Attached is the document titled “World Development Report 2020 – Trading for Development in the Age of Global Value Chains” prepared by the World Bank Group for the October 19, 2019 Development Committee Meeting
World Development Report 2020
Trading for Development
in the Age of Global Value Chains

World Bank Group and International Monetary Fund
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WHAT IS A GVC?

A global value chain (GVC) involves the fragmentation of production across countries. **Backward participation** is importing foreign inputs for processing and further export. **Forward participation** is exporting inputs that are incorporated in the exports of other countries.

TRADING FOR DEVELOPMENT IN THE AGE OF GVCS

GVC participation is driven by economic fundamentals but policy choices matter – both to enhance participation and to ensure benefits are shared and sustained.
Main Messages

The rise of GVCs and their impacts on development

- The rise of trade and global value chains (GVCs) accelerated economic growth and reduced poverty, but since the global financial crisis of 2008, the growth of trade has been sluggish and the expansion of GVCs has slowed. The last decade has seen nothing like the transformative events of the 1990s, such as the integration of China and Eastern Europe into the global economy and the conclusion of NAFTA and the Uruguay Round. At the same time, labor-saving technologies could reduce demand for labor at home and abroad, and trade conflict could lead to a retrenchment or a segmentation of GVCs.

- What does this mean for developing countries seeking to link to GVCs, acquire new technologies and grow? Is there still a path to development through GVCs?

- GVCs have two special features that make them even more powerful in supporting growth than standard trade. Hyperspecialization enhances efficiency, and durable firm-to-firm relationships promote the diffusion of technology, and access to capital and inputs. The result is increased productivity and income growth: a one percent increase in GVC participation is estimated to boost per capita income growth by more than one percent, about twice as much as standard trade. GVCs also create more jobs (primarily through scale effects) and reduce poverty.

- But the gains from GVC participation are not distributed equally. Large corporations that outsource parts and tasks to developing countries have seen increasing markups and profits, while markups for the producers in developing countries are declining. Within countries, exposure to trade with lower-income countries and technological change contributes to the reallocation of value added from labor to capital, and raises the premium for skilled workers.

- GVCs also pose challenges for the environment. The main environmental costs stem from increased trade in intermediate goods (leading to greater CO₂ emissions from transportation than standard trade), excess waste, and strained natural resources due to hyperspecialization. On a more positive note, the concern that firms locate the most polluting stages of production in countries with relatively lax environmental regulation is not borne out by the data.

What drives GVC participation, and what is the appropriate policy response?

- GVC participation is uneven across regions, countries, and sectors. GVC growth has been concentrated in machinery, electronics, transportation, and in the regions specializing in those sectors: North America, Western Europe, and East Asia. Most countries in these regions participate in complex GVCs, producing advanced manufactures and services, and engaged in innovative activities. In contrast, many countries in Africa, Central Asia, Latin America and South Asia still produce commodities for further processing in other countries.

- Evidence shows that GVC participation is determined by fundamentals such as factor endowments, location, and institutions, but policies also play an important role. For example, attracting foreign direct investment—though openness, investor protections, stability, a favorable business climate and, in some cases, investment promotion—can remedy the scarcity of capital, technology, and management skills. Liberalizing trade at home while negotiating trade liberalization abroad can overcome the demand and supply constraints of a small domestic market. Improving customs and border procedures, promoting competition in
transport and logistics services, and improving port structure and governance can address the disadvantage of a remote location. Participating in deep integration agreements can spur institutional and policy reform. And because GVCs thrive on the flexible formation of networks of firms, improving contract enforcement can reduce risk around GVC investment.

- Contrary to concerns about new labor-saving technologies reducing trade, overall GVC participation is enhanced. The emergence of new products, as well as new technologies of production and distribution is creating both opportunities and risks. The evidence suggests that on balance these technologies enhance the contribution of GVCs to development.

- National policies should be tailored to the specific circumstances of countries. To transition from commodities to limited manufacturing, then to more advanced manufacturing and services, and finally to innovative goods and services, requires different policy priorities depending on the country context and types of GVCs at issue. Skills, connectivity, and regulatory institutions become more important as countries move through these transitions. Where policies on a national scale are too costly and take time, “second best” policies, such as special economic zones (SEZs), can enhance GVC participation in the short term.

- Beyond policies to facilitate participation in GVCs, policies to share the benefits and attenuate any costs are needed. These include labor market policies to help workers disrupted by structural change; better enforcement of labor regulations; appropriate tax policies to attract GVCs without undermining revenues; and environmental protection measures, particularly efforts to reduce production subsidies and carbon pricing. Private sector initiatives are also important, particularly to promote sustainability standards across supply chains.

- The multilateral trading system also has a role to play, particularly for developing countries on the margins of GVCs. Today, however, trade conflict between major countries is leading to protection and policy uncertainty and beginning to disrupt GVCs. To sustain beneficial trade openness, countries can deepen trade cooperation to address the remaining barriers to trade in goods and services, as well as other measures that distort trade, such as subsidies and the activities of state-owned enterprises. Regional initiatives can help countries to advance this agenda pending progress at the multilateral level.

- All countries need to cooperate within the rules-based trade system. Traditional trade negotiations may deliver more meaningful outcomes if the major developing-country traders engage as equal partners and even leaders, instead of seeking special and differential treatment; if the large industrial countries continue to place their faith in rule-based negotiations, instead of resorting to unilateral protection; and if all countries together define a negotiating agenda that reflects both development and business priorities.

- In parallel, there is a need to widen cooperation beyond trade policy to include taxes, data flows, competition, and infrastructure.

**Operationalizing the WDR 2020**

- The World Bank Group (WBG) has a rich set of tools for helping developing countries put in place the trade and investment policies and build the infrastructure needed to connect to GVCs. The WBG also offers solutions to help countries enhance the benefits and promote inclusion. These tools can be especially effective when teams work together across the WB, IFC, MIGA
and across VPUs, to ensure policies, infrastructure, and technical assistance are coordinated to support the development of new sectors.

- The WBG offering can be improved in several dimensions:
  - More attention to trade policy in WBG client countries is needed. Trade policy is rarely used as a prior action in development policy lending. Given the importance of trade and GVCs to growth, more effort could be made to encourage governments to reduce trade barriers and expand trade.
  - Another way to strengthen operationally the GVC and trade agenda is by enhancing support for regional integration. The beyond-the-border nature of many of the challenges to GVC participation suggests that WBG multi-country interventions should be bolstered.
  - Policies for participation in GVCs and those for inclusion and sustainability should also be more central to the WBG framework for identifying countries’ national priorities, including CPFs, CAS, and CPS.
  - Finally, new and more granular data are needed for effective policy making. Firm-to-firm relationships are one reason why GVCs have such positive impacts on development, but country/sector/product data are too aggregate to assess determinants, benefits, and costs of participation from the firm perspective. Increasing trade uncertainty may lead to a reshaping of global supply chains. Developing countries will need advice on how to manage the new environment. Better data is also needed to provide evidence-based policy recommendations for the digital economy, where market concentration, mark-ups, and competition issues are of increasing concern. Investment in data and analysis requires more and deeper collaboration with other international organizations, academia, and private data providers, combined with a renewed commitment to the WBG knowledge agenda.

**Questions for Discussion**

1. What policy actions should governments prioritize at the national, regional and multilateral level to reinvigorate trade and GVC formation, especially considering rising trade tensions? What is the role for targeted industrial policy?

2. What policies help most to integrate GVCs into the local economy and create linkages with local suppliers and SMEs?

3. What does the rise of technology, platform firms and cross-border data flows imply for existing trading relationships and the comparative advantages of developing countries? How can countries guard against the risks and take advantage of the opportunities created?

4. What are the priority areas of action for the World Bank Group to enhance governments’ potential to participate in GVCs and reap their benefits? What should the World Bank Group do differently?
WDR2020: Trading for Development in the Age of Global Value Chains

The new face of trade

1. International trade expanded rapidly after 1990, powered by the rise of global value chains (GVCs). Two features distinguish GVCs from traditional trade: firms can specialize in a specific part or task, and do not have to produce a whole good; transactions typically involve durable relationships between firms rather than anonymous spot market transactions.

2. The rise of trade and GVCs accelerated economic growth and reduced poverty. It enabled an unprecedented convergence: poor countries grew faster and began to catch up with richer countries. These gains were driven by the fragmentation of production across countries and the growth of connections between firms. Parts and components began crisscrossing the globe as firms looked for efficiencies wherever they could be found. Productivity and incomes rose in countries that became integral to GVCs—China, Vietnam, and Bangladesh, among others. And the steepest declines in poverty occurred in precisely those countries.

3. However, it can no longer be taken for granted that trade will remain a force for prosperity. Since the global financial crisis of 2008, the growth of trade has been sluggish, and the expansion of GVCs has slowed down. The last decade has seen nothing like the transformative events of the 1990s—such as the integration of China and Eastern Europe into the global economy and the conclusion of major trade agreements such as NAFTA and the Uruguay Round.

4. At the same time, potentially serious threats have emerged to the successful model of labor-intensive, trade-led growth. First, the arrival of labor-saving technologies such as automation and 3D printing, could draw production closer to the consumer and reduce demand for labor at home and abroad. Second, trade conflict among large countries could lead to a retrenchment or a segmentation of GVCs.

5. What does this mean for developing countries seeking to link in to GVCs, acquire new technologies and grow? Is there still a path to development through GVCs?

6. That is the central question of this report. It examines the degree to which GVCs have contributed to growth, jobs, and reduced poverty—and to inequality and environmental degradation. It spells out how national polices can reignite trade growth and ensure that GVCs are a force for sustainable development rather than divergence. Finally, it identifies inadequacies in the international trade system that have fomented disagreements among nations and provides a roadmap to resolve them through greater international cooperation.

7. The report concludes that GVCs can continue to boost growth, create better jobs and reduce poverty, provided developing countries implement deeper reforms and industrial countries pursue open, predictable policies. The evidence shows that technological change to-date has been more a boon than a curse for trade and GVCs. The benefits of GVC participation can be widely shared and sustainable if all countries enhance social and environmental protection.
**GVC participation is uneven across regions, countries, and sectors. After a sharp increase in the 1990s and early 2000s, growth has stagnated.**

8. GVCs have existed for centuries. But they grew swiftly from 1990 to 2007 as technological advances—in transportation, information, and communication—and reduced trade barriers caused manufacturers to extend production processes beyond national borders (figure 1). GVC growth was concentrated in machinery, electronics, transportation, and in the regions specializing in those sectors: North America, Western Europe, and East Asia. Most countries in these regions participate in complex GVCs, producing advanced manufactures and services, and engaged in innovative activities (figure 2). In contrast, many countries in Africa, Central Asia, Latin America, and South Asia still produce commodities for further processing in other countries.

**Figure 1 GVC trade grew fastest in the “long 1990s” but stagnated after the crisis**

Source: WDR team calculations using the EORA26 database, Johnson and Noguera (2012), and Borin and Mancini (2019).

Note: The GVC participation corresponds to the share of world exports that flow through at least two borders. For 1990–2015, the GVC participation measure is computed as the ratio of the sum of foreign value added embodied in countries’ gross exports (backward linkages) and domestic value added embodied in third countries’ exports (forward linkages) to gross exports. The data used to compute the GVC participation measure is the EORA26 database. For 1970–90 the GVC participation measure is backcasted using Johnson and Noguera (2012) estimate of VAX, an older measure of value-added content of bilateral trade. While the difference between VAX and the GVC participation measure is sizable, the correlation of the change over the overlapping years (1990–2010) is 0.97. This method allows reconstructing a long series covering 1970–2015 rather than simply 1990–2015 for which the EORA26 database is available.
In recent years, trade and GVC growth have slowed, especially since the global financial crisis (figure 1). One reason is the slowing of overall economic growth, and especially investment. Another reason is the slowing pace and even reversal of trade reform. The integration of China and Eastern Europe into the global economy in the 1990s and the conclusion of major trade agreements such as NAFTA and the Uruguay Round undoubtedly spurred the global expansion of GVCs through that decade and into the 2000s. Meanwhile, the fragmentation in the dynamic regions and sectors has matured. China is producing more at home.\(^1\) In the United States, a booming shale sector reduced oil imports by one-fourth between 2010 and 2015 and slightly reduced the incentives to outsource manufacturing production.\(^2\)

Recent increases in protection could also affect the evolution of GVCs. On the one hand, protectionism could facilitate reshoring of existing GVCs or their shifts to new locations. On the other hand, unless policy predictability is restored, any expansion of GVCs is likely to remain on hold. When future market access is uncertain, firms have an incentive to delay investment plans until uncertainty is resolved.

GVCs raise productivity and incomes, create better jobs, and reduce poverty

GVCs have two special features which make them boost productivity and growth, to an even greater extent than standard trade. Hyperspecialization enhances efficiency, and durable firm-to-firm relationships promote the diffusion of technology and access to capital and inputs along chains. For example, in Ethiopia, firms participating in GVCs are more than twice as
productive as otherwise similar firms that participate in standard trade. Firms in other developing countries also show significant productivity gains from GVC participation. A one percent increase in GVC participation is estimated to boost per capita income growth by more than one percent, about twice as much as standard trade (figure 3). The biggest growth spurt typically comes when countries transition out of exporting commodities and into importing-to-export basic manufacturing products, such as garments, as happened in Bangladesh, Cambodia, and Vietnam.

**Figure 3** The boost to per capita GDP growth is largest in countries after they enter simple manufacturing GVC tasks

![Graph showing the boost to per capita GDP growth](image)

Source: WDR Team using data from WDI and EORA.  
Note: The event study quantifies cumulated boost to real income growth in the 20 years following a switch from a lower to a higher stage of GVC engagement. See box 3.3 in the full Report for the methodology.

12. Eventually, however, these high growth rates cannot be sustained without further transition to progressively more sophisticated forms of participation. But the transitions from limited manufacturing to more advanced manufacturing and services, and then to innovative goods and services, are more demanding in terms of skills, connectivity, and regulatory institutions.

13. GVCs also deliver better jobs, but the relationship with employment is complex. Firms in GVCs tend to be more productive and capital-intensive than other (especially non-trading) firms, so their production is less job-intensive. The fall in the labor is highest in sectors witnessing increasing concentration and the concomitant emergence of superstar firms. For example, across local labor markets in Mexico and the United States, workers with a high exposure to domestic robotization have witnessed a reduction in employment and wages relative to those with more limited exposure. But this does not necessarily mean that aggregate employment goes down overall. Productivity gains lead to an expansion in firm output and may lead to compositional shifts in the structure of the economy and could create jobs by spurring the growth of sectors with high labor shares. The result is that GVCs are associated with structural transformation in developing
countries, drawing people out of less productive activities and into more productive manufacturing and services activities.

14. Firms in GVCs are unusual in another respect: across a wide range of countries, they tend to employ more women than non-GVC firms. They contribute, therefore, to the broader development benefits that come from increased female employment.

15. Because they boost income and employment growth, participation in GVCs is associated with reduced poverty. In a cross-section of countries, growth in GVC participation is associated with a fall in the number of people living on less than $5.50 a day (in 2011 international prices). Trade in general reduces poverty primarily through growth. Because gains in economic growth from GVCs tend to be larger than from trade in final products, poverty reduction from GVCs also turns out to be greater than that from conventional trade. Within Mexico and Vietnam, for example, the regions that saw more intensive GVC participation also saw faster growth in incomes and greater reduction in poverty.

**But the gains from GVCs are not equally shared and they are a mixed blessing for the environment**

16. The gains from GVC participation are not distributed equally across and within countries. Large corporations that outsource parts and tasks to developing countries have seen increasing markups and profits, suggesting that cost reductions from GVC participation are not being passed on to consumers. At the same time, markups for the producers in developing countries are declining, which reduces the incentives for local firms to get involved and inhibits competition. Such a contrast is evident, for example, in the markups of garment firms in the United States and India, respectively. Within countries, exposure to trade with lower-income countries and technological change contributes to the reallocation of value added from labor to capital. Inequality can also increase in the labor market, with a growing premium for skilled work and stagnant wages for unskilled work. GVCs may offer more women jobs but seem to have even lower glass ceilings: women are generally found in lower value-added segments; it is hard to find women owners and managers.

17. GVCs are, similarly, a mixed blessing for the environment. The main environmental costs of GVCs are associated with more—and more distant—trade in intermediate goods, which lead to greater CO₂ emissions from transportation than standard trade, and with excess waste (especially in electronics and plastics) from more trade and packaging of goods. The growth generated by GVCs can also deplete vital natural resources, especially if accompanied by production or energy subsidies, which encourage excess production. On the more positive side, the concern that firms may choose to locate the most polluting stages of production in countries where environmental norms are laxer is not borne out by the data.

**New technologies on balance promote trade and GVCs**

18. The emergence of new products, new technologies of production, like automation and 3D printing, and new technologies of distribution, like digital platforms, is creating both opportunities and risks. But the evidence so far suggests that on balance these technologies are enhancing the contribution of GVCs to development.

19. Innovation is leading to the emergence of new traded goods and services. In 2017, 65 percent of trade was in categories that did not exist in 1992. Trade in intermediate goods became
more prevalent, and entirely new products entered global trade. For example, trade in information technology products tripled over the past two decades, as trade in digitizable goods such as CDs, books, and newspapers steadfastly declined from 2.7 percent of the total goods trade in 2000 to 0.8 percent in 2018. Technological developments are likely to continue to produce product churning.

20. Automation does encourage countries to use less labor-intensive methods and reduces demand for the labor-intensive products of developing countries. This drives down the labor share of income and shapes the relative returns to capital, unskilled, and skilled labor, thereby exacerbating inequality in the labor market. The pace and impacts of these technologies on manufacturing and production processes are highly uncertain. However, the evidence to-date for reshoring is limited and the evidence on automation and 3D printing suggests that these technologies have contributed to higher productivity and a larger scale of production—as such, they have increased the demand for imports of inputs from developing countries (figure 4).

21. Similarly, digital platforms firms are reducing costs of trade and making it easier for small firms to break out of their local markets and sell both goods and services to the world. But there are signs that the rising market power of platform firms is affecting the distribution of the gains from trade.

**Figure 4 Increased adoption of industrial robots in the North has promoted imports of material inputs from the South**

![Graph showing increased imports of material inputs from the South](image)

Source: Artuc, Bastos, and Rijkers 2018.
Note: The figure depicts the automation-induced increase in imports of material imports from developing countries into developed countries by broad sector over 1995–2015. The change in imports of parts is measured in log points; a 0.10 increase in log points is roughly equivalent to a 10% increase in imports.
National policies can enhance GVC participation and its benefits by liberalizing trade, improving connectivity, attracting capital, and developing skills

22. In principle, breaking up complex products like cars and computers allows countries to specialize in simpler parts and tasks, making it easier for those at an early stage of development to participate in trade. But a country’s ability to participate in GVCs is by no means assured. Instead, participation is shaped by its economic fundamentals and its policy choices.

23. GVC participation is driven primarily by factor endowments, location, and institutions. But these fundamentals alone need not dictate destiny. Policies also play an important role. Attracting foreign direct investment can remedy the scarcity of capital, technology, and management skills. Liberalizing trade at home while negotiating trade liberalization abroad can overcome the constraints of a small domestic market, liberating firms and farms from the limits of domestic demand and local inputs. Improving transportation and communication infrastructure and introducing competition in these services can address the disadvantage of a remote location. And participating in deep integration agreements, which cover domestic regulation in areas like investor, worker, and environmental protections, can spur institutional and policy reform, especially when complemented by technical and financial assistance.

24. Based on the analysis of the drivers of various types of GVC participation, we identify the policies that promote integration into more advanced GVCs (table 1). We explain in the Report that national policies can and should be tailored and prioritized according to the specific circumstances of countries and to specific forms of participation in GVCs.
Table 1 Different factors and policy priorities underlie the transitions between different forms of GVC participation

<table>
<thead>
<tr>
<th>Fundamentals</th>
<th>Policy priorities</th>
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<tbody>
<tr>
<td><strong>Endowments</strong></td>
<td>Foreign direct investment: adopt supportive investment policy and improve the business climate</td>
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<td></td>
<td>Finance: improve access to banks</td>
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<td></td>
<td>Labor costs: avoid rigid regulation and exchange rate overvaluation</td>
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<td></td>
<td>Trade infrastructure: reform customs; liberalize transport services; invest in ports and roads</td>
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<td></td>
<td>Basic ICT connectivity: liberalize ICT services; invest in ICT infrastructure</td>
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<td><strong>Geography</strong></td>
<td>Advanced logistics services: invest in multimodal transport infrastructure</td>
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<td></td>
<td>Advanced ICT services: expand high-speed broadband</td>
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<tr>
<td><strong>Market size</strong></td>
<td>Access to inputs: reduce tariffs and NTMs; reform services</td>
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<td></td>
<td>Market access: pursue trade agreements</td>
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<tr>
<td><strong>Institutions</strong></td>
<td>Standardization: harmonize or mutually accept standards</td>
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<td></td>
<td>Governance: promote political stability</td>
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<td></td>
<td>Governance: improve policy predictability; pursue deep trade agreements</td>
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<td></td>
<td>Standards certification: establish conformity assessment regime</td>
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<td></td>
<td>Contracts: enhance enforcement</td>
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<tr>
<td></td>
<td>Intellectual property rights: ensure protection</td>
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Source: WDR 2020 team.
Note: ICT = information and communication technology; NTM = nontariff measure.

25. Attracting foreign direct investment is important at all stages of participation. It requires openness, investor protection, stability, a favorable business climate and, in some cases, investment promotion. Countries use contrasting approaches in different sectors. Some, such as those in Southeast Asia that have benefited from foreign investment in goods, still restrict foreign investment in services. Others try to draw in investment through tax exemptions and subsidies, but they risk antagonizing their trading partners, and the net benefits may not be positive. Nevertheless, countries like Costa Rica, Malaysia, and Morocco were successful in attracting transformative GVC investments by large MNCs through successful investment promotion strategies.

26. Overvalued exchange rates and restrictive labor regulations raise the cost of labor, preventing labor-abundant countries from taking advantage of their endowments. For example,
while manufacturing labor costs in Bangladesh are in line with average GDP per capita, in comparator countries in Africa they are twice the average.

27. Connecting to markets through trade liberalization helps countries expand their market size and gain access to the inputs needed for production. For example, large unilateral tariff cuts by Peru in the first decade of the 2000s is associated with faster productivity growth and expansion and diversification of GVC exports.\textsuperscript{17} Trade agreements (PTAs) expand market access and have been a critical catalyst for GVC entry for a wide range of countries, including Lesotho, Honduras, Dominican Republic, Bangladesh, Mauritius, and Madagascar, among others. Because the goods and services economies are increasingly interlinked, reforming services policies – in telecommunication, finance, transport, and a range of business services, needs to be part of any strategy for promoting GVC activity.

28. For many goods traded in GVCs, a day’s delay is equal to imposing a tariff in excess of 1 percent. Improving customs and border procedures, promoting competition in transport services, improving port structure and governance, and opening the domestic market to global providers of third-party logistics and express delivery services—all are strategies that can reduce trade costs related to time and uncertainty.

29. GVCs thrive on the flexible formation of networks of firms. Therefore, attention should be paid to contract enforcement, to ensure that legal arrangements within the network are stable and predictable. A survey in GVC sectors across 14 countries in Sub-Saharan Africa\textsuperscript{18} found that just 43 percent of lead firms outsourced critical business and technical services, with the majority choosing to bring the required expertise in-house. Weak legal and regulatory enforcement mechanisms contribute significantly to underdevelopment of local services markets. The ability to enforce contracts relating to intellectual property is particularly important for more innovative and complex value chains, and it can be supported through deep PTAs.

30. Other pro-active policies can deepen beneficial engagement in GVCs:

- Countries can promote linkages between domestic SMEs and GVC lead firms through coordinating local suppliers, providing access to information about supply opportunities, and supporting training and capacity building of SMEs. Countries should also avoid forcing GVC investors to meet local content requirements or require the use of local partners. Brazil’s poor experience with localization in the automotive sector suggests such policies can lead to inefficiencies and undermine value chain competitiveness over time. Examples of successful supplier linkage programs include Guinea and Chile in mining, Kenya and Mozambique in agriculture, and the Czech Republic in electronics and automotive.

- For countries participating in agricultural value chains, policies to support integration of smallholders are particularly important. In Africa, 55 percent of jobs and more than 70 percent of the earnings of the poor come from agriculture. Ensuring that smallholders benefit requires additional support, such as through agricultural extension services, access to risk management instruments (e.g. insurance), and coordination to exploit scale through producer organizations.

- To strengthen domestic capacity to support upgrading in value chains, countries need to invest in human capital.\textsuperscript{19} The Penang Skills Development Center in Malaysia is an example of an industry-led training center that played a key role in supporting Malaysia’s upgrading in electronics and engineering GVCs.
• Targeted policies to unblock constraints to GVC trade can be effective. For example, support for investment in critical infrastructure to support high opportunity sectors – including transport, energy, and industrial and commercial infrastructure – may be catalytic. In Bangladesh, the introduction of bonded warehouses combined with the ‘back-to-back’ letters of credit (ensuring access to working capital) has been credited with driving the country’s integration into the apparel GVC. Pro-competition regulation and enhanced antitrust enforcement can also assuage the risks associated with excessive concentration, particularly in digital markets.

31. Improving the business and investment climate for GVCs on a national scale can be costly and take time, so many countries set up special economic zones (SEZs) to create islands of excellence. But the results so far have been mixed and suggest that SEZs are successful only when they address specific market and policy failures. Getting conditions right, even in a restricted geographical area, requires careful planning and implementation to ensure that the needed resources—such as labor, land, water, electricity, telecommunications—are readily available, that regulatory barriers are minimized, and that connectivity is seamless. Successful zone programs, in places like China, the UAE, Panama, and emerging in Ethiopia, as well as the numerous examples of SEZs that fail to attract investors or grow, offer important lessons for SEZs for different types of GVC participation.

Policies to assist those left behind and to mitigate environmental damage can help ensure GVC benefits are shared and sustained

32. Beyond policies to facilitate participation in GVCs, complementary policies are needed to share the benefits and attenuate any costs. These include labor market policies to help workers who may be hurt by structural change; mechanisms to ensure compliance with labor regulations; appropriate tax policies to attract GVCs without undermining tax revenues; and environmental protection measures. The private sector also has an important role to play, particularly through the adoption of environmental, social, and governance standards across their supply chains.

33. As GVCs expand, some workers will gain, but in some locations, sectors, and occupations, workers may lose. Adjustment assistance is needed to help workers adapt to the changing patterns of production and distribution that GVCs bring about. Adjustment policies can include facilitating labor mobility and equipping workers to find new jobs. Because unemployment resulting from structural change tends to be persistent, wage insurance can help keep workers employed in lower paying jobs without experiencing income loss, leading to better long term outcomes. For example, Denmark’s successful ‘flexicurity’ model gives employers the freedom to hire and fire workers with few restrictions but supports workers with generous unemployment benefits combined with strong support for employability through active labor market programs. Enhanced investments in skills, through formal education and retraining programs, can facilitate adjustment in the longer term.

34. Labor regulations, when well designed and enforced, can help ensure the safety and health of workers. Private firms can contribute, especially when their consumers are sensitive to labor conditions in the firm’s global operations. But there is also an important role for national policy supported by international cooperation, in establishing and monitoring appropriate labor standards. In Vietnam, working conditions improved when firms participated in the ILO-IFC Better Work Program alongside complementary government action to publicly disclose the names of firms that fail to meet key labor standards.
35. Pricing environmental degradation can prevent GVCs from magnifying misallocations of resources. Prices of goods should reflect both their economic and socio-environmental costs. Appropriate pricing of environmental damage would also encourage innovation in environmentally friendly goods and production processes. Reducing distortions, such as those created by energy and production subsidies, and shifting towards taxing carbon, would improve resource allocation and reduce CO₂ emissions. In addition, environmental regulation, especially for specific industries and pollutants, can curb damage caused by GVC-related production and transport.

36. Private environmental, social, and governance standards complement government policy and regulation in the above areas. Driven by national regulatory pressures, but even more by consumer and social demand, private standards transfer knowledge and technology from FDI to firms and workers in developing countries. In countries where the broader policy environment is weak, global standards adoption supports entry and upgrading in GVCs by firms in developing countries by overcoming problems of asymmetric information and negative reputational effects. As such, compliance with private standards can help firms enter GVCs while also delivering on sustainability goals. Governments play a critical facilitative role here, too, by investing in effective and efficient quality infrastructure for inspection, testing and certification purposes.

**International cooperation supports beneficial participation in GVCs, but the international trading system is under threat**

37. The international trade system is especially valuable in a GVC world. GVCs span boundaries, and policy action or inaction in one country can affect producers and consumers in other countries. International cooperation can help address the policy spillovers and achieve better development outcomes. Because the costs of protection are magnified when goods and services cross borders multiple times, the gains from coordinated reduction of barriers to trade are even larger with GVCs than in the case of conventional trade. Because foreign investment and GVCs are inextricably linked, creating an open and secure climate for investment is vital for GVC participation, especially by capital-scarce countries.

38. Developing countries have benefited enormously from the rules-based trade system. The trade system has provided developing countries with guarantees against trade discrimination, incentives to reform, market access around the globe, and recourse in case of disputes—even against the trade heavyweights.

39. Today, however, there is tremendous pressure on the international trade system. Three decades of trade-led catch-up growth in developing countries has contributed to shifts in economic power across countries and increased income inequality within countries. The increasing symmetry in the size of countries is placing in sharp relief the persistent asymmetry in their levels of protection. The trade system has adapted to changes in the past, but it has faltered in recent years, most notably with the failure of the Doha negotiations. Regional initiatives, such as the EU and NAFTA, have also been hurt by disagreements among member countries.

40. Most seriously, trade conflict between major countries is leading to protection and policy uncertainty and beginning to disrupt GVCs. If trade conflict worsens and causes a slump in investor confidence, effects on global growth and poverty could be significant—more than 30 million people could be pushed into poverty (measured as income levels below $5.50 a day), and global income could fall as much as $1.4 trillion.
41. To sustain beneficial trade openness, it is essential to “walk on two legs.” The first priority is to deepen traditional trade cooperation to address the remaining barriers to trade in goods and services, as well as other measures that distort trade, such as subsidies and the activities of state-owned enterprises. In parallel, there is a need to widen cooperation beyond trade policy to include taxes, regulation, and infrastructure.

**Deepen trade cooperation to further liberalize trade in goods and services, while restraining industrial subsidies**

42. Looking ahead, the first priority should be to deepen traditional trade rules and commitments. International cooperation has so far delivered uneven openness in goods and services. Trade liberalization is overdue in agriculture and services, and some industrial goods remain restricted in certain markets and by non-tariff measures. Trade preferences have reduced the goods tariffs the poorest countries face—but not the tariffs these countries impose on their imports. Special and differential treatment for developing countries has accommodated sluggish reform, ultimately inhibiting GVC participation and integration into the global economy.

43. Meanwhile, the escalation of tariffs in some of the world’s largest markets—which serve to protect higher value added production—inhibits processing activities in agroindustry and other labor-intensive areas such as apparel and leather goods in developing countries. In addition, restrictive rules of origin curtail sourcing options. Increasingly, subsidies and state-owned firms are distorting competition, and existing rules in these areas do not guarantee competitive neutrality. For services, international negotiations have delivered little liberalization beyond that undertaken unilaterally. Key GVC-relevant services, such as air and maritime transportation, which most need coordinated liberalization, have been excluded from negotiations because of the power of vested interests.

44. Traditional trade negotiations may deliver more meaningful outcomes if the major developing-country traders engage as equal partners and even leaders, instead of seeking special and differential treatment; if the large industrial countries continue to place their faith in rule-based negotiations, instead of resorting to unilateral protection; and if all countries together define a negotiating agenda that reflects both development and business priorities.

45. In parallel, regional initiatives can help countries make progress in line with regional policy priorities, whilst also enhancing countries’ potential to participate in GVCs and guard against the risks. Regional coordination of industrial policy may be particularly important in the context of developing competitive regional spaces for location of GVC-oriented activities. It could include targeting of common regional infrastructure such as transport corridors, trade gateway infrastructure, energy, ICT, industrial parks, and potentially sector-specific infrastructure. There might be a role for regional initiatives to define regional (rather than local) content and value addition policies, allowing for more cross-border cooperation and specialization. In this regard, the African Continental Free Trade Area (AfCFTA) presents an important opportunity to boost trade and deepen regional integration in Africa. Negotiators should make eliminating traditional barriers a top priority.
**Widen cooperation beyond trade—to capital taxation, competition policy, data flows and infrastructure**

46. Taxing capital, the big winner from globalization, is increasingly difficult in a GVC world, with global firms, fragmented production, and the growth in intangible assets like intellectual property. Cooperation should focus on ensuring fair access to tax revenues, which rich countries need to help displaced industrial workers and poor countries need to build infrastructure. Ultimately, a joint approach to greater use of destination-based taxation, such as the value added tax, could eliminate the incentive to shift profits and compete over taxes, but the consequences for tax revenue in small developing countries would need to be considered. Higher value added taxes coupled with low labor taxes would shift more resources to workers and away from capital. Meanwhile, other measures against tax-base erosion and income-shifting, proposed by the OECD, IMF and the World Bank, could alleviate challenges around domestic resource mobilization.

47. Consumer concern is growing about data flows and the international expansion—and concentration—of digital firms, both of which play an important role in GVCs. The risks range from privacy abuses in data-based services to anti-competitive practices in platform-based services, including abuse of dominance. Governments are resorting to data localization laws to limit the cross-border mobility of data, and strict rules on the handling of data domestically. Competition laws too remain explicitly nationalist in focus, and cooperation in bilateral or regional trading agreements has been limited. The solution may be a new type of bargain: regulatory commitments by exporters to protect the interests of consumers abroad in return for market-access commitments by importers, as is the case for data flows.

48. But developing countries must not be left out of such arrangements, because that would undermine their productive engagement in GVCs. International support can help them both to make regulatory commitments in areas of export interest (as in data-based services) and to extract commitments from their trading partners when they open their markets (as for the enforcement of competition policy).

49. Coordination failures in infrastructure investment affect GVC investment, expansion, and upgrading especially in the poorest countries. Lessons come from the WTO Trade Facilitation Agreement, which encourages countries to coordinate improvements in trade facilitation. Each individual country does not fully internalize the benefits to foreign traders of reductions in domestic trade costs, and gains are larger when governments on both sides of the border invest in expediting trade simultaneously. The agreement addressed this coordination problem and provides low-income countries with financial assistance for the necessary investments. A similar approach may help exploit synergies for other infrastructural investment in transport, energy, and communication.

**Operational implications of the WDR2020**

50. The World Bank Group (WBG) has a rich set of tools for helping developing countries to put in place the trade and investment policies and build the infrastructure needed to connect to GVCs. The WBG also offers solutions to help countries enhance the benefits and promote inclusion. The WBG offering can be improved in important ways.
51. The WBG support for GVCs ranges from developing long-term strategies for deep structural reform to targeted policy interventions on shorter-term challenges, specific issues, or challenges in specific sectors. IFC investments and MIGA guarantees can be deployed to enhance the ability of private sector firms to participate in GVCs. Other tools available through the World Bank, IFC and MIGA include financial support to governments, direct investment in the private sector, political risk guarantees, and other financial instruments for de-risking private sector investment in areas critical to private sector development, such as infrastructure. WB and IFC advisory services support business climate reforms and private sector growth.

52. The components of support depend on the type of country. In lower-income countries, gender, informality, or rural/urban fragility issues are increasingly discussed in the context of country assessments. In middle-income countries, understanding the enabling environment is critical. In upper middle-income contexts, issues of leveraging trade for knowledge-based growth tend to be addressed. The assessment of country needs is usually carried out in the context of Country Economic Memoranda (CEMs), Country Partnership Strategies (CPS), and Country Private Sector Diagnostics (CPSDs), or preparatory work for Systematic Country Diagnostics (SCDs). Given the importance of firm-to-firm relationships in GVCs, CPSDs can be particularly well suited to address countries’ demand for GVC integration, since their aim is to identify synergies between IBRD, IFC, and MIGA support instruments for private sector-led development. In other cases, the analytical assessment is done at the request of the client country, through Reimbursable Advisory Services (RAS) or other AAA instruments, and it can cover only partial aspects of the GVC agenda.

53. Governments’ needs for WBG support goes beyond financing to their public and private sector. High-quality data and analysis, assistance with designing and implementing policy and regulatory interventions, and support with capacity building to enable GVC participation are equally important. An example of a data public good directly relevant to the GVC agenda is the World Bank Services Trade Restrictions Database, covering 103 countries (79 developing) and financial, basic telecommunications, transport, distribution and selected professional services, which allows countries to benchmark the openness of their service industries against peers.

54. IBRD advisory interventions in combination with lending and with IFC investment, are instrumental in many areas of the GVC and trade agenda. Combining lending and advisory, for example, has allowed for improvements in infrastructure quality in Pakistan, a critical necessity for countries wishing to participate in GVCs. Deployed in combination with the United National Industrial Development Organization (UNIDO) and the United States Agency for International Development (USAID) infrastructure projects, the WBG support in Pakistan has resulted in the establishment of the Pakistan National Accreditation Council, now fully recognized by the International Laboratory Accreditation Cooperation and the International Accreditation Forum. In addition, the National Physical and Standards Laboratory was renovated and its equipment upgraded, leading to internationally recognized services (see WDR 2020 for more detail). As a result, in March 2013 Pakistan could start exporting fish again to EU supermarket chains, following a six-years long restriction. The same measures also allowed the export of mangoes and mandarins to more than 50 countries, increasing their total exports of fully traceable produce from 10,000 tons in 2009 to 400,000 tons in 2018. These and other examples of relevant programs and illustrative projects are reported in Table 2 and Table 3, respectively. The tables demonstrate the breadth of WBG support available but are not intended to cover exhaustively the full agenda of relevant interventions.
### Table 2

<table>
<thead>
<tr>
<th>Endowments</th>
<th>Limited manufacturing to advanced manufacturing and services</th>
<th>Advanced manufacturing and services to innovative activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commodities to limited manufacturing</strong></td>
<td>Access to Finance: SMEs IDA guarantee and other financing, infrastructure finance</td>
<td>Access to Technology: Technology adoption surveys, Infodev</td>
</tr>
<tr>
<td><strong>FDI:</strong> Investment policy and promotion, SEZ support; TA on policies (investment institutional framework and entry restrictions); investment incentives</td>
<td><strong>UNIT LABOR COSTS:</strong> Productivity and competitiveness diagnostics (firm, sector, and country)</td>
<td><strong>SKILLS:</strong> Entrepreneurship ecosystem assessments, management practice surveys, Programmatic Clusters and Impact Evaluation; business and soft skills trainings TAs</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td><strong>TRADE AND TRANSPORT INFRASTRUCTURE:</strong> Trade and transport infrastructure lending; trade facilitation lending and support programs</td>
<td><strong>CONNECTIVITY AND ADVANCED LOGISTICS:</strong> Transport and trade infrastructure and trade Connectivity and advanced logistics: Trade and transport infrastructure and trade facilitation lending and support programs; connectivity and advanced logistics</td>
</tr>
<tr>
<td><strong>BASIC ICT INFRASTRUCTURE:</strong> Africa moonshot initiative, IFC digital infrastructure financing</td>
<td><strong>ADVANCED ICT AGENDA:</strong> “DICs” regional and national ICT programs financing and TA; ICT infrastructure sharing legal framework</td>
<td></td>
</tr>
<tr>
<td><strong>Market size</strong></td>
<td><strong>TARIFFS, NTM REFORMS FOR ACCESS TO INPUTS:</strong> Trade policy advice, prior actions in DPOs</td>
<td><strong>BROAD-BASED LIBERALIZATION OF DOMESTIC GOODS, SERVICES, INVESTMENT, AND DOMESTIC REGULATORY POLICY:</strong> opening markets and competition TA and DPLs, improving antitrust frameworks, and supporting reforms for programmatic competition policy agenda</td>
</tr>
<tr>
<td><strong>INVESTMENT SERVICES AND OTHER BEYOND THE BORDER AND BORDERLESS ISSUES IN MARKET ACCESS:</strong> Trade policy reforms and NTBs simplification/elimination in DPOs, PTAs negotiation and WTO accession TA; regional trade investment projects; DTIS</td>
<td><strong>INNOVATION:</strong> Quality infrastructure toolkit</td>
<td><strong>INNOVATION ECOSYSTEMS:</strong> PERs for STI and SME programs, toolkits, IPFs</td>
</tr>
<tr>
<td><strong>Institutions</strong></td>
<td><strong>POLITICAL STABILITY:</strong> Derisking of markets in FCVs</td>
<td><strong>POLICY PREDICTABILITY:</strong> Reform toolkits, TAs, and RAS (including quality assurance to implementation and EGOV reforms, support for macro stability and current account management)</td>
</tr>
<tr>
<td></td>
<td><strong>CONTRACTS AND IPR PROTECTION:</strong> Toolkits, TAs, and RAS (including quality assurance to implementation of indicator based reforms, business entry and operations, quality and standards infrastructure, etc.)</td>
<td><strong>INNOVATION ECOSYSTEMS:</strong> PERs for STI and SME programs, toolkits, IPFs</td>
</tr>
</tbody>
</table>
### Table 3

<table>
<thead>
<tr>
<th>Endowments</th>
<th>Limited manufacturing to advanced manufacturing and services</th>
<th>Advanced manufacturing and services to innovative activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI: IFC manufacturing strategy leveraging global buyers for PSD in client countries; Myanmar and Ethiopia investment entry restrictions removal</td>
<td>ACCESS TO FINANCE: IDA SME Guarantee Facility</td>
<td>ACCESS TO TECHNOLOGY: Bangladesh ecoindustrial parks and resilience</td>
</tr>
</tbody>
</table>

**Access to Finance**
- Colombia, Indonesia, and Kenya infrastructure finance projects
- **Access to Technology**: Bangladesh ecoindustrial parks and resilience

**Unit Labor Costs**: Jordan equitable growth and job creation DPL; Serbia competitiveness and jobs

**Skills**: Colombia and Mexico managerial capabilities extension advisory; Macedonia Skills Development and Innovation Support Project

**Trade and Transport Infrastructure**: Ethiopia DPL logistics pillar; Great Lakes TF IP; in 12 African countries TA ($40m); SADC industrialization

**Connectivity and Advanced Logistics**: Algeria machine learning to fight fraud in customs

**Basic ICT Infrastructure**: Haiti GVC and blockchain agenda; EASSy IFC investment for broadband connectivity

**Advanced ICT Agenda**: Digital CASA (infrastructure and services)

**Tariffs, NTM Reforms for Access to Inputs**: World Bank Services Trade Restrictions Database

**Broad-Based Liberalization of Domestic Goods, Services, Investment, and Domestic Regulatory Policy**: Armenia new aviation policy DPOs, PIR, and TA; Serbia pharmaceutical sector entry barriers removal; Philippines new competition law; Kuwait new competition authority; Moldova comprehensive state-aid framework

**Market size**
- TA to analyze effects and support implementation of ACFTA; Ethiopia, Somalia and Uzbekistan WTO accession support; Mauritius, Seychelles, Madagascar, Malawi, Mozambique, and Zambia program to accelerate regional economic integration, particularly through agricultural trade

**Investment, Services, and Other Beyond the Border and Borderless Issues in Market Access**: Northern Cyprus World Bank engagement; Pakistan National Accreditation Council

**Political Stability**: Great Lakes SCP, Bashra Investment Commission SIRIM

**Governance and Policy Predictability**: AITTA TA; AGOA impact evaluation KP; SADC Industrialization Strategy with GVC roadmaps, strengthening RPO, and data access support TA

**Contracts and IPR Protection**: Egypt, Arab Rep. PSD for inclusive growth DPF; Pakistan PIR and TA

**Innovation Ecosystems**: Argentina, Kenya, and Peru IPFs; Croatia STI IP and Entrepreneurship Venture Capital Project; Georgia National Innovation Ecosystem IP
55. The WBG support also covers targeted policies, including SEZ, linkages between multinationals and local companies, and sectoral work. Support for SEZs seeks to allow countries to participate in GVCs in those cases in which improving the business climate and connectivity or solving specific market failures at the national scale is too slow or too costly. In Vietnam, the World Bank is engaged with multinational corporations and the government in an innovative supplier development program. Meanwhile, coordinated support from the World Bank and IFC, combined with close collaboration with private sector, has allowed the establishment of a comprehensive program to upgrade the cashew sector and increase domestic value-addition in Côte d’Ivoire. The program included the establishment of four cashew “platforms” and eight satellite hubs that provide training, access to inputs, and market information, along with processing demonstration units. This was supported with access to new sources of finance for smallholders, notably through the introduction of a warehouse receipts system that enables processors to use unprocessed nuts as collateral for working capital loans.

56. Other WBG support measures help to ensure that international integration leads to sustained export growth and income gains for the largest spectrum of firms and workers. For example, in Afghanistan, a World Bank project, in coordination with a leading global food manufacturer, focused on producer organizations and compliance with international standards, resulting in the integration of female smallholders into the high-value global saffron supply chain. An innovative pilot project—the Northern Areas Reduction of Poverty Initiative, supported by the World Bank in cooperation with the Bangladesh Export Processing Zones Authority—brought women from the poorest regions of northern Bangladesh into Dhaka for training and employment in the EPZ-based garment factories. The program provided information and awareness building in the local community to help overcome social stigma, transport and living stipends, and a comprehensive program of technical and life skills training, followed by employment. Results from the pilot were positive – more than 6,000 women (two-thirds of those who completed training) took up employment in the garment factories at earnings above the industry average. And initial evidence indicates positive spillovers from the pilot relating to the spread of information and changing social norms, which opens new opportunities for other women in these northern villages.

57. Finally, the WBG is expanding its initiatives to help potential losers from integration adjust, and to ensure that GVC participation is environmentally sustainable. For example, in a bid to address the negative environmental impacts of the concentration of industrial production, the World Bank, in partnership with UNIDO and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), developed an international framework for eco-industrial parks in 2017 to guide policy makers on establishing environmentally sustainable eco-industrial parks (EIPs) that go beyond compliance. EIPs are becoming increasingly important frameworks to overcome sustainability challenges within the scope of the United Nations’ Sustainable Development Goals (SDGs). Countries such as Denmark, France, Japan, and Korea, among many others, have leveraged EIPs to promote more inclusive and sustainable action to improve industrial competitiveness in line with climate change goals.

58. But more could be done. Given the importance of trade and GVCs to accelerate development, policies for participation in GVCs and to improve GVC inclusivity and sustainability should be more central to the WBG framework for identifying countries’ national priorities. It is rare to find “integration into GVCs” mentioned as a development objective in country partnership frameworks (CPFs). A search of over 65 CPFs prior to November 2018 produced only one
instance, Uruguay, in which GVCs are listed as a development objective (Table 4). No other CPF mentions GVCs explicitly. Similarly, no prior action in the database of development policy loans (DPLs) deployed by the World Bank since 2004 mentions GVCs.

Table 4: CPF Uruguay, Development Objectives

<table>
<thead>
<tr>
<th>URUGUAY</th>
<th>2016</th>
<th>LGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building resilience to shock</td>
<td>Objective 1</td>
<td>Increase the efficiency of public investment and strengthen management of selected SOEs</td>
</tr>
<tr>
<td>Rebalancing the social compact</td>
<td>Objective 2</td>
<td>Increase the sustainability and efficient use of resources</td>
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<tr>
<td></td>
<td>Objective 3</td>
<td>Promote early childhood development of the bottom 40 percent (B-40)</td>
</tr>
<tr>
<td></td>
<td>Objective 4</td>
<td>Strengthen quality of and access to education to prepare B-40</td>
</tr>
<tr>
<td>Integrating into global value chains</td>
<td>Objective 5</td>
<td>Make logistics and transport networks safer and more efficient</td>
</tr>
<tr>
<td></td>
<td>Objective 6</td>
<td>Increase Research and Development (R&amp;D) opportunities to facilitate integration into global value chains</td>
</tr>
</tbody>
</table>

59. A more explicit recognition of the importance of trade and GVCs for development in the programmatic documents of the WBG could boost development. The WBG Country Partnership Strategies (CPS) and Country Assistance Strategy (CAS) provide the framework for policy priorities and sequencing, and for identifying the most useful role for the WBG. Ensuring that development through trade and GVCs is part of that core framework can accelerate the transition towards more advanced stages of development. For small countries especially, there is no other sustainable growth path. This would help to identify synergies between the trade, investment and private sector development (PSD) agenda and other areas of the World Bank’s work, such as social and human development. Similarly, the WBG should use existing policy commitments and operations, including those on climate change, knowledge sharing, jobs and economic transformation, the human capital project, and regional integration to address problems and challenges identified in the WDR 2020 report.

60. More attention to trade policy is needed. A search of the DPL database shows that of the 884 DPLs since 2003, only a small fraction includes at least one prior action on trade policy and suggests that trade policy has become less prominent over time (Figure 5). A more systematic analysis of the database would be needed to determine whether trade has taken a backseat in client countries and World Bank lending priorities. While tariffs have come down in recent decades, most of that reduction was in the 1990s, and so cannot account for the sharp drop seen in the figure. Moreover, many countries still have high tariffs and non-tariff barriers, such as export and import licenses and other regulatory restrictions. Given the importance of trade and GVCs to growth, trade barriers should be evaluated and relevant policy options considered to help countries integrate globally. On the positive side, prior actions on trade facilitation and logistics have remained important over time and are present in about 13% of loans.
Another way to strengthen operationally the GVC and trade agenda is through regional integration. The beyond the border and borderless nature of many of the challenges to GVC participation suggests that WBG multi-country interventions should be bolstered, particularly in the deployment of public goods, in the prevention of public “bads”, and when greater scale or management of spillovers are needed. The Horn of Africa, the Sahel, Lake Chad, West Africa, East Africa are likely to benefit from a spatial approach to WBG operations. Experience with IPFs shows that regional projects can be more difficult because countries move at different paces and face unique challenges, especially in conflict-affected regions. However, regional projects in both hard and soft infrastructure can be transformative, and greater cooperation is instrumental to spur development of regional value chains. The spatial cross-border agenda could be strengthened by both improving access to financing and by focusing on strategic initiatives underpinned by strong analytics, e.g., by expanding the current pioneer experiences with regional economic memorandums. Continuing to fill the gaps in hard infrastructure is important, but there is also the need to augment the WBG focus on policy and cross-border coordination. In terms of lending, extending the current financial support for cross-border initiatives from investment operations to other forms of financing would represent a considerable step ahead. For example, currently only investment operations can access the IDA regional window. It would be important to also allow countries to access regional IDA to finance coordinated policy reforms (regional development policy operations (DPOs)).

Finally, a strong operational agenda requires better analytical, data-driven underpinnings. Firm-to-firm relationships are a fundamental reason why GVCs will continue to be so relevant for poverty reduction and development, and the heterogeneity in GVC production makes the country/sector lens of analysis obsolete. GVCs are continually evolving, and developing countries need advice on how to manage changes in trade policy and technology. Finally, platform firms and
e-commerce are fundamentally changing trade and raising new policy concerns about competition and data sharing, where evidence-based policy recommendations will be needed. New and more granular data are needed to assess these critical issues for development. More investment in data and analysis will require seeking more and deeper synergies and collaborations with other international organizations, academia, and private data providers.
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACFTA</td>
<td>Association of Southeast Asian Nations - China</td>
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<tr>
<td>AfCTA</td>
<td>African Continental Free Trade Agreement</td>
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<tr>
<td>AGOA</td>
<td>African Growth and Opportunity Act (United States)</td>
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<tr>
<td>CAS</td>
<td>Country Assistance Strategy</td>
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<tr>
<td>CEMs</td>
<td>Country Economic Memorandum</td>
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<td>CPF</td>
<td>Country Partnership Framework</td>
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<tr>
<td>CPS</td>
<td>Country Partnership Strategy</td>
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<tr>
<td>CPSD</td>
<td>Country Private Sector Diagnostic</td>
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<td>DIC</td>
<td>Digital initiative countries</td>
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<tr>
<td>DPL</td>
<td>Development Policy Loans</td>
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<tr>
<td>DPO</td>
<td>Development Policy Operation</td>
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<tr>
<td>DTIS</td>
<td>Diagnostic Trade Integration Study</td>
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<td>EGOV</td>
<td>E-government</td>
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<td>EIP</td>
<td>eco-industrial parks</td>
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<td>EPZ</td>
<td>export processing zones</td>
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<tr>
<td>FCV</td>
<td>fragility, conflict, and violence</td>
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<td>FDI</td>
<td>foreign direct investment</td>
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<tr>
<td>GVC</td>
<td>global value chain</td>
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<tr>
<td>ICT</td>
<td>information and communication technology</td>
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<tr>
<td>IDA</td>
<td>International Development Association</td>
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<tr>
<td>IP</td>
<td>Investment Project</td>
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<tr>
<td>IPF</td>
<td>Investment Project Financing</td>
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<td>IPR</td>
<td>intellectual property rights</td>
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<tr>
<td>KP</td>
<td>Knowledge Portal</td>
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<tr>
<td>MAS</td>
<td>Manufacturing, Agribusiness &amp; Services (IFC)</td>
</tr>
<tr>
<td>NTB</td>
<td>non-tariff barrier</td>
</tr>
<tr>
<td>NTM</td>
<td>non-tariff measures</td>
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<tr>
<td>PER</td>
<td>Public Expenditure Review</td>
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<tr>
<td>PfR</td>
<td>Program-for-Results Financing</td>
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<td>PSD</td>
<td>private sector development</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>PTA</td>
<td>preferential trade agreement</td>
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<tr>
<td>RAS</td>
<td>Reimbursable Advisory Services</td>
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<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
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<tr>
<td>SCD</td>
<td>Systematic Country Diagnostics</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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<tr>
<td>SEZ</td>
<td>special economic zone</td>
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<tr>
<td>SIRM</td>
<td>systemic investor response mechanism</td>
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<tr>
<td>SME</td>
<td>small and medium enterprises</td>
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<tr>
<td>SOP</td>
<td>series of projects</td>
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<tr>
<td>STI</td>
<td>science, technology &amp; innovation</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>TF</td>
<td>trade facilitation</td>
</tr>
<tr>
<td>ULC</td>
<td>Unit Labor Costs</td>
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<tr>
<td>UNIDO</td>
<td>United National Industrial Development Organization</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VPU</td>
<td>Vice Presidential Units</td>
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<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
References


Gollier, C., and J. Tirole. 2015. “Negotiating Effective Institutions against Climate Change.” Economics of Energy & Environmental Policy 0 (2).


End Notes

1 Constantinescu, Mattoo and Ruta 2018.
2 Ibid.
3 Artuc, Bastos, and Rijkers 2018.
4 Graetz and Michaels 2018; Acemoglu and Restrepo 2017; Artuc, Christiansen, and Winkler 2018.
5 In Vietnam, firms that import and export employ more workers than firms that export only and firms that do not trade, controlling for sector and province fixed effects as well as state- and foreign-ownership. In Mexico, firms that have relationships with buyers, as well as firms that export and import, also see higher employment than firms that only import or only export. This holds even when considering regional, sector, and foreign ownership characteristics of firms. Across country, firms that import and export employ more workers than one-way traders or non-traders.
6 The poverty elasticity of growth depends on various factors, including its incidence (changes in inequality), the initial distribution of land, wealth and income, education levels among the poor, other forms of past public investment, as well as local institutions including unions (Ravallion and Datt 2002; Ferreira et al. 2010). For more see: Dollar and Kraay 2002; Ferreira and Ravallion 2008.
7 Markups can increase because prices are higher, or because costs are lower, or a combination of both when markets are not perfectly competitive, meaning that firms can affect prices. The effect on firms’ markups depends on whether the reduction in costs, or the gains from GVC participation, are passed fully onto the consumer through lower prices.
8 Feenstra and Hanson 1996, 1997; Verhoogen 2008.
10 Oldenski 2015 provides evidence that reshoring is not widespread in the United States.
11 Artuc, Bastos, and Rijkers 2018.
12 Freund, Mulabdic, and Ruta 2018.
13 See Garicano and Kaplan 2001; Chen and Wu 2018; Höppner and Westerhof 2018.
14 This positive association is driven by GVC participation in the manufacturing sector only, while there is no association between FDI inflows and countries’ GVC integration of their agriculture, commodities, or services sectors. This could point to a more favorable role of efficiency-seeking or market-seeking FDI that looks for internationally cost-competitive destinations and potential export platforms. See Buelens and Tirpak (2017) for further evidence that bilateral FDI stocks are positively associated with the bilateral backward GVC participation as well as with bilateral gross trade.
15 APEC and World Bank 2018.
16 Johnson and Noguera (2017) also show an important role of the EU and other preferential trade agreements, especially deep agreements, in decreasing the ratio of bilateral value added to gross exports, a sign of growth in global production fragmentation.
18 Farole, Dihel, and Winkler 2016.
19 Evidence from the EORA database shows a U-shaped relationship between GDP per capita and forward GVC integration across countries.
20 Bown and Freund 2019.
22 Nordhaus 2015; Gollier and Tirole 2015.
24 Auriol et al. forthcoming.