (“old generation” BITs), protecting investments that are already established. The relatively low presence of “deep” provisions in G-20–LDC trade and investment agreements may limit the ability of LDCs to improve their domestic frameworks, which, in turn, is likely to be important for attracting investment and connecting to GVCs.

3. Design G-20 trade and investment policies to benefit LDCs

Cooperation among G-20 countries in the areas of trade and investment policy can play an important role in the development of LDCs’ development going forward. Progress can be made on both the multilateral and preferential fronts, by implementing the Trade Facilitation Agreement, by building on the successful 2013 Bali Ministerial Conference in delivering a substantive Doha Round outcome, by making sure that new PTAs are “open,” and by taking action to facilitate foreign investment in low-income developing countries.

Multilateral trade issues

A strong and evolving multilateral trading system with the World Trade Organization (WTO) at its center is essential to facilitate the integration of LDCs into the global economy. Key actions by G-20 countries are outlined below.

- **Ratify and fully implement the WTO's Trade Facilitation Agreement (TFA)** agreed in 2013 in Bali, an important step forward in the effort to reduce trade costs, particularly for developing countries. By simplifying customs procedures and reducing delays, implementation of the TFA can increase the opportunity for developing countries to integrate into GVCs and to both increase and diversify their exports, particularly to the benefit of small and medium enterprises that suffer more from administrative burdens. Greater efficiency in trade procedures should speed up the flow of goods through customs and hence increase the amount of duties collected at the border. It is also an important signal of improvements in the overall investment climate, so the TFA should also help developing countries attract more FDI.

- **Deliver a substantive Doha Round outcome, building on the progress at the 2013 Bali Ministerial Conference.** Achieving outcomes in the three core areas of agriculture, nonagricultural market access, and services will be key. Specific outcomes that would benefit developing countries include the following:
 - **The parallel elimination of all forms of export subsidies and disciplines on all export measures with equivalent effect**, which would be a particularly positive outcome for developing countries.
 - **Further discipline and reduction in the use of production- and trade-distorting domestic support in agriculture.** This outcome should help developing countries benefit from the competitive advantage that many of them have in agriculture.
 - **A specific outcome on cotton, under the three pillars of export competition, domestic support, and market access.** This outcome would be particularly welcomed for cotton-producing LDCs.
 - **Reduction or, as appropriate, elimination of tariffs, including tariff peaks, high tariffs, and tariff escalation, as well as nontariff barriers, particularly on products of export interest to developing countries.**
 - **A commitment to reduce trade policy uncertainty.** Lowering tariff uncertainty (that is, reducing currently bound tariffs and increasing binding coverage, even above the applied rate) would contribute to reducing trade costs.
 - **An agreement on and conclusion for an ambitious services element.** Widening and deepening services commitments, perhaps to levels achieved in PTAs or as actually applied, would help open services markets for developing-country suppliers, including addressing the lack of transparency and predictability in measures affecting mode 4 and building domestic support for eventual mode 4 liberalization.

- **Consolidate progress in *specific LDC issues* within the multilateral trading system, including in three areas:**
 - **Duty-free and quota-free (DFQF) market access.** Developed-country members not providing DFQF market access for at least 97 percent of products originating from LDCs, defined at the tariff line level, are required to work toward improving their existing DFQF coverage before the next (that is, 10th) WTO Ministerial Conference. G-20 developing countries that are in a position to do so should also be encouraged to do the same.
 - **LDC services waiver** to grant preferential market access to LDC services and service suppliers. So far, of the G-20 members, Australia, Canada, China, India Japan, Mexico, the Republic of Korea, Turkey, and the United States have notified sectors and modes in which they will provide

preferential treatment, and the European Union has signaled its intention to do so soon. Other members of the G-20 could contemplate meaningful preferences for LDCs in their individual capacities.

- **Preferential rules of origin.** The Bali decision on preferential rules of origin for LDCs contains a set of multilateral guidelines that WTO members could consider in developing their RoO framework, including how preferential RoOs can be simplified to make it easier for LDCs to comply. A number of G-20 members (for example, Canada in 2003, the European Union in 2011) have already implemented reforms in their generalized system of preferences' RoO criteria with positive results for LDCs. Other G-20 countries are encouraged to do the same.

Preferential trade issues

PTAs negotiated by G-20 countries (“G-20 PTAs”), such as the Trans-Pacific Partnership or the Transatlantic Trade and Investment Partnership, have potentially positive effects on low-income developing countries. First, deeper economic integration among G-20 countries can stimulate global growth. Second, G-20 PTAs are likely to generate positive spillovers where they result in liberalization that is broadly nondiscriminatory. “Deep” PTAs, including many either already agreed or under negotiation, tend to contain numerous features that are effectively nondiscriminatory. Third, economic integration through G-20 PTAs can also serve as a laboratory for reform that can be applied more widely, including by low-income developing countries.

However, it is also important to recognize the potential risks of new PTAs and to identify strategies to address them: first, trade and investment diversion and preference erosion; second, exclusion of low-income developing countries and fragmentation of the trading system. Deep PTAs are influenced by existing trade and investment patterns, but they also affect the direction of such flows. PTAs can crystallize existing relationships, making it more difficult to include outsiders and possibly creating inefficient path dependence in trade and investment flows. And third, progress on PTAs may not be matched by efforts to move forward multilateral negotiations.

Accordingly, G-20 members could maximize the benefits of new PTAs, while minimizing their risks, with the following set of actions:

- **To avoid the risk of trade and investment diversion for low-income developing countries, G-20 countries could, for example, adjust preference schemes to offset negative spillovers,** including through expanding preferences to a wider range of products, providing deeper tariff preferences, or both, and providing certainty of preferential access over a long time horizon. G-20 countries could commit to review which locational investment incentives generate investment diversion away from low-income developing countries and to explore avenues for their reform.
- **To avoid exclusion and fragmentation of the trading system, new G-20 PTAs should be “open,”** with membership ultimately available to all countries willing to meet the standards. This action also requires that rules be transparent and minimize discrimination between members and nonmembers, such as through “open” mutual recognition requiring low-income developing countries to comply with only one standard set through a PTA, rather than each party’s standard.
- **To further improve efficiency and transparency of new PTAs, G-20 members should task international organizations with collecting and analyzing information on the implementation and effects of preferential disciplines,** identifying policies that generate negative spillovers.
- **G-20 countries should commit themselves to making progress on the multilateral trade issues above as the best guarantee that benefits from new PTAs are eventually shared by all.**
- **G-20 countries should target Aid for Trade at actions to address pressures from PTAs,** including the following:

- Building competitiveness to offset erosion of competitiveness and helping ease adjustment pressures caused by preference erosion;
- Helping developing countries take advantage of opportunities opened up by nondiscriminatory liberalization through G-20 PTAs;
- Lowering trade costs, which have fallen more slowly for developing countries, to increase competitiveness, regardless of developments under way in G-20 PTAs;
- Helping achieve compliance with standards established through G-20 PTAs (as well as existing standards), thereby strengthening capacity to participate in global value chains; and
- Continuing to provide targeted and focused Aid for Trade to the LDCs, including through the Enhanced Integrated Framework, to help build their supply-side capacity and strengthen their trade related infrastructure.

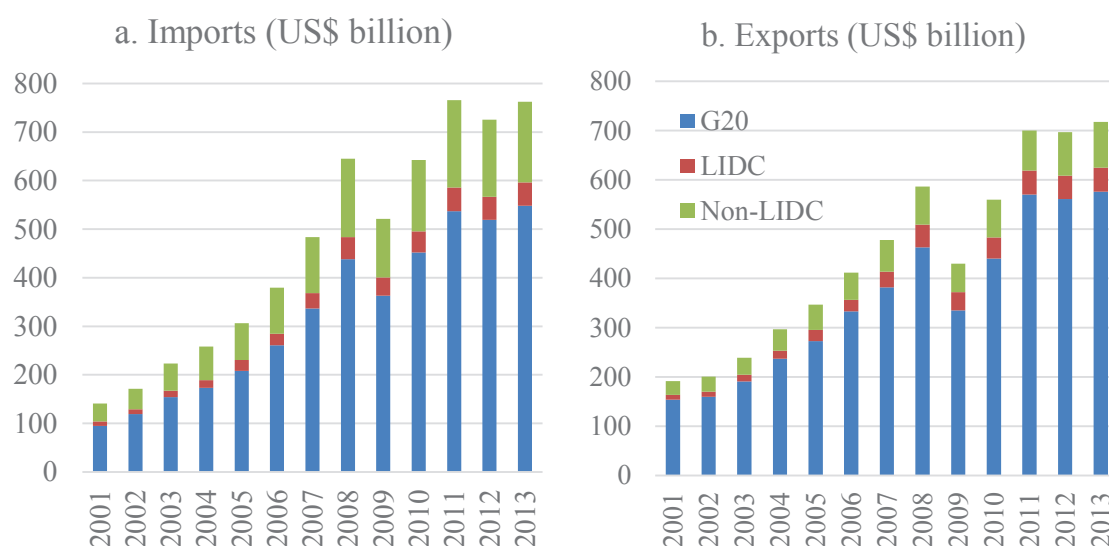
1. LIDCs trade and investment integration in the world economy

Integration in the world economy through international trade and investment is a key element of the development process in LIDCs. The current picture is mixed, with some LIDCs having integrated more than others.

1.1. Trade in goods

The value of total LIDC imports and exports has increased substantially in recent years, but it still represents a small fraction of world trade. Despite the global trade collapse of 2009 and the following slowdown, the international exchange of goods is at its historical maximum. The total value of imports of LIDCs increased more than fivefold between 2001 and 2013, from US\$141 billion to US\$762 billion. The total value of exports increased almost fourfold, from US\$192 billion in 2001 to US\$718 billion in 2013 (see figure 1.1). However, when compared with the global value of imports and exports, the value traded by LIDCs is still very small, between 3 percent and 4 percent of world trade.⁴

Figure 1.1: Imports and Exports of Low-Income Developing Countries by Partner Group, 2001–13



Source: World Bank computation based on data from the United Nation's COMTRADE database.

Note: G-20 = Group of 20; LIDC = low-income developing country.

G-20 countries are the main trading partners of LIDCs. About 70 percent of LIDC imports come from the G-20, and about 80 percent of LIDC exports are directed to the G-20. The share of trade between LIDCs remained quite constant and low (about 6.5 percent on average) between 2001 and 2013. In general, the composition of LIDCs' trade partners does not seem to have changed over the period under consideration (see figure 1.1).

The aggregate level of trade, relative to GDP, is lower in LIDCs compared with G-20 countries. Trade openness, defined as the sum of imports and exports as a proportion of GDP, takes into account the size of a country.⁵ In 2013, aggregate trade openness in LIDCs was 0.22 percent, whereas that in the G-20 was 0.36 percent. Over the past decade or so, trade openness of both LIDCs and the G-20 increased with the

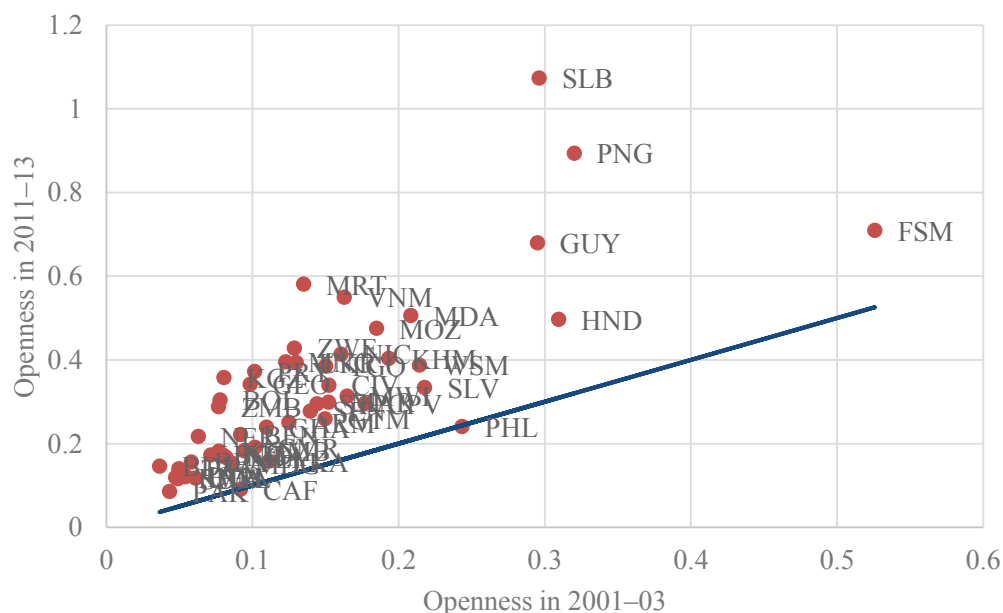
⁴ As reported also in WTO (2014), the share of LDCs in global trade was negligible throughout the period 1995–2012.

⁵ The openness index bears some limitations, including the fact that small countries appear to be systematically more open.

exception of 2009. Moreover, until 2008, G-20 countries were growing relatively more open to global trade than LIDCs. But that pattern of divergence seems to have ended with the trade collapse. After 2009, the difference in openness between G-20s and LIDCs appears to be stable.

Aggregate figures hide the heterogeneous experience of individual countries. Although the trade-to-GDP ratio increased for most LIDCs between 2001–03 and 2011–13, it remains very low (most LIDCs are concentrated in the lower left corner of figure 1.2). Only three countries (the Federated States of Micronesia, Papua New Guinea, and Honduras) recorded a trade-to-GDP ratio of at least 30 percent in 2001–03; only four countries (the Solomon Islands, Papua New Guinea, the Federated States of Micronesia, and Guyana) recorded a trade-to-GDP ratio of at least 60 percent in 2011–13.

Figure 1.2: Trade Openness in 2001–03 and 2011–13



Source: World Bank computation based on data from the United Nation’s COMTRADE database and the World Bank’s World Development Indicators database.

Note: Openness has been calculated as the average openness in the periods 2001–03 and 2011–13.

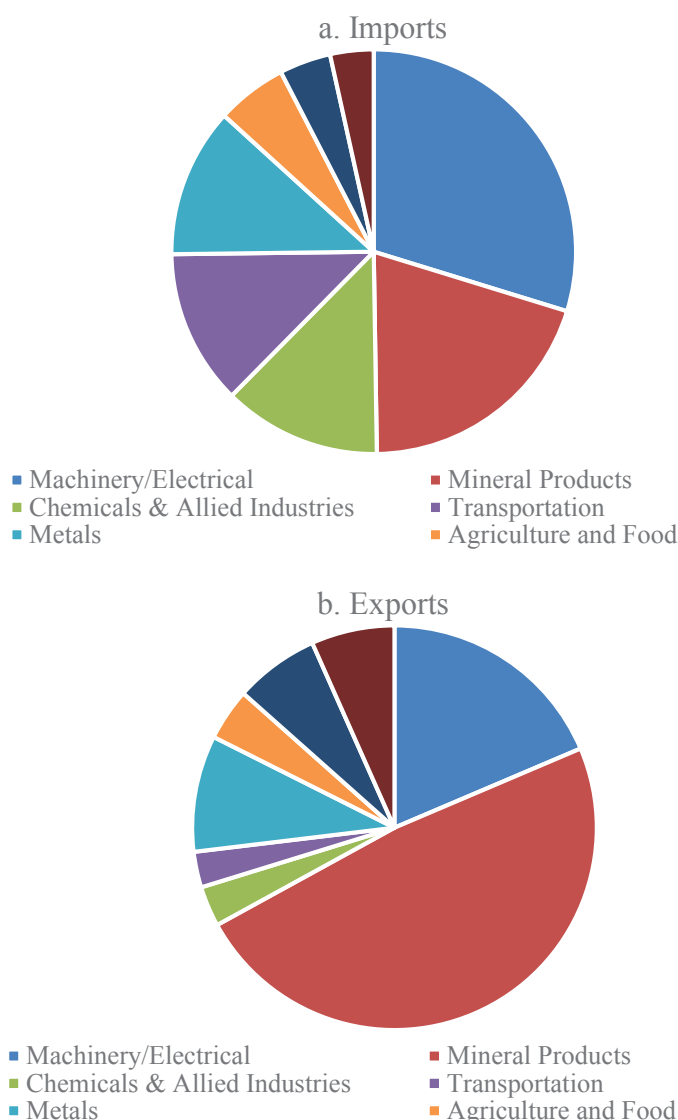
The upward sloping 45° line represents the points for which openness in the later period is equal to openness in the earlier period. Points above the line indicate countries that increased their openness to trade.

Composition of trade

LIDCs import mainly machinery and electrical equipment from G-20 countries (see panel a of figure 1.3). Transportation and chemicals and allied industries also represent a consistent share of LIDC imports. The relatively high share of mineral products, such as oil, in LIDC imports from the G-20 is due to imports of resource-poor countries from Russia, Saudi Arabia, and the United States. The major LIDC importers of mineral products are Ukraine, Morocco, the Philippines, Egypt, and Nigeria.

Almost half of total exports from LIDCs to G-20 countries comprise mineral products, but for many LIDCs, agriculture is a key export sector (see panel b of figure 1.3). Exports of machinery and electrical equipment and metals represent more than a quarter of total exports to the G-20. In contrast, exports of transportation equipment and chemicals and allied industries are low. For 40 percent of LIDCs, agriculture represents more than 30 percent of their exports.

Figure 1.3: Industrial Composition of Low-Income Developing Countries' Imports from and Exports to Group of 20 Countries, 2011–13



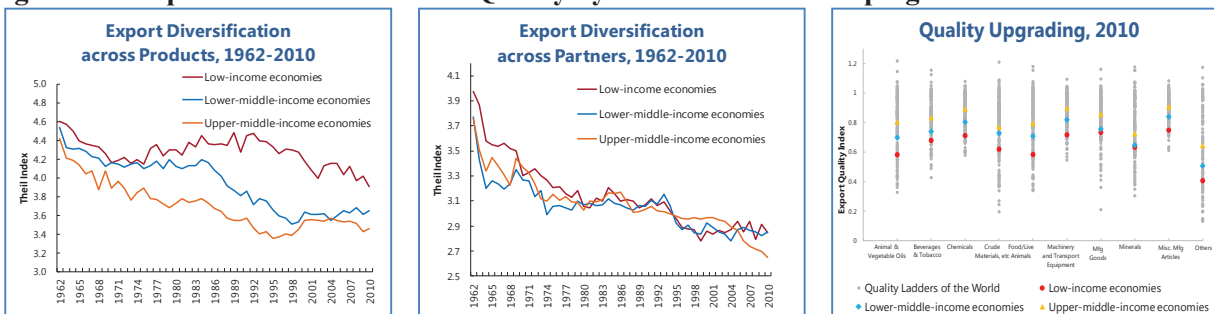
Source: World Bank computation based on data from the United Nation’s COMTRADE database.

The composition of LIDC imports and exports has not changed much over time. LIDCs imported a lower share of machinery and a higher share of mineral products and metals from G-20 countries in 2011–13 relative to 2001–03. LIDCs exported more mineral products and fewer machinery and agricultural products to G-20 countries in 2011–13 relative to 2001–03.

Although LIDCs have made some progress in diversifying their exports, both over products and trading partners, they remain at the bottom of product quality ladders. LIDCs, as a group, have made substantial progress in export diversification across trading partners. Low-income economies have experienced some success in diversifying their export baskets, starting in the mid-1990s. The speed of product diversification, however, was much faster in lower-middle-income economies, resulting in a growing gap between those two groups. Low-income economies occupy the relatively low rungs of product

quality ladders,⁶ reflecting the extent of heterogeneity in quality across different varieties of a given product. That situation implies that ample scope still exists to upgrade the quality of low-income countries' existing export basket, to introduce new higher value-added products, or both, not only in manufacturing but also in agriculture—often the least productive sector in low-income countries (see figure 1.4).⁷

Figure 1.4: Export Diversification and Quality by Low-Income Developing Countries



Source: International Monetary Fund (IMF) calculations based on the IMF Diversification Toolkit.

Note: A lower Theil Index value indicates more diversification. Income groups are defined in accordance with World Bank classifications.

Trade costs

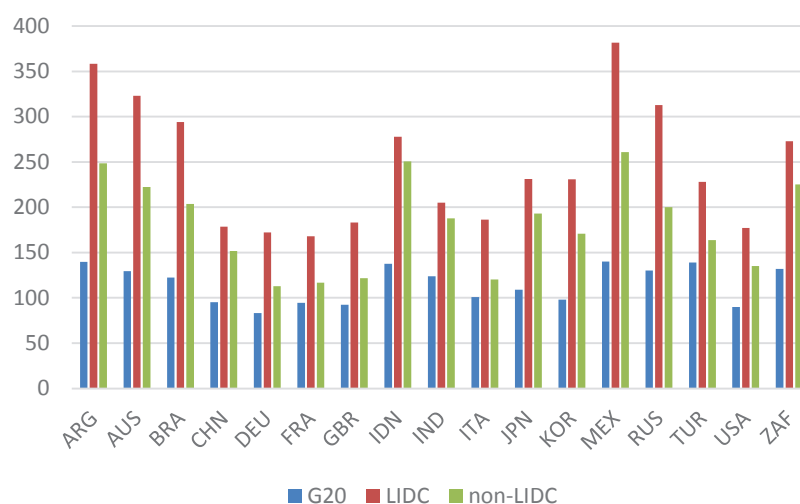
High costs of trading agricultural and manufactured goods internationally may explain why LIDCs are so little integrated in the world economy.⁸ Trade costs between LIDCs and any G-20 country are systematically higher than trade costs between G-20 countries or other non-LIDCs and any G-20 country. In figure 1.5, trade costs between LIDCs and each G-20 country are compared with trade costs faced by the G-20 and all other countries for trading with each G-20 member. LIDCs pay a premium when exporting to all G-20 countries with respect to the trade costs faced by G-20 countries and other non-LIDCs. A comparison of trade costs across G-20 countries shows that EU members, the United States, and China are the lowest trade cost partners of LIDCs. In contrast, Mexico, Argentina, Australia, South Africa, and Indonesia are the highest trade cost partners of LIDCs. The geographical pattern seems to be influenced by distance.

⁶ The average quality index of each economy corresponds to its income levels in 2010. These quality measures correct unit values for such factors as production cost differences. Developed by the IMF, it is the most extensive quality database available, covering 178 countries (including most LIDCs) and 851 products over the period 1962–2010.

⁷ This paragraph is based on work done by Chris Papageorgiou and Ke Wang of the IMF.

⁸ Based on the World Bank UNESCAP Trade Costs Database, which synthesizes a wide set of bilateral trade barriers, including policy restrictions, geographic distance, and the quality of transportation infrastructure. Arvis et al. (2013) provide a comprehensive description of the data. Here the data set is used to construct a measure of how costly it is for LIDCs to trade with each G-20 member relative to the cost of exchanging goods within borders. From a policy perspective, as explained by Arvis et al. (2013), it is important to bear in mind some caveats regarding this measure of trade costs. First, since trade costs are bilateral, it is impossible to say without further analysis to disentangle the contribution of actions taken by one country to changes in trade costs. Second, the trade costs measure is a measure of international relative to domestic trade costs. Therefore, a change in trade costs might be due to a change in either domestic or international conditions, or both simultaneously.

Figure 1.5: Average Bilateral Trade Costs by Country Group, 2010



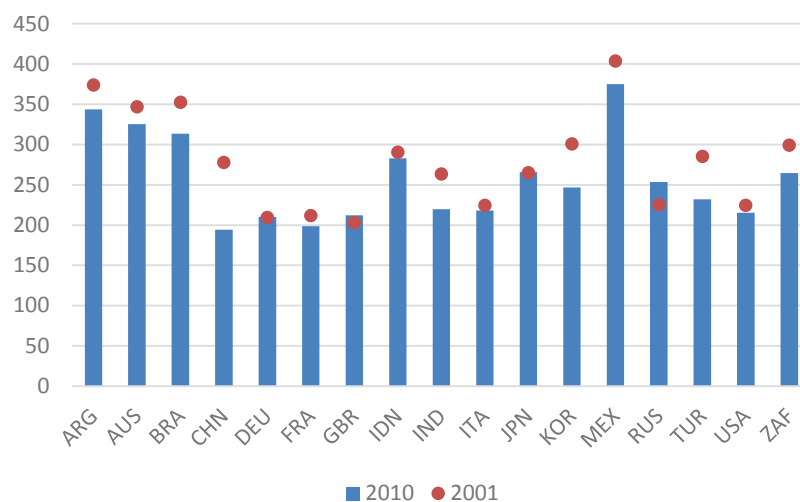
Source: World Bank computation based on data from the World Bank’s UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific) Trade Costs database.

Note: G-20 = Group of 20; LIDC = low-income developing country. For comparison purposes, trade costs are computed for the subsample of partner countries for which data are available for all G20 countries.

Some G-20 countries became cheaper destinations for imports and exports of LIDCs between 2001 and 2010, but the level of trade costs changed little during that period. Figure 1.6 compares trade costs between LIDCs and G-20 countries in 2001 and 2010. The decline in trade costs between China and LIDCs is the only remarkable change. LIDCs saw only a slight reduction of trade costs with most other G-20 countries. Only the United Kingdom and Russia seem to be more expensive partners for LIDCs in 2010 than 2001.⁹

⁹ Trade costs for G-20 countries decreased or remained constant across all countries, whereas trade costs for other non-LIDC countries exhibited a more heterogeneous pattern.

Figure 1.6: Bilateral Trade Costs between Low-Income Developing Countries and Group of 20 countries, 2001 and 2010



Source: World Bank computation using data from the World Bank’s UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific) Trade Costs database.

Note: For comparison purposes, trade costs are computed for the subsample of partner countries for which data are available both in 2001 and 2010.

In sum, the evidence presented here highlights the relative isolation of LIDCs from the world trading system and from the G-20. Box 1.1 analyzes the role of domestic constraints in hampering the participation of LIDCs in the global economy.

Box 1.1: LIDCs’ Domestic Constraints to Export

Domestic factors that inhibit the cost of doing business can impede the participation of low-income developing countries (LIDCs) in global value chains (GVCs) and world trade more generally. Ensuring that goods reach the border is one of the most pervasive binding constraints to LIDCs’ export growth. Freund and Rocha (2010), for instance, find that transit delays were the most important constraint to exports from African countries. The availability of basic infrastructure, such as good-quality ports and telecommunication services, is central in this regard (Nordås and Piermartini 2004). The effect of poor infrastructure on transport costs is magnified for landlocked countries (several of which are LIDCs), since their ability to trade also depends on the infrastructure in neighboring transit countries (Limão and Venables 2001).

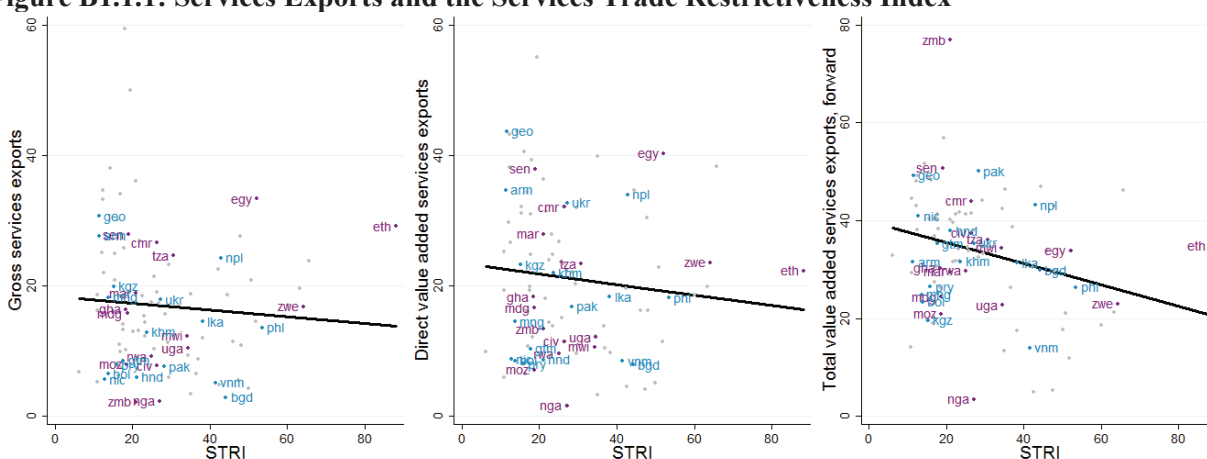
Infrastructure alone, however, does not determine high transport costs and transit delays. Institutional barriers to trade, such as red tape, customs procedures, laws, and access to services are equally important. According to the World Bank’s Doing Business data, more onerous border procedures means that it takes three times as many days, nearly twice as many documents, and six times as many signatures to import goods in poor countries as it does in rich ones; Africa, which is home to several LIDCs, has twice as many import procedures as member countries of the Organisation for Economic Co-operation and Development (OECD) (McLinden 2012).

Besides customs procedures, rules and regulations implemented by a combination of government agencies—health, agriculture, law enforcement, immigration, and so forth—also contribute to border delays. It is worth noting that the burden of border procedures and other clearance processes is particularly acute for landlocked countries, because regulation in transit countries matters as well (Arvis, Raballand,

and Marteau 2007). Furthermore, the lack of competition in the market for logistics services—such as trucking—can result in high markups (Portugal-Perez and Wilson 2009; Raballand, Macchi, and Petracco 2010). Teravaninthorn and Raballand (2009) show that competition-restricting market regulations in West and Central Africa have kept prices high, whereas competition and deregulation in East and Southern Africa have produced lower costs to users. To maximize their participation in global value chains, LIDCs may also have to invest in innovation systems and skill development and, in certain cases, deepen backward and forward linkages to commodity exports (Park, Nayyar, and Low 2013).

Domestic constraints matter for services trade as well. Amin and Mattoo (2006) find that countries with better institutions have larger and more dynamic services sectors. They suggest that regulatory and contract-enforcing institutions play a key role in the development of services sectors because of the complex web of transactions with the rest of the economy. Comparative advantage in services can also be linked to governance frameworks, laws and regulations, business environment, and labor skills (Sáez et al. 2015; Van der Marel 2012). Countries with more restrictive regulations toward foreign services providers are associated with lower total services exports on a value-added basis. This relationship is not as strong, however, for gross services export shares or direct value-added services export shares. That factor suggests that the regulatory environment matters more for other sectors seeking to use services as inputs for their exports than for direct services exports. Therefore, one can conclude that a restrictive regulatory framework is likely to reduce services exports (and thus export diversification) and limit the competitiveness of other sectors of the economy (see figure B1.1).

Figure B1.1.1: Services Exports and the Services Trade Restrictiveness Index



Source: World Bank Export Value Added database; Borchert, Gootiiz, and Mattoo 2012.

Note: STRI = Services Trade Restrictiveness Index. Countries are abbreviated according to the International Organization of Standards method.

Domestic constraints also play a crucial role in inhibiting FDI flows and, therefore, participation in GVCs. In addition to the lack of infrastructure and skills, the investment climate in LIDCs is often characterized by barriers to entry, lack of transparency, corruption, mandatory local content requirements, and lack of property rights protection. Furthermore, political risk—manifested in arbitrary changes of regulations, breach of contract, and expropriation—can reduce the competitiveness of LIDCs in attracting FDI. The inadequate investment climate and low institutional quality in LIDCs, relative to G-20 economies, are reflected in a number of global indexes, including Doing Business (189 economies), the Global Competitiveness Index (144 economies), and the Corruption Perception Index (175 economies). Table B1.1.1 provides the relevant rankings of G-20 countries and LIDCs and the annexes include additional information on these rankings.

Table B1.1.1: Country Rankings According to Doing Business, the Global Competitiveness Index, and the Corruption Perception Index

	Group of 20 countries			Low-income countries			
	Doing Business, 2015	Global Competitiveness Index, 2014–15	Corruption Perception Index, 2013		Doing Business, 2015	Global Competitiveness Index, 2014–15	Corruption Perception Index, 2013
Argentina	124	104	107	Afghanistan	183	—	172
Australia	10	22	11	Bangladesh	173	109	145
Brazil	120	57	69	Benin	151	—	80
Canada	16	15	10	Burkina Faso	167	135	85
China	90	28	100	Burundi	152	139	159
France	31	23	26	Cambodia	135	95	156
Germany	14	5	12	Central African Republic	187	—	150
India	142	71	85	Chad	185	143	154
Indonesia	114	34	107	Comoros	159	—	142
Italy	56	49	69	Congo, Dem. Rep.	184	—	154
Japan	29	6	15	Eritrea	189	—	166
Korea, Rep.	5	26	43	Ethiopia	132	118	110
Mexico	39	61	103	Gambia, The	138	125	126
Russian Federation	62	53	136	Guinea	169	144	145
Saudi Arabia	49	24	55	Guinea-Bissau	179	—	161
South Africa	43	56	67	Haiti	180	137	161
Turkey	55	45	64	Kenya	136	90	145
United Kingdom	8	9	14	Liberia	174	—	94
United States	7	3	17	Madagascar	163	130	133
				Malawi	164	132	110
				Mali	146	128	115
				Mozambique	127	133	119
				Myanmar	177	134	156
				Nepal	108	102	126
				Niger	168	—	103
				Rwanda	46	62	55
				Sierra Leone	140	138	119
				Tajikistan	166	91	152
				Tanzania	131	121	119
				Togo	149	—	126
				Uganda	150	122	142
				Zimbabwe	171	124	156

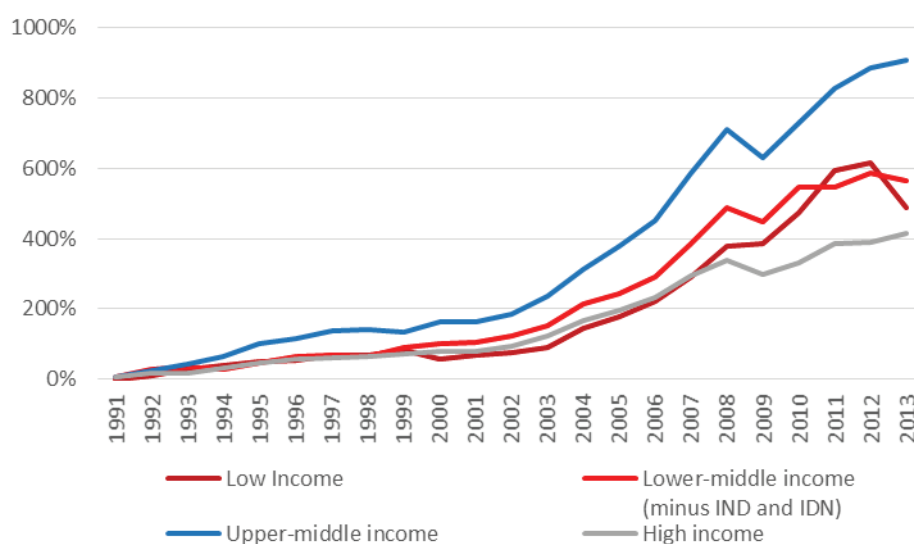
Sources: World Bank's Doing Business rankings for 2015; World Economic Forum's Global Competitiveness Index for 2014–15; Transparency International's Corruption Perception Index for 2015.

Note: — = not ranked.

1.2. Trade in services

Exports of services have increased for all country income groups and regions (figure 1.7). World services exports have increased fourfold since 1990. Upper-middle-income developing economies have benefited the most from this boom, expanding services exports ninefold between 1991 and 2013. In Latin America, Brazil, Costa Rica, and Uruguay export professional and information technology–related services; Mexico exports communication and distribution services; and Chile exports distribution and transportation services. Exports of professional services to Europe by Kenya, South Africa, and Tunisia are growing. The Philippines, Singapore, and Thailand are exporting medical services, and Malaysia is increasing its exports of education, Islamic banking, and telecommunication services. Low-income developing countries experienced around a fivefold increase of their exports between 1991 and 2013, largely because of the expansion of tourism in countries like Cambodia, Nepal, and Tanzania. High-income countries, the leaders of services exports in absolute terms, also expanded their exports four times during the same period.

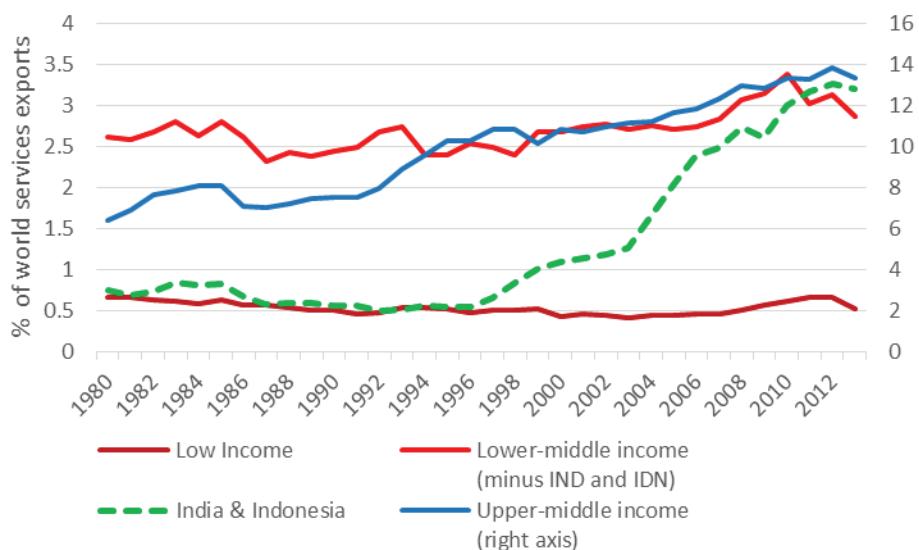
Figure 1.7: Services Exports Growth, 1991–2013



Source: UNCTADStat database.

Only upper-middle-income economies (together with India) have successfully expanded their share in the global services market (see figure 1.8). Upper-middle-income countries more than doubled their share of the global services market, from 6 percent in 1980 to over 13 percent in 2013, thereby reducing the participation of high-income countries. The share of LIDC exports in the global services market, however, has remained stagnant, and negligible, over the past 35 years. Exports from lower-middle-income economies (excluding India and Indonesia) have remained below 3 percent of the global market, whereas those of low-income countries were at 0.6 percent in 2013, the same as in 1980.

Figure 1.8: Share of World Services Exports, 1980–2012



Source: UNCTADStat database.

In addition to providing a channel for export diversification, services trade is a key input for the export of other goods and services. Assessing trade in relation to value added, rather than direct export values, provides greater insight into how services trade can enhance competitiveness and promote integration in the global economy. This deeper analysis of services trade shows that, when measured in value added, services exports from LIDCs are more significant than is reflected by the direct exports. In addition, it also becomes clear that trade in services is an essential input for other exports of LIDCs, especially for manufacturing and primary exports. Figure 1.9 provides three different measures of the importance of services exports by LIDCs.¹⁰ The first bar (blue) represents gross exports of services.¹¹ The second bar (red) represents the share of direct services exports when measured by value added.¹² The third bar (green) represents both the direct and indirect (or total) value added of services in all exports (for example, including forward linkages).¹³ The gap between the two indicates that services are supporting other export activities.

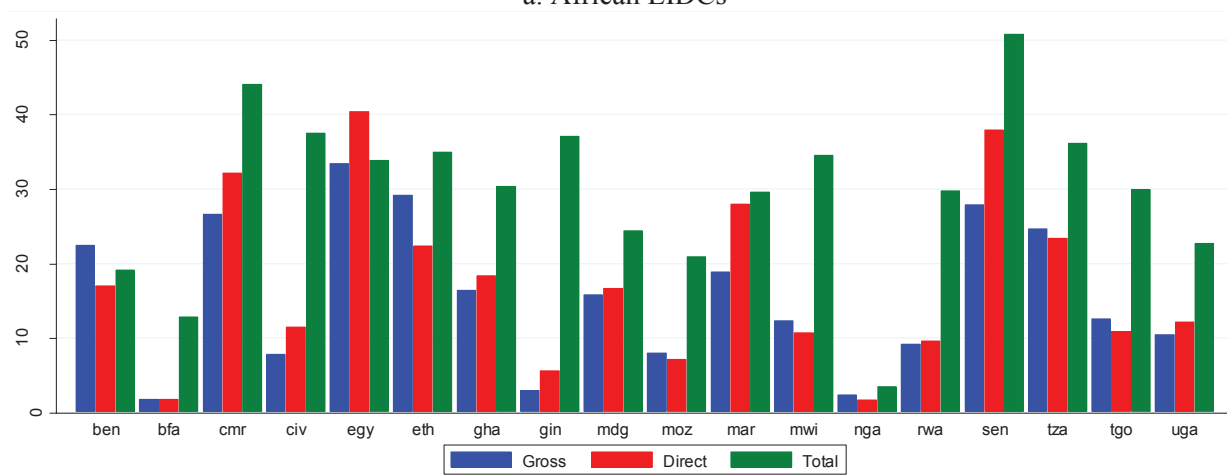
¹⁰ The data come from the World Bank’s export of value added database. It covers only 25 countries in Africa. We have included all African countries in the database.

¹¹ Gross exports are the transaction value of a sector’s exports. They capture both the value added embodied in the production of the export and all domestic and imported intermediate inputs.

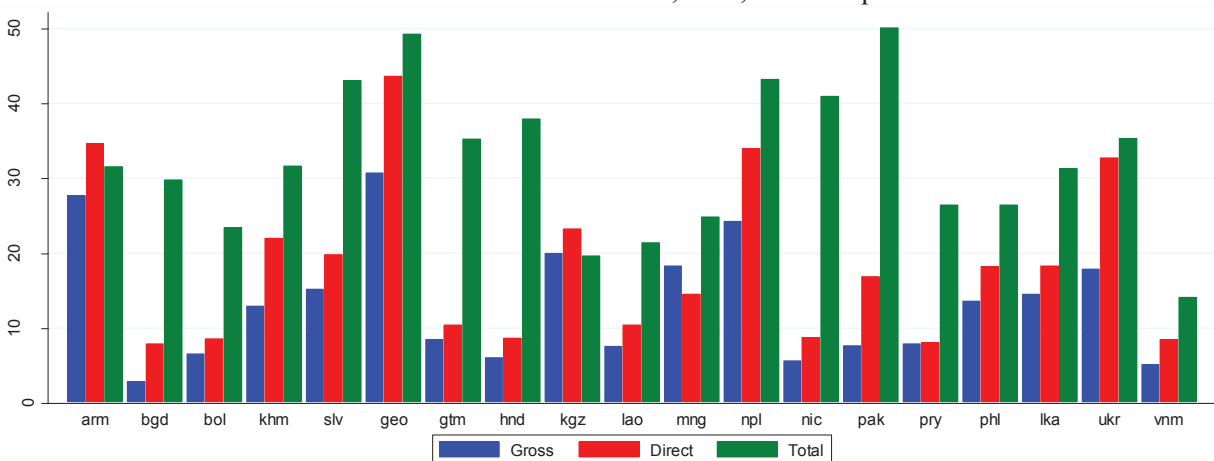
¹² Direct value-added exports measures gross exports less domestic and foreign inputs. This measure captures the true sector-specific value-added contribution of exports.

¹³ Total value added of exports adds the value added of inputs produced domestically to the direct value added of exports. It captures the indirect contribution through value chain linkages with other export activities, expressed as forward or backward linkages.

Figure 1.9: Low-Income Developing Countries' Share of Service Exports in Total Exports, 2011
a. African LIDCs



b. LIDCs from the Americas, Asia, and Europe



Source: World Bank's Export Value Added database.

Note: LIDC = low-income developing country.

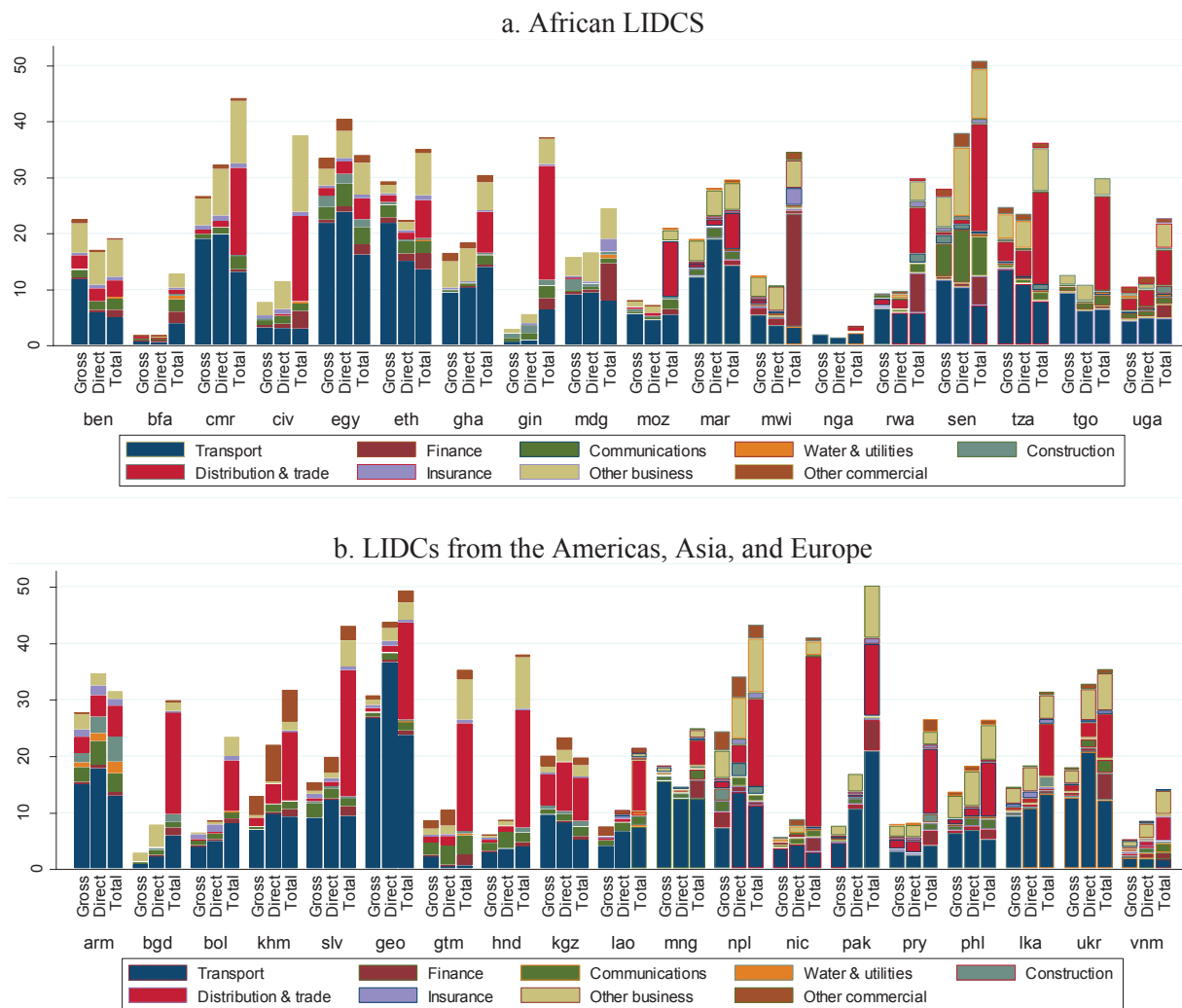
These values suggest that services can be valuable to LIDCs either as exports per se or as inputs to other exports. That seems to apply to LIDCs across regions. For example, in Burkina Faso, Côte d'Ivoire, Malawi, Bangladesh, all Central American countries, and Pakistan, the total services exports far exceed the values for the direct exports, suggesting that services in those countries are mostly exported as input to other products—mostly exported goods. In other LIDCs, such as Benin, Morocco, Georgia, and Ukraine, services are mostly exported as such.

Transport, distribution, trade, and “other business services”¹⁴ are the main services exports of Africa, which is home to a large number of LIDCs (see figure 1.10). Transport services represent a significant percentage of total services exports in nearly all LIDCs. However, their importance diminishes when measured for value added. That decline in the share of value added indicates weak linkages between transport and other service sector exports. In contrast, distribution and trade services (which include hotels and restaurants) and other business services (which include information and communication technology

¹⁴ Other business services include (a) real estate activities, (b) rentals of transport equipment, (c) rentals of other machinery and equipment, (d) rentals of personal and household goods not elsewhere classified, (e) computer and related activities, (f) research and development, and (g) other business activities.

and professional services) tend to have stronger linkages to other export sectors. In the case of Guinea, Senegal, Togo, Bangladesh, and El Salvador, for example, those shares are much larger when forward linkages are included. That fact confirms that those services play a critical role in supporting other export activities in those countries and the region as a whole. It is also interesting to note that exports of “other commercial services”—such as personal, cultural, and recreational services—are important exports for several of the LIDCs, such as Madagascar, Malawi, Senegal, Uganda, Nepal, and Honduras.

Figure 1.10: Structure of Low-Income Developing Countries’ Services Exports, 2011



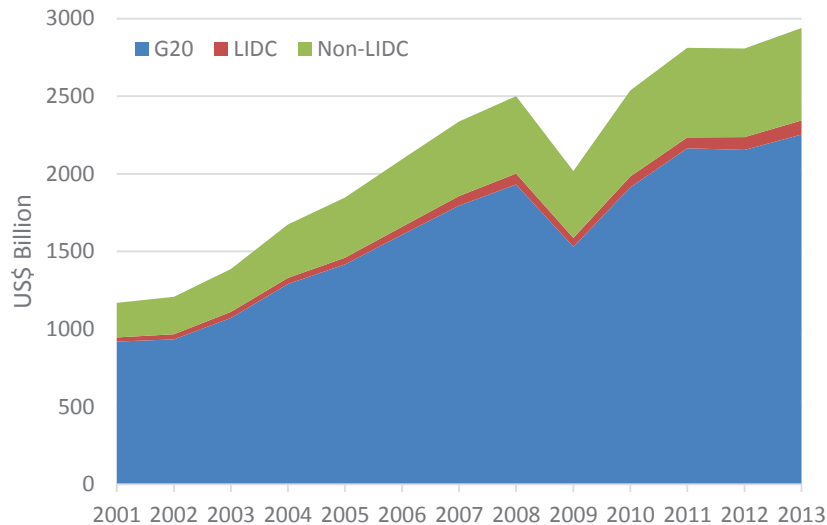
Source: World Bank’s Export Value Added database.

Note: LIDC = low-income developing country.

1.3. Integration in global value chains

Following the pattern of total trade, although the value of LIDC imports of parts and components has increased in the past 10 years, the role of LIDCs in that GVC-related trade appears to be limited (see figure 1.11). Only 3 percent of world imports of parts and components are done by LIDCs (see box 1.2 for a brief review of the Sub-Saharan Africa experience in this regard). G-20 countries dominate the value of world imports in parts and components, and that situation has not changed in the past decade or so.¹⁵

Figure 1.11: Value of Imports in Parts and Components by Country Group



Source: World Bank computation based on data from the United Nation's COMTRADE database.

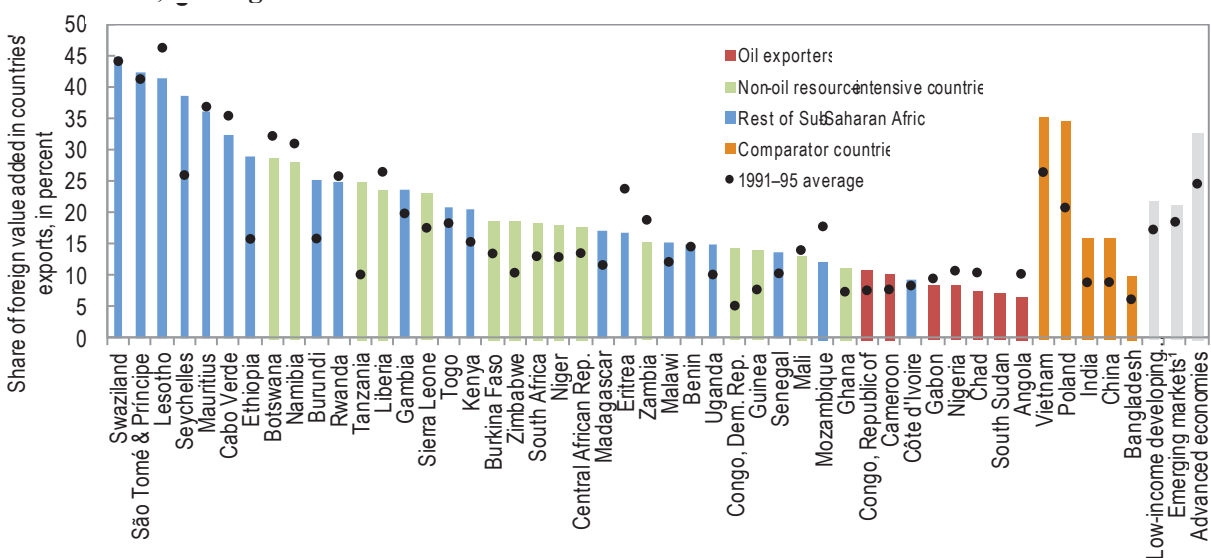
Note: G-20 = Group of 20; LIDC = low-income developing country. Parts and components are defined according to the Broad Economic Categories.

¹⁵ To analyze participation in GVCs, measures of trade in value added are ideally needed. However, trade in value-added data for LIDCs are scarce. Imports of parts and components, although imperfect, are an alternative measure of the participation of LIDCs in GVCs.

Box 1.2: Global Value Chains and the Missing Link in Sub-Saharan Africa's Trade Integration

One key aspect in the development of global trade in recent decades has been the development of global value chains (GVCs). Experience across the globe shows that deeper integration into GVCs has been associated with a pickup in income levels over time. Yet Sub-Saharan African countries still generally find themselves at the start of this integration process, although a substantial degree of heterogeneity exists across the region (figure B1.2.1). Oil exporters are the least integrated in GVCs, reflecting their heavy reliance on extractive activities. However, in the rest of the region, a majority of countries have made progress since the early 1990s, even if from low starting points.

Figure B1.2.1: Sub-Saharan Africa and Comparator Countries: Depth of Integration in Global Value Chains, Average 2008–12



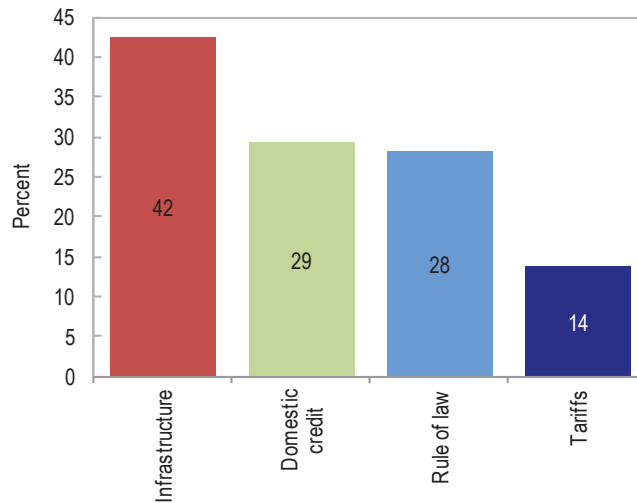
Sources: Eora database; International Monetary Fund calculations.

Note: Emerging markets data excludes Sub-Saharan African countries.

Even more encouraging, five countries stand out, having seen their integration rise by a magnitude similar to countries like Poland or Vietnam—examples of successful partnerships in larger global value chains. In those countries—Tanzania, Ethiopia, the Seychelles, South Africa, and Kenya—the sectors that benefited the most from deeper integration include manufacturing, agriculture and agrobusiness, and to a lesser extent, textiles, transport, and tourism. These results highlight the sectors where the region may build on its comparative advantages (a young and growing workforce, a large share of unused land, a favorable climate), provided the business environment is sufficiently conducive.

In that respect, infrastructure appears as the most important impediment to trade for the region: bringing the quality of infrastructure in the region to the level found elsewhere in the world could help enhance the region's trade flows by as much as 40 percent (figure B1.2.2). Likewise, policies to improve access to credit for the private sector, improve the rule of law, and lower tariffs would also allow for further trade growth. Finally, G-20 countries could support the expansion of Sub-Saharan African trade by opening their markets in more systematic ways to the region's goods, especially in the context of the renewal of the African Growth and Opportunity Act (with the United States) and conclusions of the Economic Partnership Agreements (with the European Union). Increased foreign direct investment from G-20 countries into Sub-Saharan African nonresource sectors could also strongly underpin future export growth.

Figure B1.2.2: Sub-Saharan Africa: Potential Increase in Trade



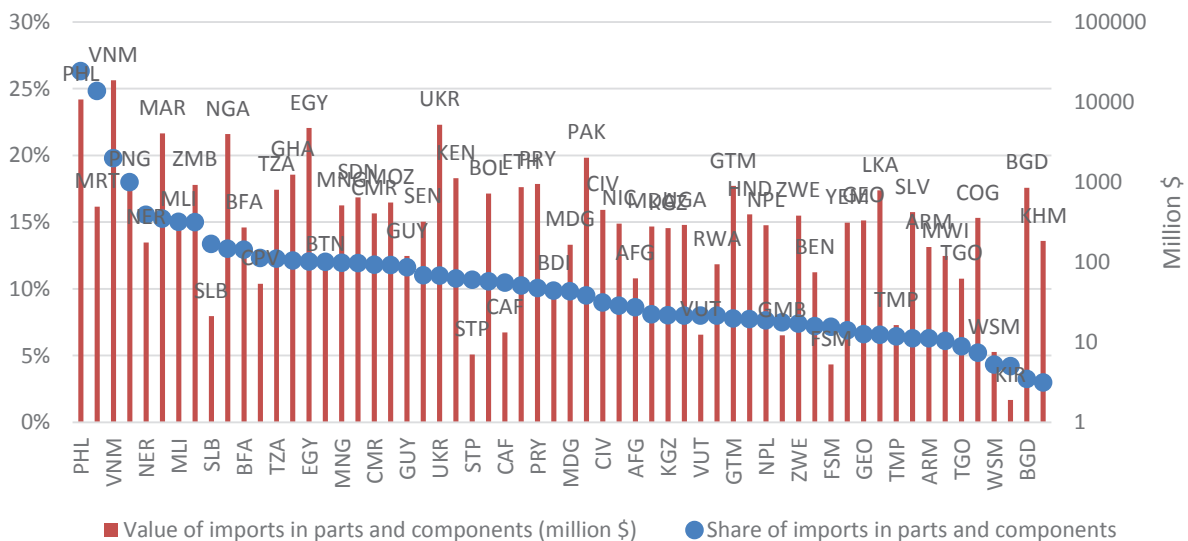
Source: International Monetary Fund’s World Economic Outlook database; World Economic Forum; International Monetary Fund calculations.

Note: Percentage increase in Sub-Saharan Africa’s trade if the variable moves from the average for Sub-Saharan Africa to the average for the rest of the world.

Source: This box was written by Celine Allard, Wenjie Chen, and Jesus Rodrigo Gonzalez-Garcia of the African Department of the International Monetary Fund and is based on chapter 3 of *Regional Economic Outlook: Sub-Saharan Africa* (IMF 2015).

Although the absolute value of imports may strongly depend on the size of the LIDC in question, the share of imports in parts and components over total imports (blue dots in figure 1.12) still provides a mixed picture. More than one-fourth and one-fifth of total manufacturing imports, respectively, of the Philippines and Vietnam are in parts and components. The picture of other Southeast Asian economies is different. For Bangladesh and Cambodia, less than 5 percent of total imports are in parts and components. Differences are also present in Africa where Mauritania, Morocco, Niger, Mali, and Zambia appear to be more integrated than Republic of Congo, Togo, Malawi, Benin, and The Gambia.

Figure 1.12: Value and Share of Imports in Parts and Components



Source: World Bank computation based on data from the United Nation’s COMTRADE database.

2. *G-20 trade and investment policies toward LIDCs*

In addition to domestic factors (box 1.1), LIDCs' competitiveness is affected by G-20 policies. Tariff barriers faced by LIDCs have largely decreased over time, more so for those imposed by G-20 countries. Nontariff measures (NTMs) are increasingly perceived as an impediment to trade for LIDCs, although at times the story is more nuanced (see box 2.1 for two illustrative examples). Many provisions that shape the integration of LIDCs in the world economy are contained in bilateral trade and investment agreements.

Box 2.1: The Case of Intellectual Property Rights and Government Procurement

Protection of intellectual property rights

Research and development (R&D) entails high levels of investment coupled with uncertain results. Therefore, stronger intellectual property (IP) protection—which provides patent holders with exclusive marketing rights over the product for a specified time—increases the incentives for firms in advanced economies to invest in innovation. At the same time, strong IP protection helps attract foreign direct investment to developing countries—including low-income developing countries (LIDCs)—which is likely to strengthen their ability to participate in the world economy, including through global value chains. LIDCs could also benefit from the transfer of technology associated with foreign direct investment and resulting trade relationships.

Empirical evidence suggests that stronger patent protection in developing countries is associated with higher returns to domestic R&D in advanced economies, larger international R&D spillovers, and greater innovation in developing economies (Branstetter, Fisman, and Foley 2006; Coe, Helpman, and Hoffmaister 2009). Conversely, there is the possibility that stronger IP protection may reduce the incentive to innovate by diminishing the threat of competition. Some evidence documents a negative relationship between strengthening IP protection, on the one hand, and increasing innovation or technology diffusion, on the other (Bessen and Maskin 2000; Lerner 2002; Sakakibara and Branstetter 2001; Scherer and Weisburst 1995). Given this trade-off, incentives to innovate must be balanced against the need to accelerate knowledge dissemination and absorption. The optimum, therefore, places the focus on the duration and scope of patent protection. The system must also determine instances where minor modifications prolong the life of a patent without amounting to genuine scientific invention.

The World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) attempts to find an appropriate balance between the short-term interests of maximizing access to knowledge and the long-term interests of promoting creativity and innovation. This issue is much cited with regard to pharmaceutical patents, where there are tensions between the need to provide incentives or R&D into new drugs and the need to make existing drugs available to LIDCs at a reasonable cost. Under the TRIPS Agreement, all member countries are required to provide exclusive marketing rights to holders of patents on pharmaceutical products for a period of at least 20 years. That provision determines the length of the approval process for the production and import of nonpatented (generic) versions of several drugs. WTO rules do provide public health safeguards, especially in the case of national health emergencies, provided that the measures taken are consistent with the provisions of the agreement. The flexibilities in the TRIPS Agreement were subsequently clarified by the 2001 Doha Declaration on the TRIPs Agreement and Public Health. It helped catalyze the growing understanding that access to medicines in LIDCs requires the right mix of intellectual property rules and the judicious and informed use of a range of measures, including procurement strategies, attention to tariffs, and other trade-related drivers of cost (WTO 2013).

More generally, flexibilities in the TRIPS Agreement are also reflected in its transition provisions, which provide LIDCs with extra time to implement the applicable changes to their national laws in two tiers of transition according to their level of development. Least developed countries were originally given a transition period of 10 years to undertake disciplines under the TRIPS Agreement. That period expired in

2005, but it has been extended twice. The transition period for LDCs to implement TRIPS was extended to 2013, and until January 1, 2016, for pharmaceutical patents, with the possibility of further extension. Following a decision of the TRIPS Council on June 11, 2013, the transition period has now been extended until July 1, 2021 (WTO 2014).

Many developing countries have been found not to have incorporated TRIPS flexibilities—related to compulsory licensing, parallel importation, limits on data protection, use of broad research and other exceptions to patentability, and so forth—into their legislation to the extent authorized under the Doha Round (Musungu and Oh 2005). That fact may be attributable to the lack of the legal and technical expertise needed to draft legislation that implements flexibilities. WTO’s technical assistance programs are central in this regard. There are also various provisions in the WTO agreements and subsequent decisions at WTO Ministerial Conferences, which specifically require developed countries to provide technical assistance to LDCs (WTO 2014).

Government procurement

The general principle behind the WTO Government Procurement Agreement (GPA) is to form a single government procurement market “to maximize opportunities for competitive suppliers and reduce costs of doing business for both government and industry.” The procurement provisions are designed to ensure that both parties’ suppliers are given equal access to each other’s government procurement markets.

The GPA has only 43 signatories out of 161 WTO members (10 additional countries are currently negotiating accession)—most of which are advanced economies.^a LDCs, and developing countries more generally, tend to be nonsignatories primarily because governments do not want to place local suppliers and small and medium enterprises at a disadvantage against more competitive foreign firms (Wells and Hawkins 2008).

At the regional level, some U.S. and EU preferential trade agreements (PTAs) include “nonparty” most-favored-nation (MFN) clauses in the area of government procurement, which ensure that more advantageous commitments with other nonmember partners—past and future—should be granted to PTA partners as well (Fink and Molinuevo 2008). Third-party MFN guarantees also limit the extent to which preferential procurement is undermined by subsequent PTAs (Baldwin et al. 2009). The government procurement provisions of regional trade agreements have therefore made feasible a significant further expansion of the membership of the GPA, which can enable LDCs to partake in the benefits of that multilateral agreement (Anderson et al. 2010).

Local content requirements (LCRs) are commonly embedded in government procurement policies^b of several G-20 countries and are often designed for industrial objectives (Hufbauer et al. 2013).^c They are likely to restrict exports from LDC firms (Luckey 2012). The same holds true for a number of climate change–based and energy security–based local content requirements enacted by advanced economies in the context of government procurement. The GPA actually eliminates LCRs between signatories to the agreement. However, as very few LDCs are party to the GPA, they cannot avail themselves of this associated benefit. In fact, the lion’s share of government procurement remains outside the multilateral trading system and is therefore subject to discretionary LCRs.

A revised text of the GPA has been negotiated, and several accession negotiations are actively being pursued (WTO 2013). The revised GPA (and more specifically Article X:6) explicitly states that parties may apply technical specifications to promote the conservation of natural resources or to protect the environment. Hence, instead of a member proving that its environmental policies fall under an exception to the GPA, a member challenging those policies would need to demonstrate that the policies were discriminatory or unrelated to climate change. Parties to the revised GPA also agreed to initiate a work program on sustainable procurement (GPA/113, annex E). The design of these rules will have to be mindful

of the fact the more widespread use of climate-based local content requirements in government procurement may hurt exports from LIDCs to G-20 markets.

^a WTO “Agreement on Government Procurement” web page, https://www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm.

^b The National Treatment article of the GATT-1947 excluded government procurement from its coverage. In 1994, government procurement was carved out from the main commitments in the General Agreement on Trade in Services.

^c Consider the “Buy American” policy or Section 1605 of the American Recovery and Reinvestment Act of 2009, which requires that all of the iron, steel, and manufactured goods used in all ARRA-funded public buildings and public works projects are produced in the United States.

2.1 Most-favored-nation tariffs

MFN (that is, nondiscriminatory) tariffs faced by least developed countries in G-20 markets have declined over time and are 9.9 percent, on average.¹⁶ Across all WTO member countries, the simple average MFN tariff on total nonoil imports of G-20 countries is 7.5 percent compared with 7.4 percent for low- and middle-income members and 9.9 percent for LDCs. Moreover, although average MFN tariffs faced by LDCs declined by 2.1 points between 2001–03 and 2011–13, the decline in MFN tariffs has been slightly faster if all WTO members are considered. WTO commitments made by G-20 countries toward low- and middle-income WTO members, represented by bound rates, are slightly more than twice MFN tariffs (see table 2.1). It should, however, be noted that G-20 countries have put in place and announced new preferential duty-free regimes for LDCs and some LIDCs, which means that exports originating in those countries are not necessarily affected by high tariff barriers (see section 2.4).

Differences in MFN tariffs and bound rates across groups are due to different export structures.¹⁷ Substantial heterogeneity exists in the level of MFN and bound rates across sectors. Textiles and food products are the most protected sectors; natural resources, such as ores and metals and fuel products, are associated with lower tariffs and bound rates in G-20 countries. That sectoral pattern is similar across partner groups. Imports of food, machinery and transport equipment, and fuels from LIDCs experienced the largest decline in MFN tariffs. Bound rates remained roughly constant over time for all groups of countries (see table 2.1).

The aggregate numbers—both MFN and bound rates—for all G-20 countries hide an important difference between developed and developing countries. G-20 developed countries apply MFN tariffs that are much lower than MFN tariffs applied by G-20 developing countries. The difference is even more pronounced for bound rates: G-20 developing countries have bound rates five times the bound rates of G-20 developed countries. Table 2.2 reports the simple average MFN and bound rates that G-20 developed countries (Australia, Canada, the EU, Japan, and the United States) and G-20 developing countries (Argentina, Brazil, China, India, Indonesia, Mexico, the Republic of Korea, Russia, Saudi Arabia, South Africa, and Turkey) apply to LDCs as well as low- and middle-income WTO members. The aggregate decline in MFN tariffs faced by LDCs has been driven mainly by G-20 developing countries. The accession of China to the WTO has been crucial in this respect (see also WTO 2014).

¹⁶ The country groups used in the empirical analysis are those defined at the WTO. Therefore, in this section, the group of least developed countries is used instead of LIDCs.

¹⁷ MFN tariffs presented in this section are simple averages of tariffs on goods with positive trade.

Table 2.1: Most-Favored-Nation and Bound Rates of the Group of 20 by Partner Group and Industry

	MFN tariff (%)		Bound rate (%)	
	2011–13	Change since 2001–03	2011–13	Change since 2001–03
<i>All WTO members</i>				
Agricultural materials (SITC 0+1+2–27–28+4)	12.1	–2.0	28.5	–0.7
Food (SITC 0+1+22+4)	14.7	–2.6	32.5	–1.5
Manufactures	6.8	–2.8	17.8	–0.2
Textiles as 26+65+84 of SITC Rev. 1	11.9	–2.1	21.9	–0.2
Chemicals (SITC 5)	4.8	–2.9	16.2	–0.4
Machinery and transport equipment (SITC 7)	4.9	–2.9	16.0	0.0
Ores and metals (SITC 27+28+68)	3.1	–2.4	15.5	0.4
Fuels (SITC 3)	2.2	–2.1	15.2	0.5
Total non-oil trade	7.5	–2.5	19.7	–0.1
<i>Low- and middle-income WTO members</i>				
Agricultural materials (SITC 0+1+2–27–28+4)	11.6	–1.8	28.1	–0.6
Food (SITC 0+1+22+4)	14.2	–2.4	32.3	–1.5
Manufactures	6.9	–2.9	17.9	–0.2
Textiles as 26+65+84 of SITC Rev. 1	12.1	–2.1	21.9	–0.3
Chemicals (SITC 5)	4.9	–3.0	16.3	–0.3
Machinery and transport equipment (SITC 7)	4.9	–2.9	16.0	–0.1
Ores and metals (SITC 27+28+68)	3.2	–2.4	15.5	0.5
Fuels (SITC 3)	2.2	–2.1	15.1	0.2
Total non-oil trade	7.4	–2.6	19.4	–0.1
<i>WTO least developing country members</i>				
Agricultural materials (SITC 0+1+2–27–28+4)	10.3	–2.1	26.4	–1.4
Food (SITC 0+1+22+4)	12.6	–3.7	30.3	–2.5
Manufactures	9.8	–2.2	19.6	–0.4
Textiles as 26+65+84 of SITC Rev. 1	15.0	–1.1	24.3	–0.2
Chemicals (SITC 5)	7.0	–2.3	18.8	0.8
Machinery and transport equipment (SITC 7)	4.5	–3.0	14.8	–0.4
Ores and metals (SITC 27+28+68)	2.1	–2.5	14.3	0.7
Fuels (SITC 3)	1.7	–3.0	14.2	1.2
Total non-oil trade	9.9	–2.1	21.1	–0.6

Source: World Bank computation based on data from the United Nations Conference on Trade and Development's TRAINS (Trade Analysis Information System) database.

Note: SITC = Standard International Trade Classification; MFN = most-favored-nation; WTO = World Trade Organization. *MFN tariffs* are the rates countries apply on imports from other members of the WTO, unless the country is part of a preferential trade agreement. *Bound tariffs* are maximum specific commitments made by individual WTO member governments. MFN tariff levels should not exceed the bound tariff for a given commodity line. When countries join the WTO, or when WTO members negotiate tariff levels during trade rounds, they negotiate bound tariff rates rather than actually applied MFN rates.

Table 2.2: Most-Favored-Nation and Bound Rates of the Group of 20 by Partner Group

	MFN tariff (%)		Bound rate (%)	
	2011–13	Change since 2001–03	2011–13	Change since 2001–03
<i>Rate imposed by G-20 developed countries to</i>				
All WTO members	3.5	–0.7	5.3	0.0
Low- and middle-income WTO members	3.5	–0.8	5.4	–0.1
Least developed country WTO members	4.8	–1.2	7.6	0.0
<i>Rate imposed by G20 developing to:</i>				
All WTO members	9.5	–3.2	27.7	–0.2
Low- and middle-income WTO members	9.4	–3.4	27.2	–0.2
Least developed country WTO members	12.4	–2.3	28.6	–1.0

Source: World Bank computation based on data from the United Nations Conference on Trade and Development’s TRAINS (Trade Analysis Information System) database.

Note: G-20 = Group of 20; WTO = World Trade Organization.

Tariff uncertainty faced by LIDCs is still high, particularly with regard to G-20 developing countries.

Such uncertainty could be the result of either unbound tariffs (that is, tariffs for which the WTO members have not committed a legal maximum) or, for those tariff lines that are bound, a large binding overhang—the gap between bound and applied MFN rates—which allows countries to potentially raise tariffs up to the bound level without being taken to dispute settlement or incurring sanctions. Table 2.2 shows that G-20 developing countries have, on average, more policy space than G-20 developed countries to use the binding overhang. Uncertainty about tariffs reduces the incentive of firms to start exporting. That, in turn, has a negative effect on trade.¹⁸

Tariff peaks and tariff escalation policies also affect market access and export diversification in developing countries, although not necessarily in LDCs and some LIDCs that may benefit from preferential schemes in those areas (see section 2.4 below). Since 2000, there has been little change in the percentage of tariff peaks (when tariffs on certain products are considerably higher than usual) in developed countries’ MFN schedules (that is, before granting preferences). As shown in table 2.3, tariff peaks in high-income OECD countries are especially prominent in agriculture where 35 percent of agriculture tariffs in 2015 were tariff peaks. The same holds true for tariff escalation, which penalizes value addition through higher tariffs on products at more advanced stages of the production chain; in 2015, there was a 9 percent difference in the tariffs on raw and finished agricultural goods.

¹⁸ See Handley (2014) and Osnago, Piermartini, and Rocha (2015) for theoretical and empirical evidence of the negative effects of trade policy uncertainty.

Table 2.3: Tariff peaks and escalation in high-income OECD countries, 2000–15

	Percentage							
	2000	2005	2010	2011	2012	2013	2014	2015 ^a
<i>Tariff peaks</i>								
Agricultural	33.4	37.6	34.6	36.3	36.0	35.8	37.2 ^b	35.4
Nonagricultural	3.1	2.2	2.2	2.3	2.5	2.6	2.6	2.5
<i>Tariff escalation</i>								
Agricultural	12.6	10.7	9.8	11.2	10.0	10.5	10.9	8.9
Nonagricultural	2.1	1.6	1.2	1.2	0.3	0.3	0.3	0.3

Source: UN-MDG Gap Task Force, forthcoming, on the basis of International Trade Centre data.

Note: Table shows country averages weighted by share in world imports. *Tariff peaks* are the proportion of total tariff lines in a country's most-favored-nation tariff schedule with tariffs above 15 percent. *Tariff escalation* refers to the percentage point difference between the applied tariffs for finished (processed) goods and the tariffs applied on raw materials. The country average is a simple average of the Harmonized System six-digit duty averages.

^a Data for Australia are for 2014.

^b The increase in the proportion of tariff peaks reflects the effect of exchange rate movements only.

2.2 Nontariff measures

Countries within the G-20 group¹⁹ are very heterogeneous with regard to the incidence of NTMs on imports. On one side of the spectrum are the European Union, India, Russia, and Turkey which apply trade-related regulations to more than 90 percent of imports. On the other side are China, Indonesia, and Mexico, which use those measures on less than 65 percent of imports. Higher coverage ratios²⁰ are associated with higher required levels of compliance with the trade-related regulations in those countries and, therefore, are an indication of the difficulty for exporters of entering into highly regulated markets.

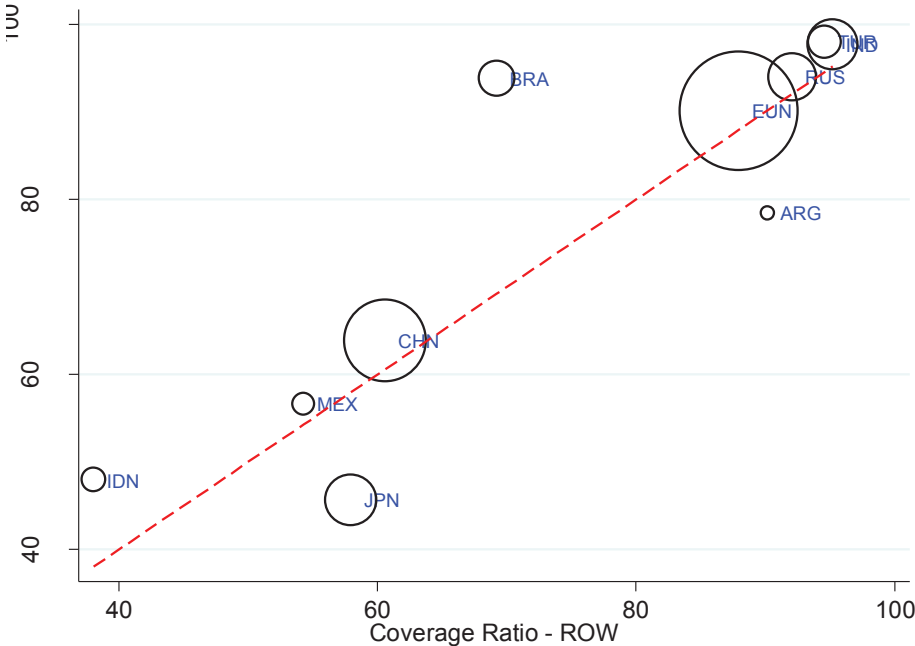
For the largest markets in the G-20, the incidence of NTMs on import flows is mostly balanced across trading partners (see figure 2.1).²¹ China, the European Union, India, and Russia accounted for 88.5 percent of LIDC exports to the G-20 in 2010–12, and, although these economies differ in the incidence of NTMs on imports, coverage ratios are roughly similar between LIDC and non-LIDC partners. Among the group of important markets in the G-20, India shows the highest incidence of NTMs with a coverage ratio of 97.7 percent for imports from LIDCs. India is followed by Russia (94.0 percent), the European Union (90.1 percent), and China (63.9 percent). The regulatory frameworks for trade in Brazil and Indonesia affect imports from LIDC partners more than imports from the rest of world. Brazil, which represented 4 percent of LIDC exports to G-20 countries in 2010–12, applies at least one NTM to 93.8 percent of imports from LIDC partners. The corresponding figure is 69.2 percent for imports from non-LIDC partners. Likewise, Indonesia, which accounts for 1.9 percent of LIDCs' exports to the G-20, applies at least one NTM to 48 percent of imports from LIDCs compared with 38 percent of imports from the rest of the world. Japan and Argentina, conversely, apply more NTMs to imports from non-LIDC partners than from LIDC partners.

¹⁹ For which data are available.

²⁰ A measure of the importance of NTMs for overall import value is given by the coverage ratio. This indicator measures the percentage of imports to country j subject to at least one NTM. In formal terms, the coverage ratio (C_j) is given by: $C_j = \left[\frac{\sum D_i V_i}{\sum V_i} \right] \cdot 100$, where D_i is a dummy variable indicating the presence of one or more NTMs, and V_i is the value of imports in product i . We use the average of total imports by product (six-digit Harmonized System codes) for the period 2010–12.

²¹ Compares G-20 countries' coverage ratios (for which data are available) computed for imports from LIDCs to coverage ratios computed for imports from the rest of the world. Each bubble on the scatter plot represents a country, and its size is relative to the importance of that specific market for the LIDC's exports in 2010–12.

Figure 2.1: Share of Low-Income Developing Countries’ Imports to Each Group of 20 Country Covered by at Least One Nontariff Measure, Average for 2010–12



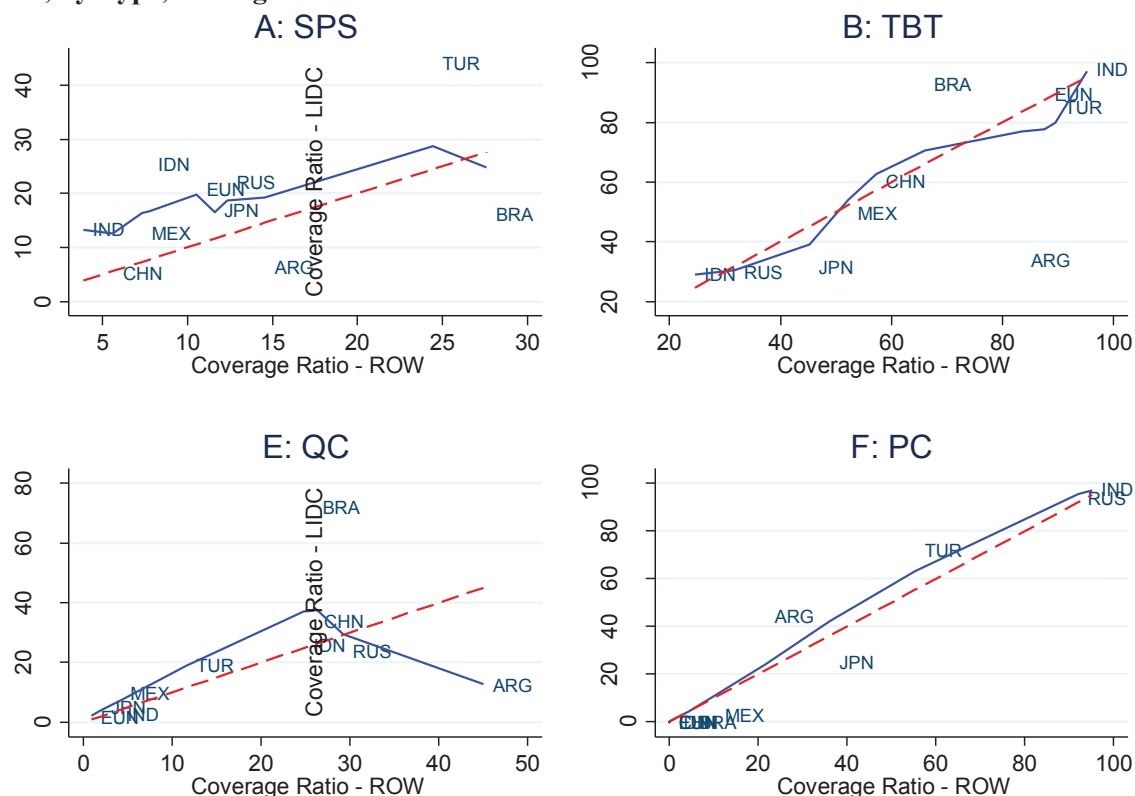
Source: World Bank computation based on data from the United Nation’s COMTRADE database and the United Nations Conference on Trade and Development’s TRAINS (Trade Analysis Information System) database.

Technical versus nontechnical regulations affecting LIDCs’ exports to G-20 countries

The incidence of nontariff measures depends not only on the types of products that are traded between countries but also on the types of measures applied by the country. NTMs applied to imports are divided into technical and nontechnical regulations. Technical regulations comprise science-based measures that are enacted to preserved societal values, such as health protection, or to ensure particular technical specification of products, such as product standards. Nontechnical regulations include measures traditionally used as instruments of commercial policy, such as quantity (quotas) or price controls. To identify whether G-20 countries use a particular type of NTM to influence trade from LIDC partners more than trade from non-LIDC partners, we compare coverage ratios by different type of measures (see figure 2.2).²²

²² As before, the 45-degree dashed line indicates the perfectly balanced NTM treatment between LIDC and non-LIDC countries. The line is the LOWESS smoothing, which provides the best nonlinear fit to the data.

Figure 2.2: Trade Incidence of Group of 20 Nontariff Measures in Low-Income Developing Country Exports, by Type, Average for 2010–12



Source: World Bank computation based on data from the United Nation’s COMTRADE database and the United Nations Conference on Trade and Development’s TRAINS (Trade Analysis Information System) database.

Sanitary and phytosanitary regulations in G-20 countries affect mostly LIDC partners. That result reflects the fact that several LIDCs specialize in agricultural products that are more susceptible to SPS regulation, whereas non-LIDC partners have a more diversified export basket. Argentina and Brazil are the only G-20 countries where the trade incidence of SPS measures is greater for non-LIDC partners.

Technical barriers to trade (TBTs) in almost all G-20 countries are balanced between trading partners. The only exception is Argentina, where 84.5 percent of imports from non-LIDC partners are affected by TBT measures, whereas only 34.3 percent of LIDC imports are affected by TBT measures. Smaller deviations in favor of LIDC partners or non-LIDC partners are observed in Brazil and Japan, respectively.

The use of nontechnical measures among G-20 countries differs greatly, but such regulations are also, on average, evenly applied across trading partners. Argentina, Brazil, China, Indonesia, and Russia predominantly use quantitative restrictions, with coverage ratios that are larger than 25 percent. The incidence of those restrictions is equally applied to imports from LIDC and non-LIDC partners, with the important exception of Argentina and Brazil. The former imposes significantly more quantity restrictions to imports from non-LIDC partners, whereas the latter imposes more restrictions on imports from LIDC partners. Price controls are used predominantly in Argentina, India, Japan, Russia, and Turkey. These measures are applied evenly across partner countries in all G-20 countries for which data are available.

Table 2.4: Sectoral Incidence of Group of 20 Nontariff Trade Measures on Low-Income Developing Country Exports, Average 2010–12)

	Share of Exports	Share of Exports Covered by G20 NTMs			
		A: SPS	B: TBT	E: QC	F: PC
01-05 Animals & animal products	1.8	1.6	1.4	0.3	0.4
06-14 Vegetable products	7.3	7.1	5.9	1.4	2.2
15 Fat & oils	1.2	1.1	0.6	0.2	0.4
16-24 Prepared foods & beverages	4.2	3.7	2.8	0.6	1.9
25-26 Mineral products	5.6	0.9	2.7	0.5	1.4
27 Oil minerals	28.8	0.0	22.5	6.2	14.4
28-38 Chemical products	3.2	0.6	2.6	0.5	1.1
39-40 Rubber & plastic	2.0	0.4	1.0	0.2	0.6
41-43 Hides, leather & skins	0.9	0.4	0.4	0.1	0.2
44-46 Wood, cork & straw	2.0	0.9	0.7	0.3	0.4
47-49 Paper, pulp & printing	0.4	0.0	0.1	0.0	0.1
50-63 Textiles & apparel	11.5	2.1	7.6	2.7	2.9
64-67 Footwear & headgear	1.7	0.2	1.0	0.4	0.3
68-70 Stone, ceramic & glass	0.4	0.1	0.1	0.0	0.1
71 Gems & jewelry	1.0	0.0	0.5	0.3	0.4
72-83 Metals & metal products	7.9	0.2	2.8	0.8	2.3
84-85 Mach. & elec. equipment	16.4	0.0	7.9	3.0	2.2
86-89 Motor vehicles	2.0	0.0	1.3	0.5	0.5
90-92 Optical & medical instruments	0.6	0.1	0.4	0.1	0.1
90-97 Miscellaneous	0.9	0.1	0.5	0.1	0.2
TOTAL	100.0	19.4	62.9	18.1	32.0

Source: World Bank computation based on data from the United Nation’s COMTRADE database and the United Nations Conference on Trade and Development’s TRAINS (Trade Analysis Information System) database.

Note: G-20 = Group of 20; NTM = nontariff measure; PC = price controls; QC = quantity controls; SPS = sanitary and phytosanitary (measures); TBT = technical barriers to trade;. Table shows the share of total low-income developing country exports into the G-20 countries by sector and the share of exports affected by different type of NTMs. Each cell presents the share of total export value in 2010–12.

The nature of the products exported by LIDCs to the G-20, relative to other trading partners, explains some of the differences observed in the incidence measures presented above. Although the LIDC export basket to G-20 countries contains mostly agricultural products and textiles (see table 2.4), non-LIDC countries export mainly machinery and electrical equipment. Sanitary and phytosanitary measures in the G-20, for example, affect mainly trade in vegetables, prepared foods, and beverages from LIDC partners. About 10.8 percent of total imports from LIDCs belong to these sectors and are affected by at least one SPS regulation (table 2.4). Another sector that is affected by SPS measures is textiles, whose SPS-covered imports account for 2.1 percent of total G-20 country imports from LIDCs. Overall, on average across G-20 countries, about 19.4 percent of LIDC imports are covered by at least one SPS measure. For imports from non-LIDC partners, it is only 11 percent.

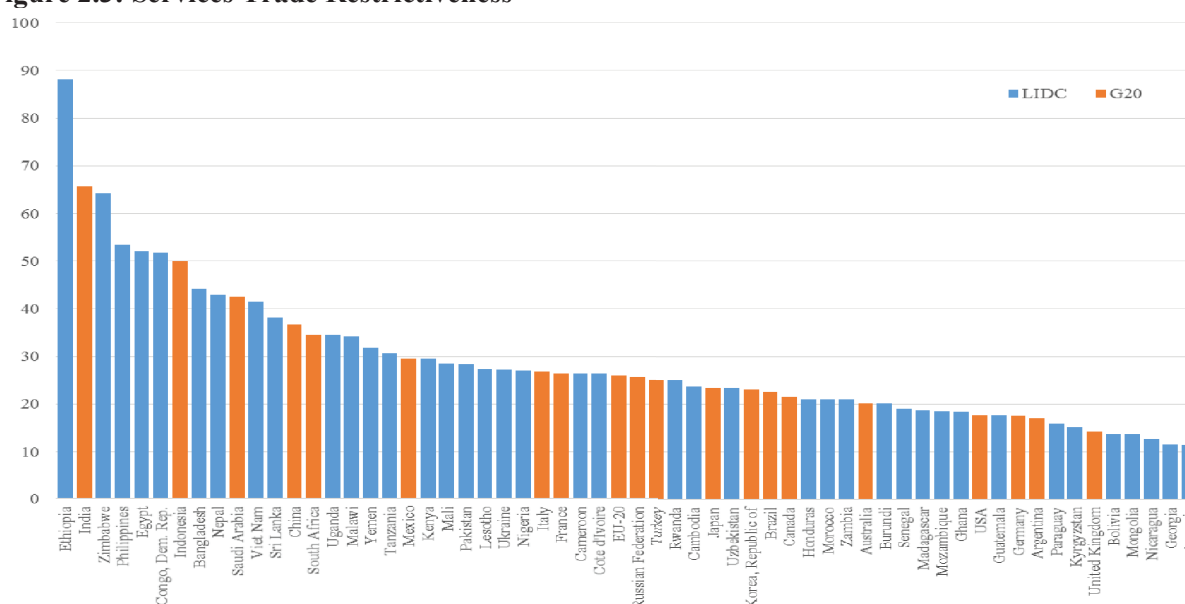
Technical barriers to trade from the G-20 countries fall predominantly on oil minerals, machinery and electrical equipment, and textiles. Given the importance of textiles (and oil) for LIDC exports into G-20 countries, TBTs are likely to affect imports from LIDC more than imports from non-LIDC countries.

Quantity and price controls targeted mainly G-20 imports of oil minerals (petroleum); imports of textiles and apparel by G-20 countries are also affected. At the same time, machinery and equipment, which are imported mostly from non-LIDC partners, face quantitative restrictions (mostly in the form of nonautomatic licenses).

2.3 Services measures

Services exports by LIDCs to G-20 economies are more heavily affected by general domestic regulatory policies than by formal trade restrictions. Restrictions to services exports fall into two categories: (a) barriers that target cross-border trade and investment and mobility of individual services suppliers, for example, local presence requirements, such as the obligation to establish a commercial presence to provide a service; and (b) domestic regulatory policies that do not directly aim to restrict trade and investment in the services sector, but may nonetheless have such an effect. For instance, a licensing requirement for professionals is meant to overcome information asymmetries between professionals and consumers, but it may restrict services by foreign professionals whose credentials are not recognized. G-20 economies, especially OECD and EU members, have comparatively few restrictions to trade and investment in services. Except for India, Indonesia, Saudi Arabia, China, and South Africa, all other G-20 economies score fewer than 30 points out of a total of 100 in the Services Trade Restrictiveness Index (see figure 2.3).²³

Figure 2.3: Services Trade Restrictiveness

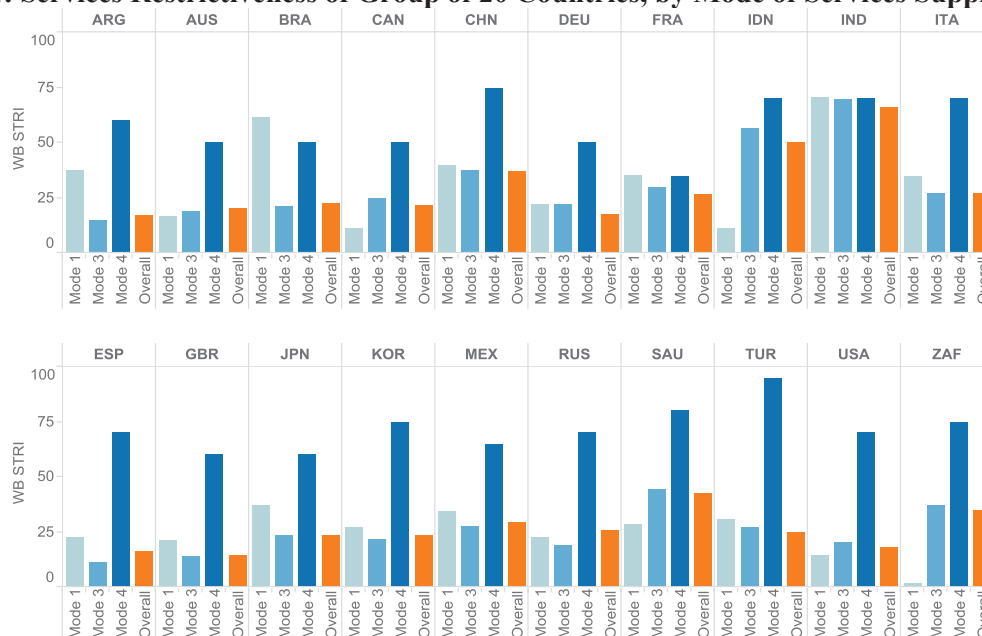


Source: World Bank's Services Trade Restrictiveness Index.

The movement of individual services suppliers (mode 4) stands out as the most restrictive mode of supply for all G-20 members, often several times more restrictive than the most open mode of service supply (see figure 2.4). Goswami, Mattoo, and Sáez (2013) offer a comprehensive review of measures that limit the movement of individual services providers (see box 2.2).

²³ The higher the index, the more restrictive are services in that particular country.

Figure 2.4: Services Restrictiveness of Group of 20 Countries, by Mode of Services Supply



Source: World Bank's Services Trade Restrictiveness Index.

Nondiscriminatory domestic regulations and administrative conditions, not usually captured by a restrictiveness index, may also influence the export of services through the movement of individual suppliers. They include price-based measures, such as entry and exit taxes, visa fees, discriminatory airline landing fees, and port taxes that may limit entry. In addition, some countries require individuals to show proof that they will have sufficient financial resources while in the host country. Furthermore, discriminatory access to information channels and distribution networks may restrict foreign suppliers of services from gaining access to local markets. The lack of transparency and predictability in government measures, procedures, and practices can be another major barrier to market access for developing countries.

Box 2.2: Limits to Movement of Individual Services Providers

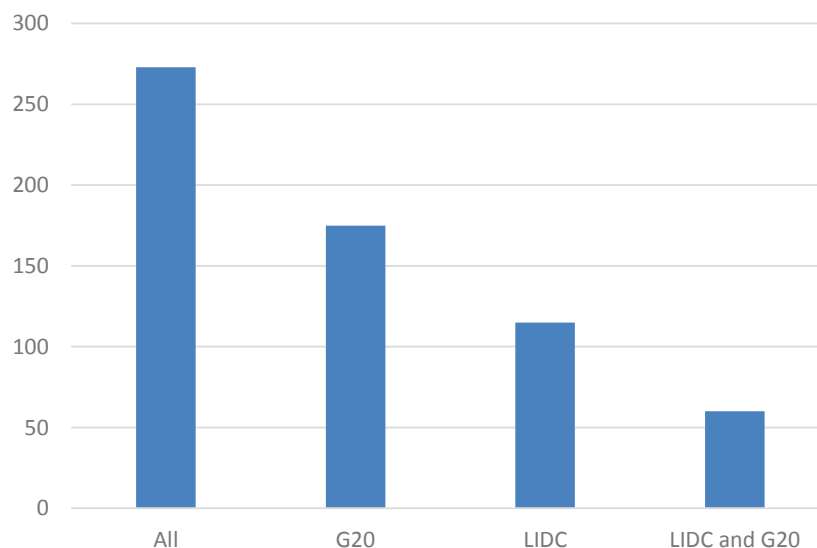
- **Quantitative restrictions:** Countries often maintain labor-market regulations that limit the percentage of foreign workers firms may employ.
- **Residency and nationality requirements:** Several destination countries require such activities as legal, insurance, accounting, educational, surveying, or investment advisory services to be provided by citizens or residents of the host country. Although nationality requirements are usually focus on professionals or high-skilled services, industries such as maritime transport services maintain nationality requirements for low-skilled workers.
- **Technical standards and licensing:** Professional qualifications, licenses, and training attained in the home country are often not recognized in destination countries. Foreign suppliers are often required to meet standards that are stricter and more costly to meet than the standards applied to domestic providers of similar services (Hoekman and Braga 1997). For instance, foreign nurses with education and practice experience that closely match domestic requirements still need to complete several months of learning modules in the United Kingdom (Engman 2010). Similarly, Canada, Italy, Spain, the United Kingdom, and the United States require foreign engineers to take a local examination to qualify for practice. Even when licensing requirements are applied even-handedly and nondiscriminatorily, they may entail a restriction to services trade because of the inherent administrative requirements that apply to these processes, usually requiring in-person exams.

- **Labor-market tests:** Labor-market tests, which require employers to prove the need for a foreign supplier, are a prominent restriction used in G-20 countries: all but Japan, Mexico, the Republic of Korea, Turkey, and the United Kingdom have labor-market tests in at least one segment. In most cases, potential employers must go through extensive bureaucratic processes to prove their needs, making temporary movement unattractive except in case of the greatest need (Chaudhuri, Mattoo, and Self 2004; Winters 2008).
- **Visa and employment permits:** Visa requirements and employment permits are perhaps the first and main barrier used to restrict foreign suppliers of services, whether temporary or permanent. Trade agreements, including the General Agreement on Trade in Services, do not usually address issues related to visa requirements for services suppliers (Chaudhuri, Mattoo, and Self 2004). However, a dynamic and flexible use of visas may include a mechanism to ensure that services suppliers from low-income developing countries, duly accredited and certified, may access temporary visas that allow them to provide services.

2.4 Preferential trade and investment policies

LIDCs have benefited from a series of preferential market access schemes, especially in developed countries. Preferential market access to developed countries has been promoted under the generalized system of (nonreciprocal) preferences or through bilateral or regional agreements. Some large developing countries, such as China and India, have also begun granting extensive preferences to LDCs with the establishment of the Global System of Trade Preferences among Developing Countries (WTO 2014). At present, of the 273 trade agreements in force (see figure 2.5), 22 percent involve LIDCs and G-20 countries. More than half of them involve at least one country of the G-20 group. LIDCs are involved in 115 PTAs, of which 60 also involve G-20 countries.

Figure 2.5: Number of Agreements in Force by Type of Signatories



Source: World Bank calculation based on data from the World Trade Organization's Regional Trade Agreements Information System.

Note: G-20 = Group of 20; LIDC = low-income developing country.

Preferential access on dutiable products

The average preferential tariff applied by G-20 countries to goods coming from WTO LDC members is 7.3 percent, whereas average preferential tariffs are 6.3 percent and 6.1 percent for all WTO members and for low- and middle-income members, respectively.²⁴ Preferential tariffs are lower than the MFN tariffs discussed in section 2.1 but follow a similar pattern across partner groups and time. On average, LDCs face higher tariffs than other countries when exporting to G-20 countries. Effectively applied tariffs declined slightly faster than MFN tariffs. Tariffs effectively applied by G-20 countries declined, on average, by 3.5 points between 2001–03 and 2011–13 (see table 2.5).

Table 2.5: Preferential Tariffs Applied by All Group of 20 Members by Partner Group

	Preferential tariffs	
	2011–13	Change since 2001–03
All WTO members	6.3	–3.2
Low- and middle-income WTO members	6.1	–3.5
WTO least developed country members	7.3	–3.5

Source: World Bank computation based on data from the United Nations Conference on Trade and Development’s TRAINS (Trade Analysis Information System) database.

Note: WTO = World Trade Organization.

Preferential tariffs imposed by G-20 developed countries on LDC exports are much lower than preferential tariffs applied by G-20 developing countries. The average preferential tariff of G-20 developed countries is equal to 2.6 percent, whereas that of G-20 developing countries is 8.1 percent (see table 2.6). The difference between tariffs effectively applied by developed and developing countries is even more striking when considering preferences conceded to LDCs. Owing to bilateral and unilateral liberalization, LDCs face virtually no barriers to entry in G-20 developed countries. On the other hand, they still face high tariffs when accessing G-20 developing markets. However, G-20 developing countries lowered their applied rates to LDC exports by almost four points in the past decade.

Agriculture is the sector where LDCs benefit from the largest margin of preference—compared with other developing countries—in developed-country markets. The preference margin of LDCs relative to other developing countries in agriculture was equal to 7 percent, on average, in 2014, whereas the margin was just over 1 percent for textiles and clothing. The margins enjoyed by LDCs across sectors have changed little in recent years (see figure 2.6).

²⁴ As in the analysis of MFN tariffs, the country groups used in the analysis of preferential tariffs are those commonly used at the WTO. Therefore in this section, the group of LDCs is used instead of LIDCs. In this section, preferential tariffs are defined as the lowest available tariff. If a preferential tariff does not exist, the applied MFN tariff is considered instead. In reality, the importing country will apply the MFN tariff if the product fails to meet the country’s rules that determine the product’s country of origin. Therefore, when analyzing the effects of preferential tariffs on trade flows, additional caution is required regarding the assumptions about which tariff rate is actually applied to a particular import.

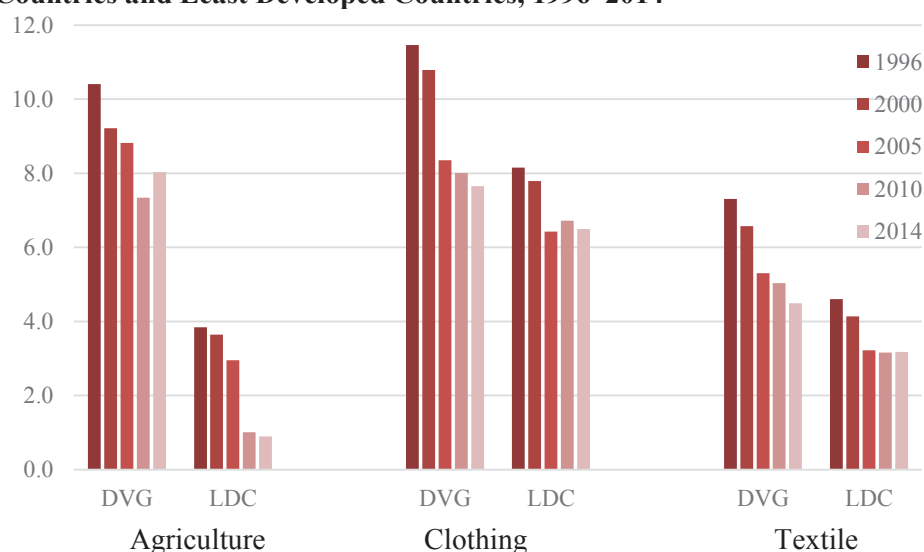
Table 2.6: Preferential Tariffs of Developed and Developing Group of 20 Members by Partner Group

	Preferential tariffs	
	2011–13	Change since 2001–03
Rate imposed by developed G-20 members to		
All WTO members	2.6	-1.2
Low- and middle-income WTO members	2.2	-1.4
Least developed country WTO members	0.8	-2.6
Rate imposed by G-20 developing to:		
All WTO members	8.1	-4.0
Low- and middle income WTO members	8.1	-4.4
Least developed country WTO members	10.5	-3.7

Source: World Bank computation based on data from the United Nations Conference on Trade and Development’s TRAINS (Trade Analysis Information System) database.

Note: G-20 = Group of 20; WTO = World Trade Organization.

Figure 2.6: Average Tariffs Levied by Developed Countries on Key Products Exported by Developing Countries and Least Developed Countries, 1996–2014



Source: International Trade Centre, United Nations Conference on Trade and Development, and World Trade Organization Millennium Development Goals database, <http://www.mdg-trade.org/>.

Note: Actual tariffs are weighted on the basis of a fixed 1999–2001 export structure.

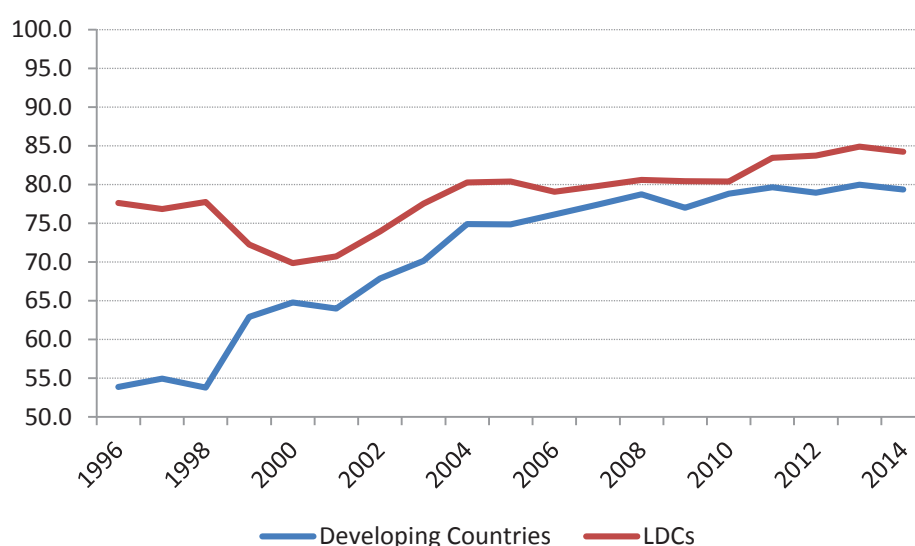
Duty-free treatment

Seventy-nine percent of developing countries’ exports are eligible to benefit from duty-free treatment, and this ratio rises to 84 percent in the case of LDCs’ products. Almost all (98 percent) agricultural exports from LDCs are exempt from duties by developed countries, whereas only 74 percent are exempt in the case of developing countries. For manufactured products, that number is 97 percent for LDCs compared with 86 percent for developing countries. That difference in market access preferences should enhance the participation of LDCs in the world economy.

Preference erosion

Over time, there has been some erosion of the preference margin of duty-free treatment received by LDCs exports in advanced economies relative to products exported by the other developing countries, leading to almost similar overall duty-free treatment in 2014 (see figure 2.7). Preference erosion could result from the reduction of MFN duties or from granting new preferential access to other countries. When looking at “true” preferences and their use, however, the nature of the competitive advantage remains significant for LDCs. About 60 percent of LDC exports benefit from true preferential treatment, being exempt from taxes on items that are normally dutiable. That ratio has steadily increased in recent years, from 53 percent in 2011. At the same time, most developing country exports that are duty-free in advanced economies receive such treatment under the MFN status, thereby not gaining any particular competitive margin over other exporters.²⁵

Figure 2.7: Share of Imports from Least Developed Countries and Developing Countries Entering Duty-Free into Developed Country Markets, 1996–2014



Source: International Trade Centre, United Nations Conference on Trade and Development, and World Trade Organization Millennium Development Goals database, <http://www.mdg-trade.org/>.

Note: Table shows the proportion of the value of total developed country imports (excluding oil and arms) from developing countries and least developed countries admitted free of duties. This indicator is also subject to the influence of changes in export structure and relative prices.

Preference utilization

Available preferences may not be fully used by exporters (as shown in table 2.7) for a number of reasons, ranging from ineligibility—because of nonconformity to some criteria, such as rules of origin or nontariff measures—to excessive administrative cost to benefit from the preferential scheme. The specificity, design, and application of rules of origin can make it difficult for LDC exporters to benefit from preferential access schemes. Strict RoOs (or regional cumulation) were, in principle, designed to promote an integrated production structure in the recipient country. But with manufacturing production increasingly

²⁵ Duty-free imports with MFN status have been increasing through time as WTO members reduced their applied tariffs and entered into sectoral agreements, such as the Information Technology Agreement. Nowadays, 27 percent of all products imported by the European Union are duty-free under the MFN treatment; that number increases to 48 percent in the case of the United States, 53 percent for Japan, and 73 percent for Canada.

performed in the context of GVCs, strict RoOs are likely to raise costs by forcing firms to switch to more costly suppliers of intermediate goods within the PTA from lower-cost sources outside (Baldwin 2006; Krueger 1999). That likelihood is a particular problem in textiles and apparel, which are key exports for LDCs (Zedillo, Messerlin, and Nielson 2005; Jara and Escaith 2012). In addition, preference utilization may be inhibited by the high costs incurred to document, administer, and verify compliance—especially given inputs from many different countries within and outside the PTA in a GVC—for multiple RoOs and agreements (Brenton and Imagawa 2005; Brenton and Manchin 2003; Kawai and Wignaraja 2011).

Table 2.7: Rate of Use of Preferences, 2011 and 2012

Market	Share of total least developing country imports (%)		Imports entering under preferential regime (% of eligible imports)
	Eligible for any preference	Entering under any preference	
<i>2012</i>			
Canada	34.9	32.7	93.7
European Union (low estimate)	47.4	44.8	93.2
European Union (high estimate)	48.1	46.4	98.0
United States	62.2	45.2	72.7
<i>2011</i>			
Canada	29.8	26.9	90.3
European Union (low estimate)	45.5	42.4	91.7
European Union (high estimate)	46.2	43.8	96.3
United States	65.7	54.8	83.3

Source: World Trade Organization data.

Deep provisions in preferential trade agreements

The scope of PTAs has changed in recent years, extending beyond preferential market access to include a wide variety of other provisions.²⁶ “Deep” agreements can help improve policy cooperation across countries on a number of nontariff measures. They can also provide institutional commitments for LDCs to improve their business environments, leading to further economic integration (see box 2.3). Deep PTAs can also have downsides, as discussed in section 3.2.

Box 2.3: Deep Agreements and Global Value Chains

The impact of preferential trade agreements (PTAs) on trade has been widely studied, and the main conclusion of those studies is that PTAs boost trade among members. In fact, the dollar value of trade between members of PTAs has grown faster than the world average since 1990; as a result, the share of intra-PTA trade in world trade has increased from 18 percent in 1990 to 35 percent in 2008 (WTO 2011). PTAs have also increased production sharing among countries. Evidence suggests that preferential trade agreements increase trade in parts and components by 20 percent among country members (Orefice and Rocha 2014).

²⁶ The WTO data set on the content of trade agreements contains information about the inclusion and legal enforceability of a set of 52 provisions for 100 PTAs covering more than 90 percent of world trade. See *World Trade Report 2011* (WTO 2011) for a detailed description of the data set and its construction.

The expansion of global value chains (GVCs) has generated a demand for deep forms of integration aimed at covering all dimensions of market access. That demand cannot be easily addressed with existing WTO rules (Bagwell and Staiger 2002), and negotiating new rules in a multilateral setting is far from straightforward. PTAs, therefore, provide an opportunity to fill the emerging governance gap between countries. In fact, empirical evidence suggests that higher levels of trade in parts and components—relative to total trade—have a positive effect on the depth of a preferential agreement (Orefice and Rocha 2014).

For GVCs to operate smoothly, particularly in the context of North–South production sharing, there is a need for greater uniformity in regulatory environments and other national policies (Henson and Reardon 2005; Maruheck et al. 2011). For instance, firms in advanced (G-20) economies may set standards for their input suppliers in low-income developing countries (LIDCs) to ensure a level of quality, to make the input compatible with other stages of the production process, or to externalize the management of risk. Such standards are especially relevant for food supply chains where ensuring the quality and safety of products is often paramount (Henson and Reardon 2005). PTAs, which specify harmonization or mutual recognition of such standards, can therefore enable producers in LIDCs to participate in GVCs (Lawrence 1996). Evidence indicates that integration of technical barriers to trade involving mutual recognition, harmonization of standards, and transparency reduces the costs of production fragmentation (WTO 2011).

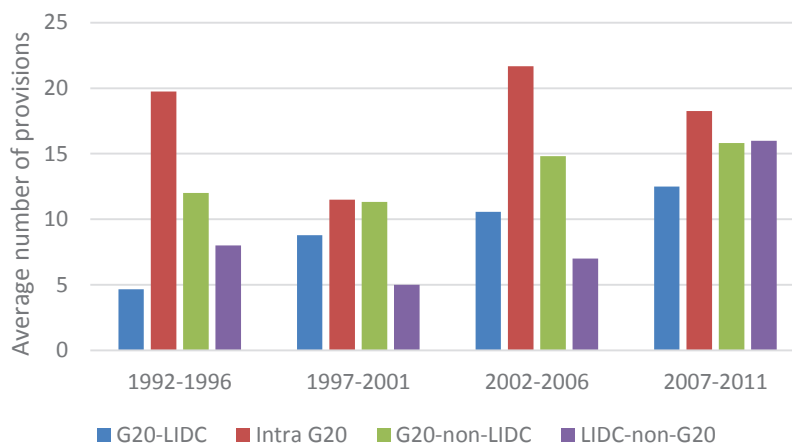
Regulatory harmonization is equally important for trade in services, the efficient provision of which matters greatly for facilitating GVCs. Domestic regulations and foreign investment limitations, which act as barriers to services trade, are likely to have a negative impact on merchandise trade (Deardorff 2001). PTA provisions that liberalize market access in logistics and related services are therefore particularly important for lowering the costs of operating GVCs in LIDCs (Baldwin 2010). Many recent North–South PTAs, such as the economic partnership agreement between Japan and Vietnam, include deep integration provisions in the area of services (Pomfret and Sourdin 2009).

More generally, by including provisions related to trade in services, investment, competition policy, intellectual property, the institutional framework, and product market regulations, PTAs can make the participation of LIDCs in GVCs more secure and less vulnerable to disruptions or restrictions (Yeats 2001). Empirical evidence also suggests that “deeper” PTAs increase bilateral trade in parts and components among member countries. In fact, countries that sign deep agreements trade more than countries that sign shallow agreements; an additional provision in an agreement increases parts and components trade by almost 1 percent on average (Orefice and Rocha 2014). Furthermore, Osnago, Rocha, and Ruta (2015) show that the content of PTAs is relevant for vertical foreign direct investment. As a word of caution, PTA rules in all these areas may be more suited to the needs of advanced economies (Brou and Ruta 2006). Furthermore, the proliferation of PTAs may result in divergent regulatory regimes that, in practice, can segment markets and raise and therefore inhibit GVC trade (WTO 2011).

Trade and investment, including through GVCs, facilitate technology transfer from developed to developing economies. The channels of transmission include technology embodied in goods, interaction between foreign multinationals and local subsidiaries through vertical foreign direct investment, and the movement of people across national boundaries (WTO 2013). Hence, to the extent that PTAs between G-20 countries and LIDCs promote trade in goods and services, including through GVCs, they can enable the diffusion of new technologies to the latter.

PTAs between G-20 countries and LIDCs are not as deep as the agreements between G-20 countries and other non-LIDCs, but their depth has been constantly increasing over time. Figure 2.8 shows that agreements between G-20 countries are, on average, deeper than all other PTAs across all periods, with the highest number of provisions included between 2002 and 2006.²⁷ A significantly smaller share of G-20–LIDC agreements include export taxes, TRIPS, intellectual property rights, movement of capital, state aid, STE, competition policy, investment, public procurement, environment, and labor-market provisions (figure 2.9). However, TBT, agriculture, information society, and regional cooperation provisions are included in relatively more G-20–LIDC agreements.

Figure 2.8: Average Depth of Preferential Trade Agreements by Partner Group and Period

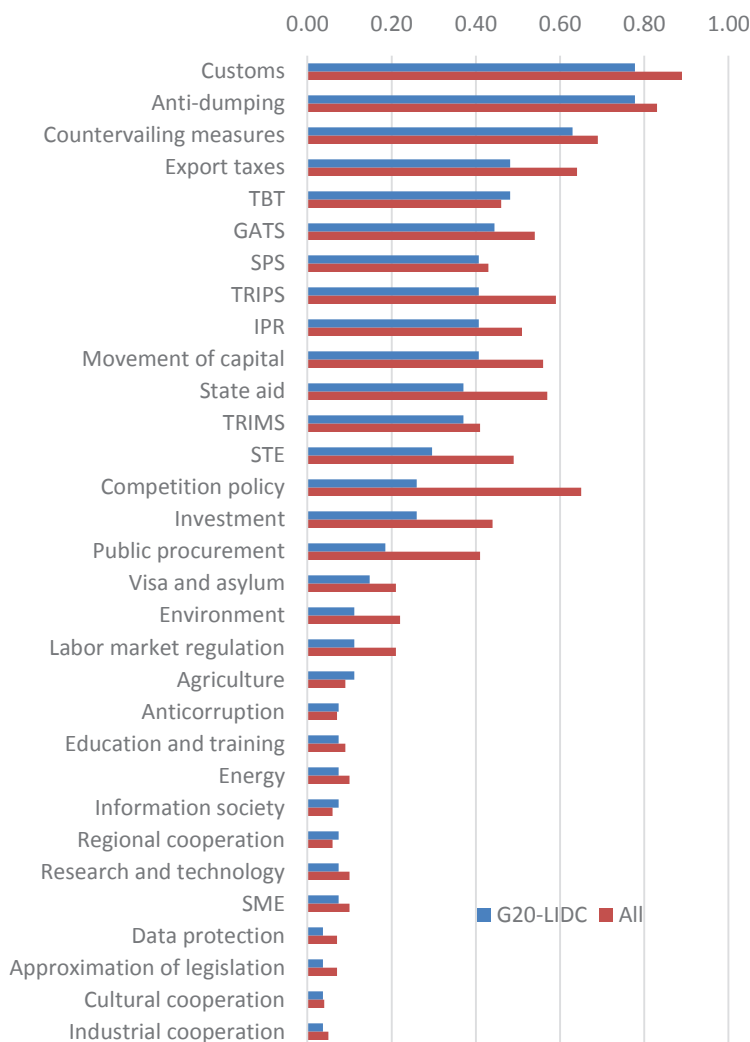


Source: World Bank computation based on the World Trade Organization Preferential Trade Agreement content dataset.

Note: G-20 = Group of 20; LIDC = low-income developing country. The number of provisions includes only legally enforceable provisions.

²⁷ The average depth is measured as the average number of provisions in trade agreements signed between different groups of countries during the different periods in which they entered into force.

Figure 2.9: Share of Group of 20 Agreements That Include Selected Provisions



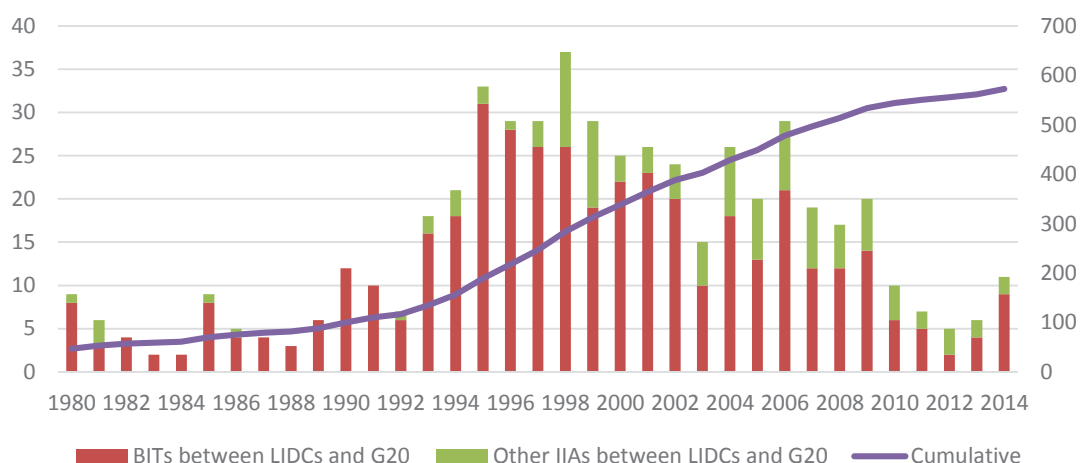
Source: World Bank computation based on the World Trade Organization Preferential Trade Agreement content dataset.

Note: Calculation of the shares takes into account only legally enforceable provisions.

Bilateral investment treaties

Bilateral investment treaties, which dominate international investment agreements (IIAs) between LIDCs and G-20 countries (see figure 2.10), can enhance FDI flows to developing countries (including LIDCs). The mechanism through which BITs can have a positive effect on FDI inflows includes (a) an international commitment effect, (b) a signaling effect, (c) a shortcut to improved institutional frameworks, and (d) the inclusion of strong provisions in favor of foreign investors (UNCTAD 2009). The empirical evidence has been inconclusive with respect to BITs, but it tilts more favorably toward a positive impact of PTAs on FDI (Büthe and Milner 2009; Egger and Pfaffermayr 2004; Neumayer and Spess 2005; UNCTAD 2014).

Figure 2.10: Proliferation of International Investment Agreements, 1980–2014



Source: United Nations Conference on Trade and Development.

Note: BIT = bilateral investment treaties; G-20 = Group of 20; IIA = international investment agreement; LIDC = low-income development country.

Unlike “old generation” BITs, “new generation” BITs are more precise in their language (definitions of investment and investors) and also respond to the needs of the investment regime in the 21st century. “Old-generation” BITs protect only investment that is already established (and admitted) in the territory of the host country in accordance with its legislation. They do not provide any protection during the preestablishment phase, allowing the host country to apply screening mechanisms for determining the entry of foreign investment (Echandi 2010). “New generation” IIAs (a) combine investment protection with liberalization of investment (entry guarantees), (b) strike a better balance between investment protection and other public policy objectives (extremely important for LIDCs), (c) provide greater clarity and transparency on regulations, (d) outline innovations on investor–state dispute settlement, and (e) establish greater predictability of rights of establishment for investors.²⁸ LIDCs tend to continue to negotiate “old generation” IIAs. Consequently, they are not taking advantage of the new possibilities that “new generation” IIAs bring to connect with the global economy.

3. Designing G-20 trade and investment policies to benefit LIDCs

This section focuses on the role that cooperation among G-20 countries in the areas of trade and investment policy can play in LIDCs’ development going forward.

3.1 Multilateral trade issues

The WTO has been working to deliver development outcomes since the Doha Development Agenda was launched in 2001. Although negotiations are ongoing, significant progress has been achieved, including at the Bali Ministerial Conference in 2013, where some important decisions on development were agreed upon. Specifically, this work has focused on improving LDCs’ market access opportunities, as well as allowing them flexibility in the implementation of their commitments, notably under the new Trade Facilitation Agreement. The promises made in Bali need to be fulfilled by delivering in full on the decisions made there, and it is crucial to ensure that the interests of developing and least developed countries also remain at the forefront of the current post-Bali negotiations.

²⁸ They grant to foreign investors national and MFN treatment with respect to the right of establishment in the host state.

The Trade Facilitation Agreement

The WTO’s Trade Facilitation Agreement agreed in Bali represents an important step forward in the effort to reduce the costs of international trade, resulting in a number of benefits, especially for LDCs. Although traditional trade barriers have come down, trade costs remain particularly high in developing countries, owing in large part to border procedures that delay the movement, release, and clearance of goods (see section 1.1). By simplifying those procedures and reducing delays, the implementation of the TFA can (a) increase the opportunity for LDCs to integrate into GVCs, (b) enable them to both increase and diversify their exports (by entering new markets and selling new products), and (c) improve revenue collection through duties on a larger volume of goods flowing through customs. With the efficiency of trade procedures being an important signal of the overall investment climate, the TFA should also help developing countries attract more FDI. Furthermore, as small firms suffer relatively more from administrative burdens, the TFA is expected to deliver particularly important benefits to small and medium enterprises, many of which are located in developing countries (OECD and WTO 2015).

Although changes in trade procedures can be implemented unilaterally, a multilateral agreement on trade facilitation brings added value to developing and least developed countries. First, it provides greater legal certainty, protecting against sudden changes in reforms. Second, it can help governments garner support from domestic constituents. Third, it helps with the adoption of similar approaches to trade procedures, steering domestic reforms in the same direction and avoiding the creation of incompatible trade facilitation regimes. It further provides donor support for capacity-constrained countries and offers developing and least developed members the possibility of tailoring their implementation according to their individual capacities (see box 3.1).

Box 3.1: Structure and Implementation of the TFA

The Trade Facilitation Agreement (TFA) has a three-pillar structure: Section I sets out a series of trade facilitation disciplines, organized in 12 articles. The first 11 represent improvements and clarifications of articles in the General Agreement on Tariffs and Trade: Article V (freedom of transit), Article VIII (fees and formalities connected with importation and exportation), and Article X (publication and administration of trade regulations). Article 12 of the TFA includes provisions on customs cooperation. Section II establishes an implementation mechanism. Its innovative architecture allows developing and least developed countries to self-determine when they will apply the trade facilitation measures and what they require to build the necessary capacity. The last segment—section III—contains language on the institutional arrangements (establishment of a World Trade Organization committee and of national committees on trade facilitation), as well as a series of final provisions.

Of the three parts, section II is most directly focused on developing and least developed countries. Although all members will have to implement all provisions of the TFA, it is recognized that only developed countries will be able to do so without extra help. Their developing and least developed counterparts are allowed to individually tailor their implementation by scheduling their commitments according to three different categories: measures ready for immediate implementation (category A), measures requiring additional time—but time alone—(category B), and measures that require both time and capacity building to be implemented (category C). In addition, the TFA offers a series of additional flexibilities, such as an early-warning mechanism (designed to alert of the need for additional time requirements), shifting between categories, and a temporary exclusion from dispute settlement. The TFA will enter into force, once two-thirds of the members have deposited their instruments of acceptance. As of September 15, 2015, 16 members have completed their ratification process. More are expected to follow shortly.

Core issues in the post-Bali process

The “Bali package”—the first global trade agreement in 20 years—was an important step forward for the multilateral trading system and the Doha Development Agenda (DDA). One of its key decisions was to deliver a substantive post-Bali work program that would allow current negotiations to advance and the Doha Round to be concluded as quickly as possible. Achieving outcomes in the three core areas of agriculture, nonagricultural market access, and services will be key to securing a substantive outcome, even as work advances in all areas.

Agriculture

Agriculture negotiations continue to hold the key to the success of the overall Doha negotiations. One objective is to further discipline and to reduce the use of production- and trade-distorting domestic support. Such support tends to divert resources away from more productive uses in the country providing the subsidy and to affect trading partners negatively. Many developing countries, and notably LDCs, lack financial resources and therefore find themselves in the latter situation. In the field of export competition, the parallel elimination of all forms of export subsidies and disciplines on all export measures with equivalent effect, as foreseen in the current DDA negotiation, would therefore also constitute a particularly positive outcome for developing countries.

On market access, the negotiations aim at substantial improvements. LDCs would be exempt from tariff reductions and would benefit from duty-free and quota-free market access for at least 97 percent of their products in developed-country markets. Given the rising share of developing countries in the trade of agricultural products, LDCs would also benefit from tariff reductions in those markets. For the C-4 countries (Benin, Burkina Faso, Chad, and Mali) that launched the cotton initiative in 2003 in the context of the Doha negotiations, as well as other cotton-producing LDCs, an outcome that would lead to a faster elimination of all forms of export subsidies, a capping and reduction of cotton-specific domestic support, and better market access (as close as possible to a quota-free duty-free regime) for cotton imports from LDCs would be of great value.

Nonagricultural market access

The negotiations on nonagricultural market access (NAMA) seek to reduce or, as appropriate, eliminate tariffs, including tariff peaks, high tariffs, and tariff escalation, as well as nontariff barriers, particularly on products of export interest to developing countries. Lowering tariff uncertainty (that is, reducing currently bound tariffs and increasing binding coverage, even when the new bound rate is above the applied rate) would contribute to reduced trade costs. Negotiations shall take into account the special needs and interests of developing and least developed country participants, including through less than full reciprocity in reduction commitments. Negotiators developed an array of provisions to take account of the different needs of different groups of countries, including through less than full reciprocity in reduction commitments. They include special provisions for (a) least developed countries; (b) developing countries with low binding coverage; (c) small, vulnerable economies; and (d) recently acceded members, as well as special flexibilities for developing members applying the Swiss formula. Despite considerable progress in many of these areas, WTO members have been unable to reach consensus on key aspects of the negotiations, such as the degree to which some members should liberalize their markets, the extent to which binding coverage should be increased, and the degree to which developed and developing countries should contribute differently. Efforts are currently under way to explore alternative options that could deliver a meaningful result while providing a higher degree of comfort to all WTO members.

The large number of PTAs that have been negotiated over the past decade may falsely suggest that the importance of NAMA to improve market access is decreasing. In reality, evidence suggests that a higher number of agreements have not been matched by an expansion in trade flows that receive preferential treatment (see section 2.4). In a report from 2011, the WTO Secretariat concluded that “the share of preferential trade was surprisingly small,” as only 16 percent of global merchandise trade receives preferential treatment (WTO 2011). That factor highlights the considerable economic importance of concluding the NAMA negotiations, as they hold the key for improving market access conditions for products of export interest to developing countries and LDCs on an MFN basis, where rules of origin would not constitute a barrier to trade and the associated administrative compliance costs would be lower.

Services

Along with agriculture and NAMA, trade in services is the third key pillar of the DDA. Currently, members are discussing what the post-Bali work program should contain, taking into account members’ different levels of ambition, the development dimension, and balance within the services topics, as well as with the other two pillars of the DDA. Should G-20 and other WTO members agree on and conclude an ambitious services element in the work program, much could be gained for developing countries, including LDCs. In market access, widening and deepening services commitments, perhaps to levels achieved in PTAs or as actually applied, would help open services markets for developing-country suppliers, including through the movement of natural persons (mode 4). At the same time, access commitments that developing-country members might choose to make could foster growth by encouraging services investment, improving the quality and reducing the cost of local infrastructure, and facilitating local participation in GVCs. Similarly, a successfully concluded work program could lead to new disciplines on domestic regulation, having significant benefits for developing countries. The resulting improvement in transparency and easing of administrative burdens could help developing-country service suppliers enter and serve export markets at lower cost, including through mode 4 (see section 2.3).

Progress on specific LDC issues²⁹

The Bali package for LDCs represented an important step in helping LDCs further benefit from the opportunities being created under the multilateral trading system. It builds on the decisions made by members earlier on market access for LDCs, to facilitate their greater participation in world trade—in the areas of both goods and services. Since the adoption of the Bali package, there has been progress in all areas, which is further described below, and it is clear that development and LDC issues remain central to the negotiations.

Duty-free and quota-free market access

Achieving full DFQF market access has been a long-standing aspiration of LDCs in the multilateral trading system. According to the Bali decision on DFQF market access, developed-country members not providing DFQF market access for at least 97 percent of products originating from LDCs, defined at the tariff line level, are required to work toward improving their existing DFQF coverage, before the next Ministerial Conference (that is, the 10th WTO Ministerial Conference). Other developing countries are encouraged to do the same. Exceptions to DFQF treatment remain in a few sectors and in a limited number of developed markets. One key trading partner of LDCs—the United States—has yet to provide 97 percent DFQF access to LDC products. Most of the other developed-country members of the G-20 grant close to 100 percent. Countries should be careful about including products that constitute the bulk of LDC exports

²⁹ Most of the low-income economies in the LDC category defined by the World Bank are least developed countries as recognized by the United Nations. A majority of them are also WTO members. Hence, progress in the WTO on LDC issues is of direct relevance to the LDCs.

in the (up to 3 percent) exempted tariff lines. A number of developing countries, including G-20 members like China, India, the Republic of Korea, and Turkey, also offer comprehensive DFQF access to LDC products, and there are indications that other developing countries are to follow.

LDC services waiver

WTO members adopted a waiver at the Ministerial Conference in 2011 enabling members to grant preferential market access to LDC services and services suppliers without providing the same access to other members. That waiver represented a significant step forward in the multilateral trading system, since unilateral preferences under the framework of the General Agreement on Trade in Services were not possible earlier. Regular discussions are now taking place in the Council for Trade in Services aiming to operationalize the waiver. It also provides the LDC group with a platform to update the membership on their consultations with potential preference grantors and creates a positive pressure for results.

A high-level meeting of the Services Council took place in February 2015 after the submission of a collective request by LDCs. That request identified some 56 specific preferential measures in 74 services subsectors. For example, it requested improved access for services supplied through the presence of natural persons (mode 4). Some of the measures proposed include the easing of quotas, removal of restrictions on independent professionals or contractual service suppliers, recognition of qualifications of LDC professionals, and accreditation of LDC institutions. Others include reducing fees and administrative formalities for LDC suppliers with respect to visas or work permits (see section 2.3).

Some 21 delegations indicated specific sectors and modes where they intend to provide preferences to LDC services and service suppliers. Several members reiterated their commitment to providing LDCs with preferential access across a broad range of sectors and promised to notify their preferences in line with the pronouncements made. Two-thirds of G-20 members have given such indications. At the meeting, some G-20 members also announced measures that LDCs had specifically identified in their collective request (for example, India in the case of waiving fees, Canada in the case of facilitating work authorization procedures, and Japan with respect to resident permit fees). So far, 15 WTO members have submitted formal notifications on preferences accorded to LDCs; 9 of which are members of the G-20 (Australia, Canada, China, India, Japan, Mexico, the Republic of Korea, Turkey, and the United States).

The Bali decision recognized the need to strengthen the service capacity in LDCs and already helped initiate a number of technical assistance and capacity-building activities in favor of LDCs. That decision recognizes the continued low participation of LDCs in services trade (0.68 percent of global commercial services exports in 2013) and also reflects their smaller domestic supply base (see box 1.1).

Preferential rules of origin

The Bali decision on preferential rules of origin for LDCs contains a set of multilateral guidelines that WTO members could consider in developing their rules of origin framework, including illustrations of how preferential rules of origin can be simplified in order to make it easier for LDCs to comply. A number of important trading partners of LDCs, and members of the G-20 (for example, Canada in 2003, the European Union in 2011) have already implemented reforms in their generalized system of preferences' RoO criteria with positive results for LDCs (see section 2.4). For instance, the simple transformation process introduced by the European Union in 2011 in textiles and clothing has helped LDCs increase their exports to the EU market. Similarly, Canada introduced lower percentage thresholds in conferring origin along with other flexibilities. In the WTO Committee on Rules of Origin, the LDC group has specifically noted that in two markets (Japan and the United States), RoO conditions have not significantly changed since the 1970s.

3.2. Preferential trade issues

This section examines the implications for LIDCs of G-20 cooperation through preferential trade agreements. It provides some general observations about potential positive spillovers and risks, as a starting point for further detailed exploration and discussion of the extent to which those apply, and what strategies could be employed to address them.

Potential positive spillovers

In a number of areas, PTAs negotiated by G-20 countries (referred to as “G-20 PTAs” hereafter), such as the Trans-Pacific Partnership or the Transatlantic Trade and Investment Partnership, have potentially positive effects on LIDCs. First, deeper economic integration among G-20 countries can stimulate global GDP growth. And boosting global demand creates the potential for greater income gains in LIDCs. Implementation of many of the growth-stimulating trade actions committed to by G-20 leaders in 2014 at the Brisbane Summit may occur through PTAs. Second, G-20 PTAs are likely to generate positive spillovers where they result in liberalization that is broadly nondiscriminatory.

“Deep” PTAs, including many either already agreed or under negotiation by G-20 members, tend to contain numerous features that are effectively nondiscriminatory. First, liberalization in services trade is often nondiscriminatory in effect. Barriers to services trade removed through PTAs are often regulatory issues (see section 2.3). The benefits of such regulatory streamlining cannot normally be applied in practice to PTA parties. Although that is not the case for some forms of liberalization in services—for example, movement of natural persons, foreign equity restrictions, or foreign direct investment screening—most service liberalization leads to openness that can benefit LIDCs. In addition, the reduction of services transaction costs in G-20 economies—for example, in transport and logistics—through G-20 PTAs can also induce a reduction in costs for LIDC trading partners. Second, many “domestic” policy reforms brought about through G-20 PTAs are likely to have positive spillovers for LIDCs, as their firms have equal access to the benefits as those from a G-20 country. That includes reforms to competition, intellectual property protection, transparency, or anticorruption. Third, reforms to trade facilitation through G-20 PTAs—complementing implementation of the WTO Trade Facilitation Agreement—lower trade costs in ways that benefit exporters and importers in LIDCs as well as the participants in the PTA.

Economic integration through G-20 PTAs can also serve as a “laboratory” for reform that can be applied more widely, including by LIDCs. LIDCs can, in principle, assess the impacts of certain approaches to economic integration pursued through G-20 PTAs and can then adopt those that have been most effective.

Potential risks and strategies to address them

The most commonly discussed impact of G-20 PTAs on LIDCs is through trade diversion and preference erosion, brought about by the lowering of tariffs among PTA partners. Although the low average tariffs among G-20 members reduce the scale of potential negative impacts, there is a risk that lowering tariffs on particular products through PTAs could erode competitiveness for LIDCs. The first step in helping offset that effect is through an analysis of the potential for trade diversion and preference erosion. That analysis can be a basis for adjusting preference schemes to offset negative spillovers, including through expanding preferences to a wider range of products, providing deeper tariff preferences, or both. The extent to which rules of origin limit preference utilization and could be streamlined for LIDCs should also be considered. Providing certainty of preferential access over a long time horizon is also likely to be important in this regard (see box 3.2).

Box 3.2: Africa and Preferential Market Access

Traditionally, low-income developing countries (LIDCs) in Africa have benefited from nonreciprocal preferences for their merchandise exports in developed-country markets. The United States and the European Union, for instance, have provided preferential (duty-free) access to exports from LIDCs through the African Growth and Opportunity Act (AGOA) and the Everything but Arms (EBA) initiative, respectively. Also, a series of bilateral or regional preferential market access schemes exist between LIDCs and G-20 countries that are reciprocal. They include several economic partnership agreements with the European Union. Some G-20 developing economies, such as China and India, are also increasingly granting preferential market access to least developed countries (LDCs).

The extent to which those preferences really influence the market access of LIDCs to developed-country markets may be diminished by the fact that oil, metals, and minerals—which constitute a large share of African exports—are almost duty-free under most-favored-nation treatment. Furthermore, developed countries often employ policies of tariff escalation, making it more difficult for LIDCs to export agricultural and mining products in their processed form. Those policies are likely to inhibit preferential market access for agro-based manufactured goods. Preferential market access for producers from LIDCs is also affected by the fact that nonreciprocal initiatives often exclude simple manufactured products, such as leather goods, ceramics, glass, and steel.

Furthermore, AGOA and EBA do not have long time horizons, and piecemeal renewals can hinder investment in developing LIDCs' production capacity by creating uncertainty (Nayyar and Nee 2014). Consider, for instance, AGOA, which was initially enacted in 2000 for eight years—at a time when Africa's production capacity was extremely low, with some countries in dire need of foreign investment to enable the manufacture of AGOA-eligible goods. Investors were reluctant to make large investments, such as in high-technology processing plants, owing to concerns that they might not recover their capital before the expiry of AGOA. That reluctance was compounded by other barriers that investors already face in African countries, including infrastructural and institutional weaknesses. In 2004, the duty-free provisions of AGOA were extended to 2015. However, that extension was also insufficient to attract investors on a large scale given the involved risks. The resulting lack of capacity is evidenced by the fact that just a handful of countries have been able to exploit the opportunity provided by AGOA. To eliminate the uncertainties, the AGOA Extension and Enhancement Act of 2015 provides another extension of 10 years.

Restrictive rules of origin (RoOs) that require a high percentage of value to be added to a product in the partner LIDC for it to be eligible for preferential treatment can nullify the value of preferences, especially given the proliferation of global value chains. AGOA RoOs, for example, are strict, with inputs generally having to come from the United States or other AGOA countries. The AGOA Extension and Enhancement Act of 2015, however, allows AGOA countries greater flexibility to combine inputs to meet the RoO for AGOA-eligible products. It also seeks to simplify the requisite paperwork to verify compliance. That holds considerable promise given the evidence, which shows that relaxation of strict RoOs for apparel under a special waiver in AGOA resulted in the rapid growth in exports of participating countries (Collier and Venables 2007).

The EBA initiative also faces several similar issues, although it has no expiry date—unless the country graduates from LDC status. By focusing preferences on those that need them the most, the EBA scheme reduces competitive pressure on LDCs and provides them with greater opportunity to export. At the same time, reciprocal preferential trade agreements, such as Economic Partnership Agreements between the European Union and LIDCs in Africa, require the latter to open up their markets to greater import competition. That may inhibit the growth of a strong industrial sector in LIDCs, which is precisely what the nonreciprocal preferential access schemes are trying to encourage.

The potential introduction through PTAs of new regulatory standards not found in the WTO disciplines is often identified as a risk for LIDCs. Although that is not true of all G-20 PTAs, many include so-called 21st-century issues not covered by existing WTO disciplines. That both influences and is influenced by trade patterns. For example, some evidence indicates that integration through PTAs—when it includes “deep” regulatory and other cooperation beyond tariff liberalization—stimulates GVC-related trade (see box 2.3). To the extent that PTAs among G-20 countries result in standards that are likely to apply to any trading partner, they could have important consequences for LIDCs. That requires careful analysis, and the potential implications are likely to be mixed and to vary greatly, depending on specific approaches taken through PTAs. Where G-20 PTAs result in reduced compliance costs for outsiders—for example, where LIDCs are required to comply with only one standard set through a PTA, rather than each party’s standard—that could lead to reductions in trade costs for LIDCs.

Across both tariff and nontariff issues, G-20 members could publish evaluations of the impact of their PTAs on LIDCs and the wider global economy. Such evaluations would facilitate an open discussion about the costs and benefits involved. The evaluations could be underpinned by a more intensive effort by international organizations and other partners to build understanding of the issues involved.

A key systemic risk often identified is that G-20 PTAs potentially undermine the multilateral trading system, which gives even the smallest developing-country members a voice in setting trade rules, and are therefore of critical importance for LIDCs. The delivery of the multilateral TFA (along with other decisions discussed in section 3.1) following active negotiation and conclusion of PTAs by G-20 countries suggests that it is possible for PTAs and multilateral negotiations to advance in parallel. Leadership by G-20 members to deliver a post-Bali work program and to conclude the remaining elements of the Doha Round, as well as to advance more ambitious multilateral liberalization in future, is therefore essential for LIDCs. Further work to monitor the coverage and implementation of PTAs—with an eye toward understanding the future potential for “multilateralizing” certain provisions, should WTO members determine that is an effective path—would also be helpful.

Aid for Trade has a critical role in managing many of those potential risks. It can encompass a number of approaches, including the following:

- Building competitiveness in existing and new goods and services to offset any erosion of competitiveness brought about through G-20 PTAs, and helping ease adjustment pressures caused by preference erosion.
- Helping LIDCs take advantage of opportunities opened up through nondiscriminatory liberalization through G-20 PTAs, with services trade likely to be a fruitful area of focus.
- Lowering trade costs faced by LIDCs. Although they have fallen in recent decades, trade costs have fallen more slowly for LIDCs than for higher-income countries. Addressing the sources of these costs would help make LIDCs more competitive (see section 1.1), regardless of developments under way in G-20 PTAs.
- Helping achieve compliance with standards established through G-20 PTAs (as well as existing standards), thereby strengthening their capacity to participate in GVCs.
- Continuing to provide targeted and focused Aid for Trade to the LDCs, including through the Enhanced Integrated Framework, to help build their supply-side capacity and strengthen their trade-related infrastructure, in order to ensure that the LDCs benefit from the different market access opportunities being provided to them.

3.3. Investment issues

G-20 countries can work with LIDCs to help them strengthen domestic policies, which in turn can create a business environment that enhances foreign direct investment. Focus areas can include reducing uncertainty, increasing transparency, and opening trade. G-20 countries can also partner with international organizations in developing a clear agenda to tackle current investment-related issues affecting LIDCs.

However, the role of G-20 countries in facilitating greater FDI into LIDCs must also focus on measures that promote outward FDI from the former to the latter, including the following:

- Targeted incentives to promote internationalization of home firms by promoting expansion in LIDCs;
- Cooperation arrangements between LIDCs' IPAs and G-20s' agencies promoting outward investment—setting up committees and working groups to address specific and well-targeted challenges regarding outward FDI into LIDCs;
- A review of which locational investment incentives in G-20 countries generate investment diversion away from LIDCs (see box 3.3) and exploration of avenues for their reform;
- Initiatives, perhaps in collaboration with multilateral institutions, that provide insurance or guarantees against political risk, which continues to be perceived as an important constraint³⁰ to investment into LIDCs; and
- Development of materials, databases, communication activities, and workshops to provide investors with information on key geographic, political, macroeconomic, sectoral, legal, and regulatory characteristics of LIDCs.

G-20 countries can develop clear, transparent, and participatory mechanisms to promote responsible business conduct by their investors abroad, in particular to ensure that they comply with the legislation of the host country. Responsible business conduct means above all complying with the laws in important areas like human rights, labor regulation, environmental questions, and financial accountability. It also involves managing relations with local organizations, local communities, trade unions, and the media, among others. At times, FDI ventures in developing countries even aspire to higher standards (for example, with respect to labor and environment) than those embodied in local regulations (WTO 2014). In fact, despite difficulties associated with monitoring suppliers (and subcontractors), evidence suggests that leading multinational enterprises in GVCs are becoming more successful in ensuring that developing-country suppliers meet their standards (Hofstetter and Mueller 2013).

G-20 countries can also support LIDCs in designing frameworks that underpin responsible business conduct. Governments in LIDCs need to design and implement good laws and regulations. But beyond that, they have to support that private sector conduct by (a) setting clear policy frameworks, (b) combining public resources with business resources, and (c) supporting publicly responsible business conduct (OECD 2011). G-20 governments can support LIDCs in designing those efficient frameworks to facilitate responsible business conduct from international investors. The OECD, for instance, designs guidelines for multinational enterprises; those guidelines are a comprehensive instrument to which governments have committed to promote globally.

³⁰ Second most important constraint to FDI in developing countries, according to MIGA (2013).

Box 3.3: Incentives and Investment Diversion from LIDCs to G-20 Economies

Financial incentives lower the operational costs of companies investing in G-20 countries. At the same time, most low-income developing countries (LIDCs) cannot afford the costs related to the creation of attractive incentives plans and packages for investors. Hence, incentives offered for investment in G-20 economies can divert investment away from a priori more cost-competitive LIDCs. Such incentives are likely to be especially important for export-oriented efficiency-seeking investments compared with those for sectors like mining. Some international experts, however, have argued that there is little evidence that such incentives are effective in diverting investment away from low-income countries.

The following are a few (nonexhaustive) examples of tax and nontax incentives that have been commonly used to promote investment in several G-20 countries:

- The Czech Republic's incentive packages between 2010 and 2013 amounted to more than one-third of the capital expenditures for the relevant projects.
- Regarding the cost of incentives per job created by project, governments in Brazil, India, and the United States have all paid about \$200,000 per job position.
- In the case of the European Union, investments by Dow Chemicals in Germany and General Motors in Hungary cost US\$800,000 and US\$300,000, respectively, per position.
- The state of Goiás in Brazil gave a US\$125 million subsidy to Usina Canada for a US\$25 million investment in an ethanol facility in 2009, which came to over US\$200,000 per job.
- In India, the state of Gujarat won a 2008 competition for the right to produce the Tata Nano. Although subsidy estimates vary widely, they start at about US\$800 million, far above the cost of Tata's investment.
- In the United States, Tesla's investment in Nevada would include (a) a 100 percent real and personal property tax abatement through June 2024, (b) a 100 percent state and local sales tax abatement on equipment purchases and construction materials for 20 years, (c) a 100 percent modified business tax abatement through June 2024, and (d) transferrable tax credits valued at US\$195 million.

Taking into account the problems and risks associated with the use of investment incentives in advanced economies, international experts have searched policies to somehow control and regulate them. One of the most interesting examples is the EU regional aid policy. It sets a maximum level of subsidy for every region in the European Union. Under this EU framework, the highest subsidies are allowed only in the poorest regions, and some richer areas are even banned from providing regional aid to companies.

Annex I
Low-income developing economies

Low-Income Economies

Afghanistan	Gambia, The	Nepal
Bangladesh	Guinea	Niger
Benin	Guinea-Bissau	Rwanda
Burkina Faso	Haiti	Sierra Leone
Burundi	Kenya	Somalia
Cambodia	Korea, Dem. People's Rep.	Tajikistan
Central African Republic	Liberia	Tanzania
Chad	Madagascar	Togo
Comoros	Malawi	Uganda
Congo, Dem. Rep.	Mali	Zimbabwe
Eritrea	Mozambique	
Ethiopia	Myanmar	

Low- and Middle-Income Economies

Armenia	Kiribati	São Tomé and Príncipe
Bhutan	Kosovo	Senegal
Bolivia	Kyrgyz Republic	Solomon Islands
Cameroon	Lao PDR	South Sudan
Cabo Verde	Lesotho	Sri Lanka
Congo, Rep.	Mauritania	Sudan
Côte d'Ivoire	Micronesia, Fed. Sts.	Swaziland
Djibouti	Moldova	Syrian Arab Republic
Egypt, Arab Rep.	Mongolia	Timor-Leste
El Salvador	Morocco	Ukraine
Georgia	Nicaragua	Uzbekistan
Ghana	Nigeria	Vanuatu
Guatemala	Pakistan	Vietnam
Guyana	Papua New Guinea	West Bank and Gaza
Honduras	Paraguay	Yemen, Rep.
	Philippines	Zambia
	Samoa	

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