

Integration in the Global Economy as an Avenue for Growth for Colombia in a Post–COVID-19 World¹

Drawing on a set of background papers prepared under the “Mision de Internacionalizacion” this note illustrates the potential benefits to Colombia of integrating into global markets through trade, global value chains (GVCs), and foreign direct investment (FDI). It discusses the country’s current participation in the global economy and proposes policy options that would allow Colombia to take full advantage of further integration in activities with higher value-added and local spillovers.

In a post–COVID-19 world, international trade is an avenue for Colombia to grow, improve welfare and generate high-quality jobs. In 2020, Colombia’s gross domestic product (GDP) contracted by 6.8 percent, and the country lost 1.4 million jobs. The World Bank Group expects growth to bounce back in 2021, but the GDP losses will take longer to heal: only by 2022 will GDP return to 2019 levels. International trade contributes to economic growth by increasing the potential market size, incentivizing firms to become more efficient due to competition, and providing know-how via exports, imports, and FDI. Previous tariff reductions in Colombia increased productivity growth.² Trade opening is also pro-poor because poorer households spend relatively more on goods, which are more heavily traded than services.³ Halving tariffs in Colombia would increase the purchasing power of the average household by more than 3.5 percent, but households in the lowest income decile would see gains of more than 10 percent on average.⁴ Reducing trade barriers related to sanitary and phytosanitary measures could raise close to 180,000 people into global middle-class status and 117,000 would be lifted from poverty (at \$5.50-day).⁵ Finally, greater trade openness could increase incomes because Colombian exporters pay 43 percent higher wages than non-exporters.⁶

Colombia exports mainly natural resources, limiting the benefits of trade. Colombia’s export basket is highly concentrated in petroleum products and other traditional exports, and diversification has proven difficult. Crude oil—Colombia’s main export—grew from a quarter of the country’s export basket in 2009 to a third in 2019 even as the price of oil dropped.⁷ Colombia’s top exports have relatively low value-added and generally lack technology, a condition that has not improved over time. Since 2009, less than 2 percent of the total value exported from Colombia could be considered high-technology, suggesting that Colombian firms remain far from the technological frontier.⁸ Realizing the full benefits of trade would require Colombia to modernize its trade basket and diversify into services and high-tech exports.

¹ This note was prepared by Paolo D’Udine (Senior Economist, ELCMU), Nadia Rocha (Senior Economist, ETIRI) and Mariana Vijil (Senior Economist, ELCFN). We would like to thank Esteban Ferro and Alvaro Espitia for their inputs and Jorge Araujo, Caroline Freund, Leonardo Iacovone, Monica Parra and Ekaterina Vostroknutova for their insightful comments.

² Eslava et al., 2013.

³ See also Broda and Weinstein, 2006; Fajgelbaum and Khandelwal, 2016; Porto, 2006; Nicita, 2009; Marchand, 2012; Han et al., 2012; and Vijil et al., 2018; for similar evidence.

⁴ OECD, 2019.

⁵ Estrades and Osorio, 2021.

⁶ Brambilla, Depetris Chauvin and Porto, 2017.

⁷ Analysis from Dudine and Rocha (2021) show that significant concentration in extractive commodities explains the low elasticities of Colombia’s exports to exchange rate depreciation in the last decades.

⁸ According to Lall’s (2000) classification of exports by level of technology.

Further integration in GVCs would boost productivity and incomes. The rise of GVCs has raised incomes due to productivity increases. And these gains are higher than those from the expansion of traditional trade. A 1 percent increase in GVC participation could boost per capita income by more than 1 percent, much more than the 0.2 percent income gain from standard trade.⁹ Backward participation in GVCs (the extent to which firms import inputs to produce goods or services for export) increases productivity: 10 percent growth in GVC participation increases average productivity by close to 1.6 percent. In Colombia, manufacturing firms participating in GVCs¹⁰ were 38 percent more productive than other exporters in 2018 and produced more than 80 percent of non-oil exports. GVC firms also tend to employ more skilled workers and pay a larger wage premium, especially to skilled labor.¹¹ Moreover, firms participating in trade and GVCs tend to provide more and better jobs for women than other firms.¹²

Upgrading from commodities into more sophisticated GVCs would allow Colombia to expand its gains from GVC participation. The benefits from GVCs depend on factors such as the complexity of the product, the value chain where the firm participates, and suppliers' technical and managerial competence.¹³ Firms producing more knowledge-intensive inputs and exports high in domestic manufacturing content have the highest productivity growth. In contrast, trade in unprocessed agricultural goods and commodities has no systematic and statistically significant relationship with growth in per capita GDP. Colombia still belongs to the group of countries that specialize in commodities. More than half of exports from GVC firms are concentrated in oil and commodities (similar to the weight of such products in total exports), suggesting limited transformation of raw material into manufacturing goods with higher value-added, including in agribusiness. Colombia's specialization in oil and other low-value commodities highlights the need to diversify towards manufacturing and services GVCs to maximize benefits in terms of productivity growth. Upgrading into more sophisticated GVCs could also increase female employment and reduce the wage gap in Colombia, where exports are currently highly concentrated in male-intensive activities.¹⁴

FDI can complement trade and catalyze GVC participation. FDI can boost productivity growth and promote economic development. In addition, it can address credit constraints and mitigate the scarcity of technology and managerial skills that limit private sector competitiveness in developing countries. FDI has favorable effects on innovation and productivity due to greater market competition, spillover effects of technology adoption, and superior managerial practices.

There is an untapped potential for FDI to improve productivity and growth in Colombia.¹⁵ Inward FDI flow plateaued around USD 14 billion between 2015 and 2019 as slow (and sometimes negative) growth in non-primary sectors failed to fill the gap left by mining. Inward FDI stock accounts for only 14 percent of GDP. In Mexico and Peru, this ratio is over 25 percent of GDP, and in Thailand and Vietnam, it is nearly 30 percent. Between 2007 and 2018, exits of foreign firms more than offset the gains in investment and job creation from new entrants.¹⁶ Since 2013, the number of greenfield investment projects has increased annually, but

⁹ World Bank (2019).

¹⁰ Firms that import inputs to export.

¹¹ Arenas, Espitia and Winkler (2021).

¹² World Bank- WTO (2020).

¹³ Gereffi, Humphrey, and Sturgeon (2005).

¹⁴ World Bank- WTO (2020).

¹⁵ Aranda and Li (2021).

¹⁶ Part of this pattern could potentially be explained by competition, and by the fact that multinationals may substitute away from labor, introducing more capital- and knowledge-intensive production process.

their average value has decreased. Only 15 percent of the value of FDI activities not destined to the local market are efficiency-seeking FDI. In similar economies, the expected value lies between 20 percent and 40 percent of total investments.¹⁷ Although FDI in services has been increasing since 2010, it has concentrated in direct consumer services, which accounted for 38 percent of FDI in 2019. Professional and financial services accounted for 20 percent and manufacturing for 11 percent. Finally, evidence suggests that multinationals do not seem to benefit Colombian firms through backward linkages (even in the extractive sector).

Colombia has a comparative advantage in the modern services sector. Services' share of employment and GDP is about 70 percent¹⁸ and 73 percent,¹⁹ respectively, but their share of international commerce is only about 14 percent. Moreover, Colombia's services exports concentrate heavily in 'traditional' as opposed to 'modern' services activities. Tourism, for example, accounts for more than 57 percent of total exported services. Traditional services (those that require face-to-face contact) were heavily affected by the COVID-19 pandemic. Thus, countries, like Colombia, that rely heavily on traditional services, are more vulnerable to the COVID-19 shock. Colombia's participation in services trade is growing in importance, and modern services have the most dynamic growth. Digital technology, which facilitates many types of trade in services, is advancing at an explosive pace.²⁰ Particularly now, amid a global pandemic, digital services are necessary and present an opportunity to diversify Colombia's export basket.

Diversifying into manufacturing and modern services requires rethinking trade and integration policy in Colombia. Colombia has historically treated imports and exports as independent activities. However, firms participating in GVCs not only export but also import intermediate inputs that are used in their production and related exports. In this context, trade policy should aim to eliminate import barriers (such as unjustified tariffs and non-tariff measures in goods and services) and costs associated with subpar trade logistics and high costs of moving goods at borders. Higher integration into growth enhancing GVCs also involves building capabilities and skills and diversifying the basket of exported products towards more sophisticated goods and services. Lower barriers in services trade will be essential to achieve this, in addition to strategic efforts aiming at attracting and retaining efficiency-seeking FDI. Institutional coordination is also key to ensuring that different agencies' trade and investment policy actions are coherent and consistent. Table 1 summarizes key reforms related to the investment climate, trade policy in goods and services, trade facilitation and logistics, FDI, and export promotion.

Policy options

1. **FDI – Work towards an integrated FDI policy and mechanisms covering attraction, promotion, facilitation, retention, expansion, and productive linkages to increase efficiency-seeking FDI and attract competence-creating firms.** If new investment opportunities emerge due to near-sourcing after COVID-19, they will require new priorities in investment policy and promotion. However, policies should not just target FDI attraction but also focus on retention. Strategic planning is needed to better align the objectives and value propositions of national and sub-national institutions. Ongoing efforts to design

¹⁷ World Bank, 2017.

¹⁸ Information for the year 2019, based on National Accounts of Statistics Office (DANE in Spanish).

¹⁹ Information for the year 2019, based on the annual average of the Large Integrated Household Survey of Statistics Office (DANE in Spanish).

²⁰ (Duque G. , Rodriguez, Zuluaga, Guayacán, & Díaz, 2020)

and implement a Single Window for FDI and set up an Investor-State Conflict Management Mechanism are critical priorities to strengthen foreign investment retention and expansion. Assessing the effectiveness of tax and non-tax incentive mechanisms is vital considering their fiscal implications and their impact on allocative efficiency. Finally, a multinational-local supplier linkages program informed by previous experiences in Colombia could better nurture local spillovers, including by minimizing risks of weak contract enforcement through third-party quality verification and reputational risks.²¹

2. **Services – Improve market intelligence on export opportunities and enhance inter-agency cooperation to identify and tackle barriers to trade in services are needed to stimulate the sector.** Increasing the institutional profile of the Ministry of Trade, Industry and Tourism (MCIT) with regards to services trade and strengthening inter-agency governance mechanisms are, therefore, priorities. Key reforms that could foster the competitiveness of Colombia’s services exports include adapting the legal framework to new digital models, including in terms of cybersecurity for data and intellectual property rights. Programs that target skills (including foreign languages) and infrastructure improvements related to firm digitalization and ICT services are also needed.
3. **Trade policy – Streamline non-tariff barriers and reduce tariff peaks protecting individual products to improve the competitiveness of downstream producers and enhance competition in the domestic market.** Despite progress in lowering tariff barriers, some sectors remain behind tariff peaks, and tariff dispersion is large. This creates distortions in the domestic market and complexifies customs clearance processes. Furthermore, most import products are subject to non-tariff measures (NTMs) that can add significant trade costs. Estimates suggest that NTMs are not just prevalent but significantly restrictive to trade in Colombia. A revision of tariffs and NTMs (improving regulatory quality) is necessary to avoid distortive trade protection.
4. **Trade facilitation and logistics – Decrease costs and time for trading across borders to improve firms’ participation and upgrading in just-in-time GVCs.** According to the World Bank Doing Business for 2020, an export operation takes an average of 112 hours due to border compliance compared to 13 hours in OECD countries, and the cost to export a container (USD 630) exceeds the average for Latin America (USD 507). Simplifying procedures and better coordination between institutions involved in trade processes are necessary to reduce the time and cost to trade (and its uncertainty, which is particularly costly in terms of export survival for firms participating in GVCs).²² Even though instruments such as the Authorized Economic Operator Program have reduced the burden on some trading firms, they remain shallow. Developing a comprehensive trade facilitation strategy attached to the monitoring and evaluation of time release and port efficiency indicators, implementing a comprehensive set of risk-based compliance strategies, reengineering the Trade Single Window to adapt it to emerging needs such as e-commerce (e.g., couriers and express consignment), implementing a Single Window for Maritime Operations, and conducting a regulatory impact assessment of requirements for access to transport and logistics professions are vital measures to reduce the time and the costs to trade across borders.
5. **Business environment – Enhance competition to foster firm productivity growth and export performance (i.e., export intensity and probability of becoming an exporter).** Only 1.2 percent of all

²¹ Indeed, the substantial time and cost for resolving a commercial dispute related to the quality of supplied goods through a local first-instance court (relative to the average in the region and in high-income OECD countries) may disincentivize Colombian firms participating in GVCs that need to meet stringent quality requirements under hard deadlines, to buy intermediary inputs from local suppliers.

²² Vijil et al. (2019).

goods-producing companies have reached a foreign market.²³ Businesses consider the internal market sufficient.²⁴ Market power in manufacturing firms has increased since 2008, and entry of new firms remains below what would be expected given Colombia's income per capita. These findings suggest that distortions that dampen domestic competition could be affecting allocative efficiency (i.e., firm entry, growth, and exit). Such distortions seem to be induced by the complexity and transparency of regulations, an uneven playing field generated by specific benefits (e.g., tax exemptions) granted to some firms, including SOEs, and restrictions on foreign entry and operation in particular service sectors. Improving the business environment by streamlining tax exemptions and regulations that act as barriers to firm entry and growth (including in the financial sector) and embedding the principle of competitive neutrality in state interventions are vital to increasing firm productivity, and ultimately export performance. Indeed, reducing markups – as would likely occur with more competition – was associated with increased productivity growth and export of manufacturing firms in 2019.²⁵

Net aggregate positive gains from trade open the door for financing programs that ease adjustment costs.

Labor mobility costs across sectors are estimated to be relatively higher in Colombia compared to the average in Latin-America.²⁶ Colombia has implemented active labor market programs concentrated mainly in the development of vocational and technical skills. The national learning service (SENA) expenditures represent 0.3 percent of GDP, more than the average in OECD countries. However, their programs suffer from design and implementation issues; and lack a systematic evaluation of their effectiveness.²⁷ Tailoring active labor market programs to the needs of local labor markets could facilitate the mobility across sectors of displaced workers. Compensating workers forced to relocate for their moving expenses could also promote geographical mobility and increase employment and wages.²⁸ Because firms in the lower end of the productivity distribution might not be immediately able to escape competition through innovation, capabilities upgrading through technological extension programs complemented with access to finance are crucial. The systematic evaluation of such programs has become a priority for the Government. Remaining challenges include the increasing budget restrictions and inter-institutional coordination (specially to consolidate some initiatives). Finally, effective sunset clauses may be needed to provide enough time for workers and firms to adjust.

²³ DNP 2020.

²⁴ Encuesta Ritmo Empresarial September 2020, Report #13; Business Performance Survey carried out by the Colombian Association of Micro, Small and Medium Enterprises second quarter 2020; Gran Encuesta PYME ANIF second quarter 2019.

²⁵ Looty, M., Pop, G., Pena, J., and Stinshoff, C., 2021.

²⁶ Artuc. et al., 2015.

²⁷ Casas et al. 2018 and OECD 2019.

²⁸ Dutz 2018.

Table 1: Key policy reforms

Objective	Proposed reforms
FDI promotion	
<p>Work towards an integrated FDI policy and mechanism covering attraction, promotion, facilitation, retention, expansion, and productive linkages to increase efficiency-seeking FDI and attract competence-creating firms</p>	<ul style="list-style-type: none"> • Cascade FDI objectives from the National Development Plan to an FDI strategy and related strategic plans that include performance indicators (KPIs), a division of labor between national and regional agencies for the promotion of investments (APIs) accompanied with coordination mechanisms, and a budget allocation. • Rationalize based on local diagnostics (ie. cluster initiatives and value chains) the number of sectors that Procolombia in coordination with regional IPAs actively promote to attract FDI. • Strengthen regional APIs through knowledge transfer from ProColombia. • Review the procedures on the cross-border movement of people (services mode 4) and the validation/accreditation of professional degrees in Colombia to facilitate the hiring of qualified foreign professionals that meet investors' needs. • Continue the efforts to design and implement a Single Window for FDI that centralizes, simplifies and rationalize the provision of information and assistance services during the whole investment cycle. Through this entity, Procolombia and the MCIT could generate efficient channels to execute procedures and consultations with the different public agencies that an investor must deal with. • Continue ongoing efforts for setting-up an Investor-State Conflict Management Mechanism in the form of an Ombuds unit. • Identify lessons learnt from previous economic linkages' programs to design a program that includes matchmaking and supplier development strategies. • Assess the effectiveness of tax incentives and non-tax incentive mechanisms (e.g. training, including from SENA, and infrastructure) for FDI attraction.
Export promotion	
<p>Improve market intelligence on export opportunities for goods</p>	<ul style="list-style-type: none"> • Strengthen Procolombia management by results through the introduction of a monitoring and evaluation system and promote evidence-based program design focused on improving firm productivity, as well as sophistication and diversification of the export basket. • Strengthen Procolombia support programs for firms by including modules related to: 1) attracting international talent and/or foster internal talent for internationalization; 2) conducting demand-driven quality improvements aimed at attracting new customers (e.g. through visits/tours by firms' agents to countries with high demand potential); and 3) improve firms technological capabilities (e.g. creation of an on-line catalogue of technical requirements that must be complied by exporters to enter selected markets; programs to improve small and medium firms practices in logistics and related import and export procedures).

	<ul style="list-style-type: none"> Strengthening the national quality system to facilitate exporters obtention of quality certification recognized by international markets.²⁹
Improve market intelligence on export opportunities for services	<ul style="list-style-type: none"> Increase institutional profile and strengthen inter-agency governance mechanisms to improve information and data gathering on services exports competitiveness. Assess barriers related to firms digitization, including those related to the digital infrastructure; mapping of support programs and their efficiency analysis; as well as design and implementation of policies and programs that promote the learning / adoption of tools such as programming, software, digital marketing and bilingualism.
Trade policy (tariff and non-tariff measures)	
Streamline non-tariff barriers and reduce tariff peaks protecting individual products to improve the competitiveness of downstream producers and enhance competition in the domestic market	<ul style="list-style-type: none"> Strengthen MCIT leadership role through more effective inter-agency coordination mechanisms. Improve regulatory quality and predictability through close coordination between authorities, consultation with key stakeholders and strong adherence to good regulatory practices. While mandatory regulatory impact analysis for all new regulations (as mandated by Decrees 1074 of 2015 and 1468 of 2020) is not fully implemented, create a transitory high-level commission with the technical support of the National Planning Department and MCIT with the power to assess and decide the reform and/or removal of non-tariff barriers currently in place, as well as new restrictions proposed. This commission could serve as a pilot to inform the functioning of the institutional coordination mechanisms instituted by the related decrees. The commission would : <ul style="list-style-type: none"> Establish a mechanism by which any existing regulation can be challenged by interested parties based on it constituting an unjustified barrier to trade (in the sense that the related public objective can be achieved with alternatives measures that are less trade distortive); Identify, in the context of regulatory analysis, expected damage to local producers from the removal of challenged non-tariff barriers and propose public interventions to help those affected to upgrade to accommodate to the new policy stance. Compile a list of all existing quantitative restrictions to import and restrictions implemented in ports of entry, evaluating their impact and removing them with a timeline that allows producers affected by the decision to request a revision of the measures and/or undertake actions (including through public support financing) to accommodate to the new policy stance. Subject tariffs exceeding 10 percent to a cost-benefit analysis. Assess the effectiveness of preferential treatment mechanisms such as the Plan Vallejo and evaluate whether recent reforms (through Decrees) are tackling issues such as 1) increased accessibility to a larger group of exporters; 2) enhanced transparency of the conditions to apply; and 3) improved information on benefits for users.

²⁹ The CONPES document 3957 of 2019 established a roadmap for strengthening the national quality system.

Streamline regulations affecting trade in services	<ul style="list-style-type: none"> • Increase institutional profile and strengthen inter-agency governance mechanisms to improve the identification and tackling of barriers to trade in services • Integrate international regulatory standards in digital commerce that include measures against fraud and cybercrime, in order to protect consumer and intellectual property rights, which are key conditions for Colombia to be competitive in data-intensive services exports.
Business environment	
Enhance competition to foster firm productivity growth and export performance	<ul style="list-style-type: none"> • Assess special economic zones / free trade zones incentives schemes effectiveness. Specific features that could be eliminated include: 1) the possibility for a firm located in a free trade zone to have special incentives even for its sales to the domestic market, which provides an inadequate advantage vis-à-vis other domestic firms; and 2) the fact that single firms can be declared free trade zones ('Zonas Francas Unipresarias') independently of their location, which also contributes to creating strong lobbies and exceptional treatments that result in unfair competition. • Embed the principle of competitive neutrality in state interventions. • Analyze the relevance of regulations that limit economic competition in services sectors such as baking, insurance, telecommunications and logistics. For instance, enable the emergence of technological tools in line with new business models and facilitate interoperability of payment systems are key measures to strengthen competition in the financial system.
Trade facilitation and logistics	
Decrease costs and time for trading across borders to improve firms' participation and upgrading in just in time GVCs	<ul style="list-style-type: none"> • Develop and implement a comprehensive Trade Facilitation plan to articulate objectives, targets and milestones, to set priorities and sequence multi-year reforms and projects. • Further develop the Trade Single Window project based on comprehensive import and export business processes reengineering (i.e. interoperability with systems of all stakeholders involved in trade processes, including mayor trading partners; harmonize data requirements; align with international standards and business practices, for instance related to automating the postal and expedite shipment processes while exploring alternative models for tax collection, etc.). • Develop comprehensive risk-based compliance strategies, by developing a unified and enriched risk profiling, as well as simultaneous inspections; expanding the usage of prior to arrival processing and release of merchandise; expanding the reach of the scanner program at ports and strengthen it with complementary equipment; exploring advanced cooperative arrangements between Customs and other border agencies, including the establishment of national targeting center and joint enforcement operations; and continue expanding the benefits granted by the Authorized Economic Operators program (i.e. it can be used as a pilot to subsequently expand successful practices based on risk management to all traders).³⁰ • Implement the Single Window for Maritime Operations.³¹

³⁰ These reforms have been proposed in CONPES 3982 of 2020; and CONPES 3993.

³¹ This reform is included in CONPES 3982 of 2020.

	<ul style="list-style-type: none"> • Accelerate the design and implementation of a best practices guide for the operation of ports and airports related to export and import operations.³² • Accelerating the design, monitoring, evaluation and publication of indicators on time release and on port efficiency (i.e. CONPES 3892 of 2020), as well as institutionalize instruments such as the National Logistics Survey to benchmark operators' performance regularly. • Conduct a regulatory impact assessment of requirements for access to transport and logistics professions. • Impact assessment of intermodality investments and pilot intermodal facility improvements. • Support the entry of IT solutions like freight boards to improve asset efficiency and return on investments.
Political economy in favor of change	
Ensure reform feasibility	<ul style="list-style-type: none"> • Conduct an analysis of the level of implementation of existing trade agreements and the level of utilization of preferential market access by Colombian firms, to prioritize the implementation of reforms that have been committed at the international level and identify the complementary measures that would allow firms to take full benefit of negotiated market opening. • Assess the political economy (identify winners and losers) behind the main barriers to internationalization, communicate about expected gains to federate winners and give visibility to their support in favor of reforms, and design as well as implement compensation mechanisms for those negatively affected. In particular, the quantification of sector and geographical labor adjustment costs is needed to design effective compensation mechanisms for workers to ease their transition. Likewise, an efficiency analysis of labor market and firm/farm support policies and programs would be key.

³² Specific recommendations are included in the CONPES 3982 of 2020.

References:

- Alfaro, L., & Chen, M. X. (2018). Selection and market reallocation: Productivity gains from multinational production. *American Economic Journal: Economic Policy*, 10(2), 1-38.
- Aranda, Y & Li, Y. (2021). *“Foreign Direct Investment and Investment Promotion: An Analysis for Colombia to Support the Internationalization Mission.”* Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Arenas, G., Espitia, A. & Winkler, D. (2021). *“Global Value Chain Participation and Upgrading: Opportunities and Challenges for Colombia”* Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Artuc, E., D. Lederman and G. Porto (2015). A mapping of labor mobility costs in the developing world. *Journal of international economics*, 95(2015), 28-41.
- Brambilla, I., Depetris Chauvin, N., & Porto, G. (2017). Examining the export wage premium in developing countries. *Review of International Economics*, 25(3), 447-475.
- Broda, C., & Weinstein, D. E. (2006). Globalization and the Gains from Variety. *The Quarterly journal of economics*, 121(2), 541-585.
- Carreras N., Borja C., & Pop, G. (2021). *“Competition Policy Inputs for Colombia CPSD”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- DIDE-DNP (2020a). Obstacles to export in Colombia. Colombia.
- DIDE-DNP (2020b). Standards of quality, productivity and exports in Colombian manufacturing firms. Colombia Mission Studies. Washington, DC: The World Bank.
- Dudine, P., Forero, A., Pinchao, A. & Rocha, N. (2021). *“Real Exchange Rates and Trade in Colombia”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Duque, G., Rodriguez, Zuluaga, Guayacán, & Díaz. (2021). *“Modern services dynamics: Global and the Colombian context”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Dutz, Mark A. (2018). Jobs and Growth: Brazil's Productivity Agenda. *International Development in Focus*. Washington, DC: World Bank.
- Echandi, R., & Gomez, D. (2021). *“Promoting Greater Investment Permanence and Expansion in Colombia: Considerations to Establish an Investment Ombuds Unit”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Eslava, M., Haltiwanger, J., Kugler, A., & Kugler, M. (2013). Trade and market selection: Evidence from manufacturing plants in Colombia. *Review of Economic Dynamics*, 16(1), 135-158.
- Estrades, C. & Osorio, I. (2021). *“General equilibrium analysis of trade policy options in Colombia”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Fajgelbaum, P. D., & Khandelwal, A. K. (2016). Measuring the unequal gains from trade. *The Quarterly Journal of Economics*, 131(3), 1113-1180.
- Gereffi, Gary, John Humphrey, and Timothy J. Sturgeon. 2005. “The Governance of Global Value Chains.” *Review of International Political Economy* 12 (1): 78–104.

- Gonzalez, A. (2021). *“Institutional arrangements and governance to support Colombia’s internationalization”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Han, J., Liu, R., & Zhang, J. (2012). Globalization and wage inequality: Evidence from urban China. *Journal of International Economics*, 87(2), 288-297.
- Huchet-Bourdon, M., Le Mouël, C., & Vijil, M. (2018). The relationship between trade openness and economic growth: Some new insights on the openness measurement issue. *The World Economy*, 41(1), 59-76.
- Iacovone, L., Maloney, W., & McKenzie, D. (2018). Improving Management with Individual and Group-Based Consulting: Results from a Randomized Experiment in Colombia. Working paper.
- Kee, H., & Forero, A. (2021). *“Non-Tariff Measures of Colombia”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Lall (2000) (2000). The technological structure and performance of developing country manufactured exports, 1985–98. *Oxford Development Studies*, 28(3), 337–369
- Looty, M., Pop, G., Pena, J., & Stinshoff, C. (2021). *“Competition, Productivity and Exports: a quick assessment of underlying trends and policy drivers for Colombia”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Marchand, Beyza Ural (2012), Tariff pass-through and the distributional effects of trade liberalization, *Journal of Development Economics*, 99(2012) 265-281.
- Nicita, A. (2009). The price effect of tariff liberalization: Measuring the impact on household welfare. *Journal of Development Economics*, 89(1), 19-27.
- OECD (2019), OECD Economic Surveys: Colombia 2019, OECD Publishing, Paris, <https://doi.org/10.1787/e4c64889-en>
- Porto, G. G. (2006). Using survey data to assess the distributional effects of trade policy. *Journal of International Economics*, 70(1), 140-160.
- Saslavsky, D. & Checcucci, E (2021). *“Enhancing Trade Facilitation, Logistics and Connectivity: challenges and recommendations”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Signoret, J. & Tovar, J. (2021). *“A Diagnostic of Trade Competitiveness in Colombia”*. Background paper prepared under Colombia *“Mision de Internacionalizacion”*. Washington, DC. World Bank.
- Vijil, M., L. Wagner and M. Tesfaye Woldemichael (2019). *“Import Uncertainty and Export Dynamics”*. World Bank Policy Research Working paper, 8793.
- World Bank and World Trade Organization. 2020. Women and Trade: The Role of Trade in Promoting Gender Equality. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/34140>
- World Bank. (2017). Global investment competitiveness report 2017/2018: Foreign investor perspectives and policy implications.
- World Bank. (2019). World Development Report 2020: Trading for Development in the Age of Global Value Chains, Washington, DC: The World Bank.