

Chapter 1. What is in Colombia's next economic chapter?

Colombia, the fourth largest economy in Latin America, is back on stage after decades of conflict. The country is looking to open up opportunities for all by addressing its structural challenges, benefiting more from trade and investment and increasing productivity. This chapter reviews the structural performance of Colombia in the last two decades and identifies opportunities going forward.

Introduction

Colombia is the fourth biggest economy in Latin America, after Brazil, Mexico and Argentina, with a GDP of USD 714 000 million (constant 2010 PPP), almost half that of Spain and 1.5 times that of Chile. It is also the third most populous country in the region, after Brazil and Mexico, with a population of 45.5 million inhabitants (DANE, 2018^[1]). In the last decade, the country underwent a major transformation underpinned by the pacification process, which ended half a century of conflict. This has boosted investor confidence while the country has been looking to re-brand itself as a nation open to business and innovation

The goal of the National Development Plan 2018-2022 is to unleash opportunities for all while moving towards a more equal society (*Gobierno de Colombia, Bases del Plan Nacional de Desarrollo 2018-2022*). This Production Transformation Policy Review (PTPR) of Colombia provides elements based on peer-review and rigorous comparative analysis to help the country along its reform process.

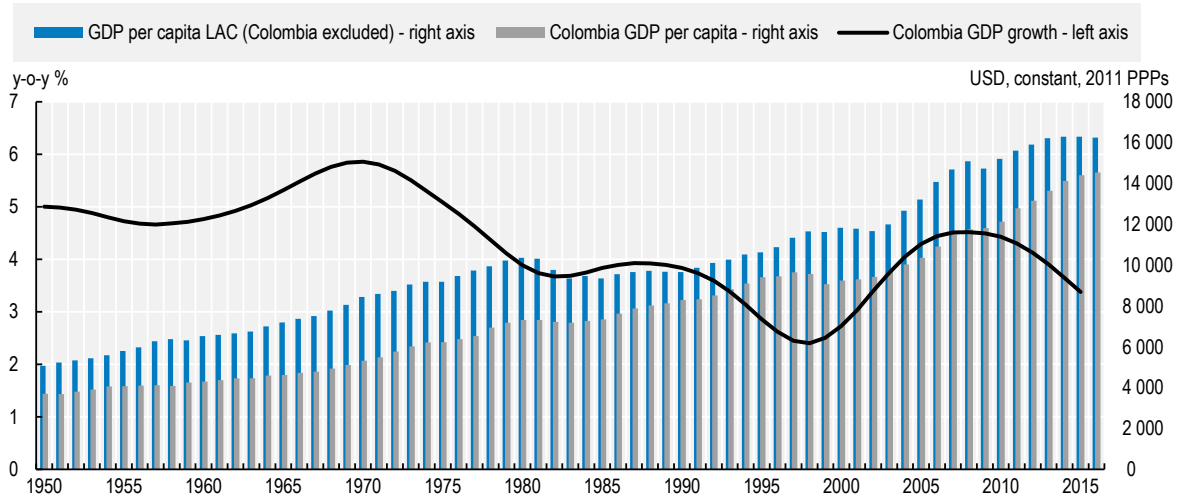
This chapter reviews the structural performance of Colombia, with a focus on the last two decades. It identifies three pending obstacles to Colombia's development and three gaps which must be addressed to achieve prosperity. The report is composed of two additional chapters; the second reviews governance and policies for production transformation, and the third focuses on how digital technologies could improve business development in the country.

A growing and relatively stable economy

Colombia is a growing, relatively stable economy. Since 2000, Colombia has been growing at an annual average rate of 4.3%, almost doubling the rate of growth of Latin America which grew on average 2.6% during the same period. GDP per capita also increased by 50% from USD 9 400 (PPP) in 2000 to USD 14 900 (PPP) in 2017 (Figure 1.1). As a consequence, middle classes now account for almost a third of the population and the poverty rate decreased from 50% to 28% between 2000 and 2016. However, much still needs to be done to end poverty in the country, and the economy has not achieved the progress of other countries in the region: in Chile, for example, the poverty rate is 12% and in Peru it is 20%.

Figure 1.1. GDP Colombia, 1950-2017

GDP growth (left axis) and GDP per capita (right axis).

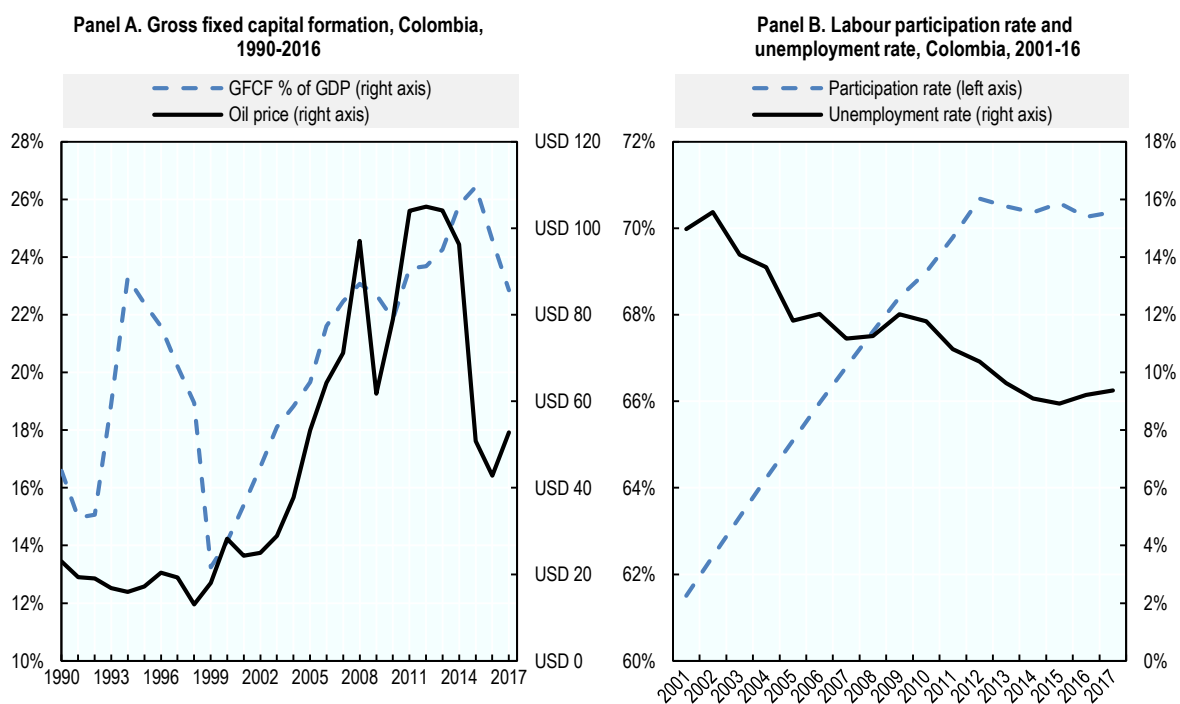


Note: For the choice of the Lambda in HP filter we follow the guidelines from OECD (2016), *OECD Compendium of Productivity Indicators 2016*, OECD Publishing, Paris.

Source: Authors' elaboration based on the Conference Board Total Economy Database™, 2018 <https://www.conference-board.org/data/economydatabase/>.

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Capital investment and the expansion of labour supply have been the main drivers of growth since 2010. Average gross fixed capital formation (GFCF) reached 27.6% of GDP in 2010-17, compared to 20% in 2002-10 and 18% in the 1990s (Figure 1.2, Panel A). The labour force participation rate reached 74.1% in 2017, compared to 67% in 2007 and the unemployment rate declined from 15% in 2001 to 9% in 2017 (Figure 1.2, Panel B). However, the reforms which opened the economy starting in the early 1990s, favoured capital accumulation mostly in natural resource intensive activities. As an example, more than half of the country's total Foreign Direct Investment (FDI) stock is concentrated in the mining (34%) and oil sectors (19%), making Colombia vulnerable to reductions in global demand and the price volatility of commodities. Furthermore, the demographic bonus that supplied the labour market during the last twenty years is expected to come to an end. The share of population over 60 represented 7% of the total in 2000, but is expected to reach 15% in 2025 and 21% in 2050, with a consequent reduction of the working-age population (Gómez and Higuera, 2018^[2]; UNDESA, 2014^[3]).

Figure 1.2. Capital investment and labour participation have been the main driver of growth

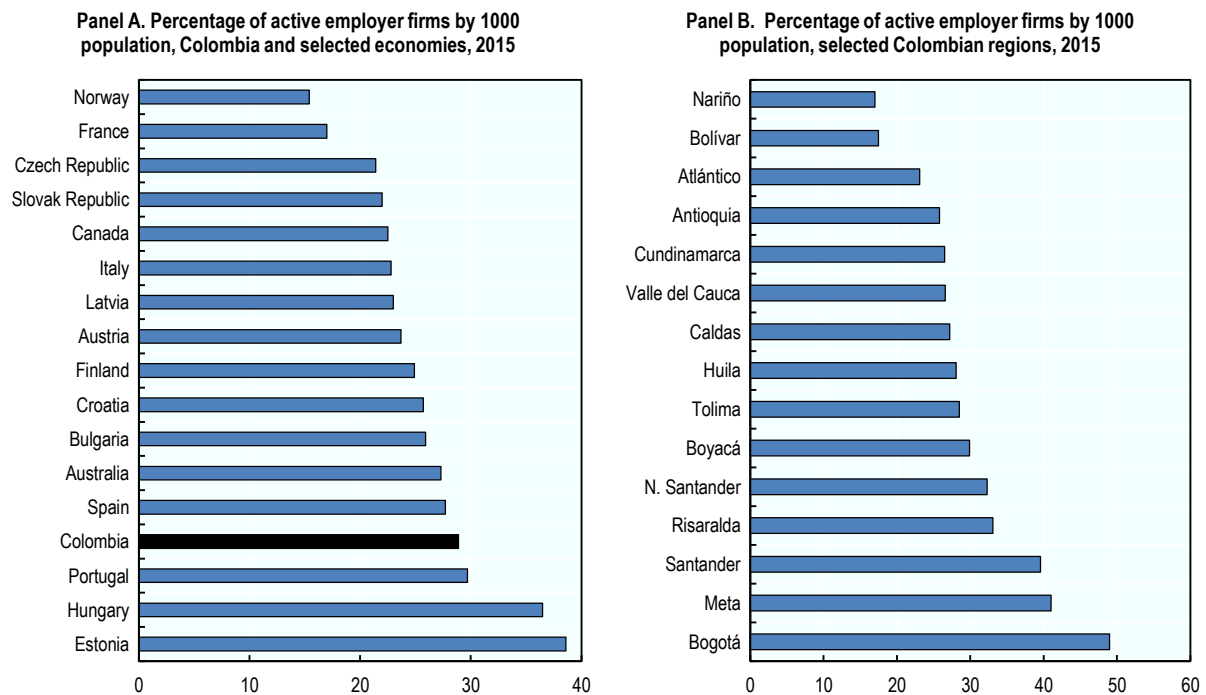
Note: Crude Oil, simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh, USD per barrel.

Source: Authors' elaboration based on OECD Economic projections database, ILOSTAT database, International Monetary Fund, World Economic Outlook Database, 2018, <https://stats.oecd.org/> <https://www.ilo.org/ilostat>; <https://www.imf.org/en/Data>.

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Firms' structure could be stronger

Colombia has a high firm density (number of active firms per 1 000 people) (Figure 1.3). However, the country has a comparatively high share of micro firms (92% of total firms) compared to the OECD average of 80% (Table 1.1). Moreover, even though a growing number of firms are created every year (the number of new firms increased by 15% in 2001-15), seven out of ten firms fail in the country within five years (Figure 1.4). Survival rates differ with respect to firm size. Large and medium-size firms in Colombia, as elsewhere in the world, have higher survival rates (71.4% of large firms and 68% of medium firms are still active after five years, while only 29% of micro-enterprises survive). In addition, the informal sector in Colombia offers uncertain job prospects. Nearly half of all workers in the main cities work in the informal sector, although the percentage has fallen in recent years (OECD, 2019). Colombia is taking steps to tackle business informality. In January 2019, the national government approved the Business Formalization Policy (reference document: CONPES 3956). This policy aims at reducing the costs associated with formalisation, and increasing the corresponding benefits.

Figure 1.3. Colombia has a high firm density

Source: Authors' elaboration based on OECD Regional Business Demography Database and RUES database and Registro Único Empresarial y Social [Single Enterprises and Social Registry]- Confecámaras, Colombia, 2018, <http://www.oecd.org/cfe/regional-policy/regional-business-demography.htm>; <https://www.rues.org.co/>.

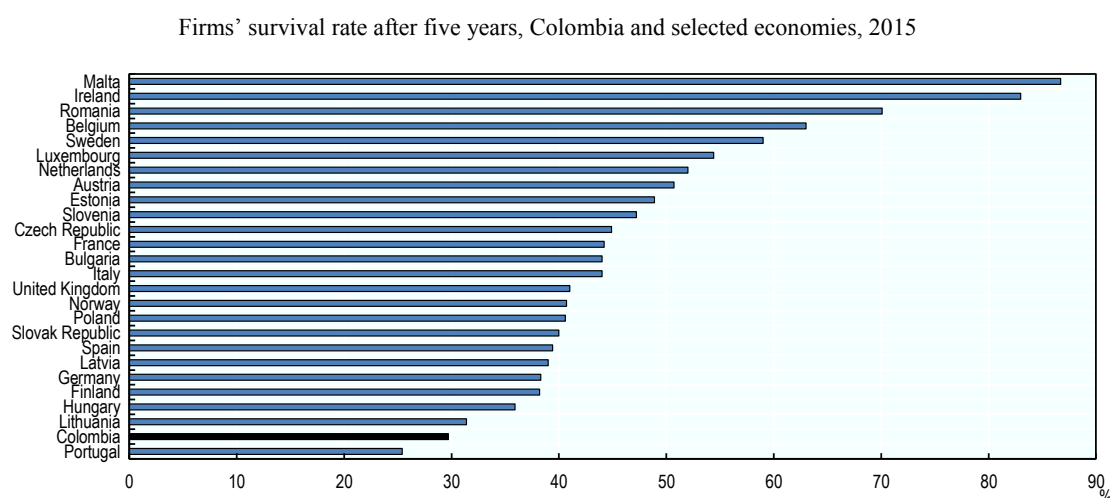
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Table 1.1. More than 90% of firms in Colombia are micro-enterprises, 2015

Type of firm	2011	2012	2013	2014	2015	
SMEs	Large (200+)	4 036 0.3%	4 837 0.4%	5 425 0.4%	5 822 0.4%	6 361 0.5%
	Medium (51-200)	12 129 1.0%	14 619 1.2%	16 780 0.1%	18 376 1.3%	19 980 0.1%
	Small (11-50)	49 976 4.2%	58 921 4.8%	68 308 5.3%	73 987 5.4%	79 926 5.8%
	Micro (up to 10)	1 131 432 94.5%	1 154 360 93.6%	1 208 278 93.0%	1 272 292 92.8%	1 273 017 92.3%
	Total	1 197 573	1 232 737	1 298 791	1 370 477	1 379 284

Note: Size class classifications in Colombia are defined according to the parameters contained in Law 905 of 2004. This involves three different indicators with three different thresholds – the monthly salaries in force (SMMLV), the total assets and the number of employees. Size class definitions of OECD statistical indicators divide enterprises into four typologies: Micro (1-9 persons employed), Small (10-49 persons employed), Medium (50-249 persons employed) and Large (250+ persons employed). However, some countries, like Colombia and Australia, set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees.

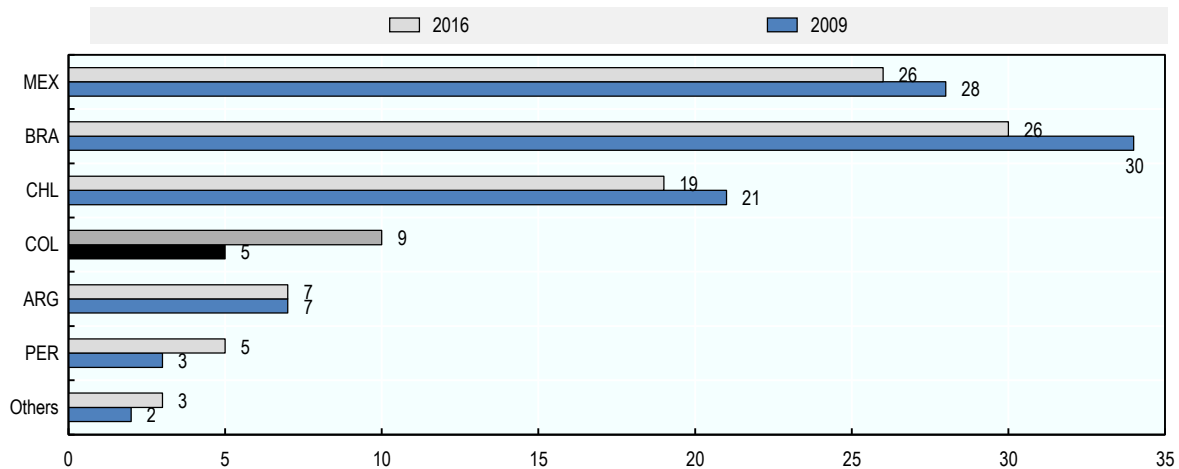
Source: Authors' elaboration based on (Confecámaras, 2016_[4]).

Figure 1.4. In Colombia seven out of ten companies fail within five years of creation

Source: Authors' elaboration based on OECD SDBS Business Demography Indicators Database and RUES database - Registro Unico Empresarial y Social [Single Enterprises and Social Registry]-Confecámaras, 2018 Colombia, 2018 <https://www.rues.org.co/> <https://stats.oecd.org/>

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Colombia has few *multilatinas* but their number is growing. *Multilatinas* are Latin American companies that have outgrown their home markets and become multinational according to the America Economica Ranking (America Economica, 2016^[5]). Colombia has doubled the number of these firms in the last decade. As of 2016, Colombia had 10 *multilatinas*, while Chile had 19 (Figure 1.5). Colombian *multilatinas* – the core business of which is aeronautics, food and beverage, manufacture of non-metallic products, finance and insurance, oil and gas, electricity and multisector products – generate on average 40% of their turnover abroad. These firms are less oriented to foreign markets than *multilatinas* from Chile and Mexico that generate slightly more than 50% of their turnover from operations abroad. In Brazil, however, these firms generate just 35% of their turnover in foreign markets.

Figure 1.5. Number of multilatinas, Colombia and selected economies, 2009 and 2016

Note: The ranking considers companies with over USD 250 million in 2015, originating from Latin American countries and with relevant operations in at least two countries different from the one of origin. The top 100 companies' ranking is measured as an index that accounts for: share of annual sales achieved outside the country of origin (25%); share of employees abroad (25%); Geographical coverage (20%), and Expansion (30%). For more detailed information see <https://rankings.americaeconomia.com/2016/multilatinas/metodologia>.
Source: Authors' elaboration with information from Multilatinas Ranking 2016, America Economía, 2018.

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Three unsolved matters in Colombia's economic development

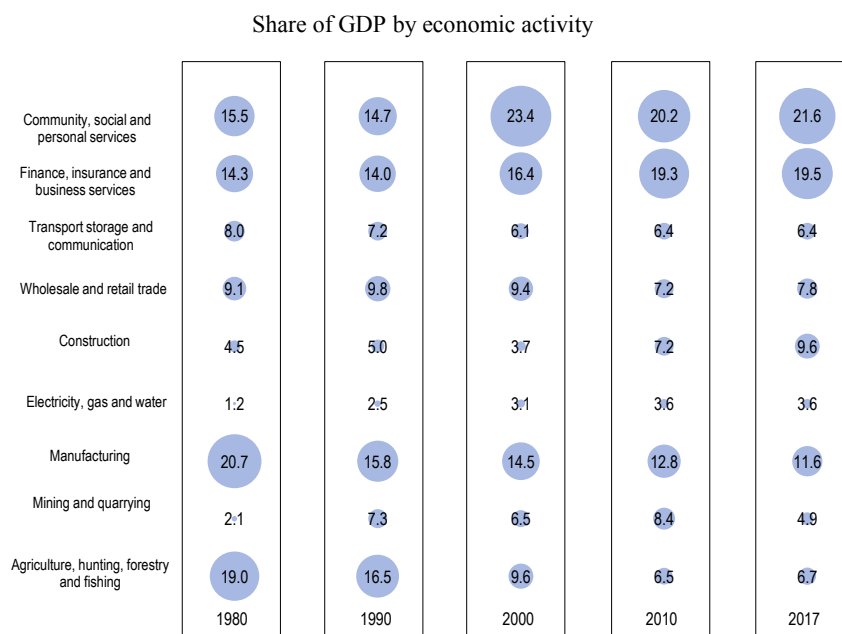
This section provides an analysis of three main persistent challenges that Colombia needs to address to achieve greater prosperity: diversification, productivity and integration in the world economy.

The economy is becoming less diversified and sophisticated

Colombia's industrialisation process dates back to the beginning of the twentieth century. For example in 1907 Coltejer was founded in Antioquia. It went on to become one of the biggest textile companies in Latin America. The industrialisation process, strongly linked with the Antioquia region, accelerated in the aftermath of the 1929 financial crisis when importing from the United States and Europe became more difficult, and import substitution policies facilitated local industrial development. It was in those years that textile, food and beverage and chemical complexes started to develop (Ocampo, 2017^[6]).

Since the 1990s, Colombia has witnessed a progressive specialisation in exporting natural resources and commodities, and the GDP structure has shifted towards social, personal and financial services, which now account for almost 40% of GDP. Manufacturing, which in the 1980s was the top economic activity as a percentage of GDP, now comes third, with its share of GDP falling to less than 12% (Figure 1.6). Wholesale, retail and business services, have been driving job creation. Employment grew at an annual average of 2% in 2001-2017, with employment in service sectors increasing the most. Almost 30% of the new jobs generated in the last decade have been in wholesale and retail (Figure 1.7).

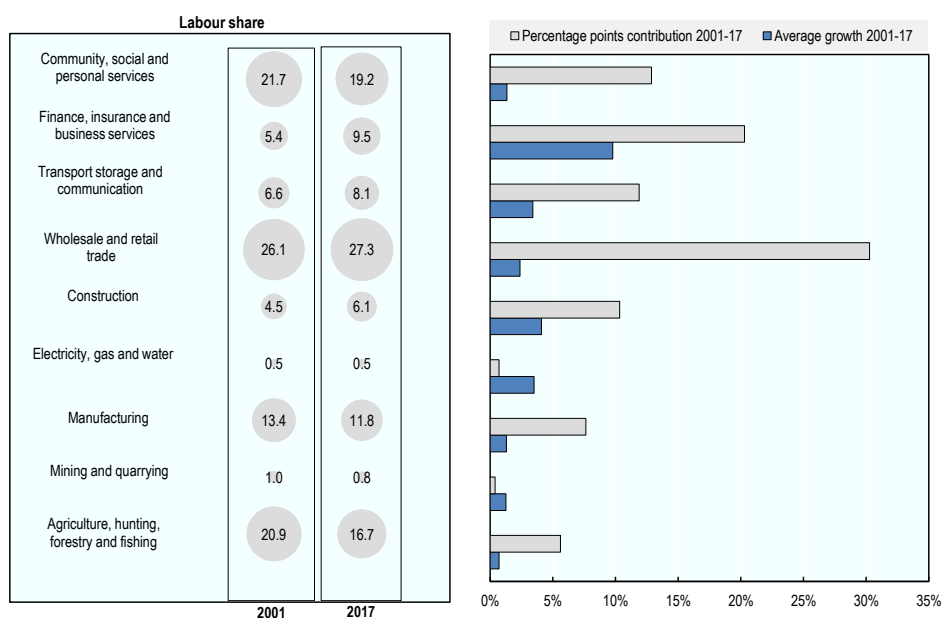
Figure 1.6. Manufacturing as a percentage of GDP in Colombia is today half of what it was in the 1980s



Source: Authors' elaboration on OECD National Accounts and DANE, 2018 <https://stats.oecd.org/>; <https://www.dane.gov.co>.

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Figure 1.7. Employment by economic activities, Colombia, 2001-17



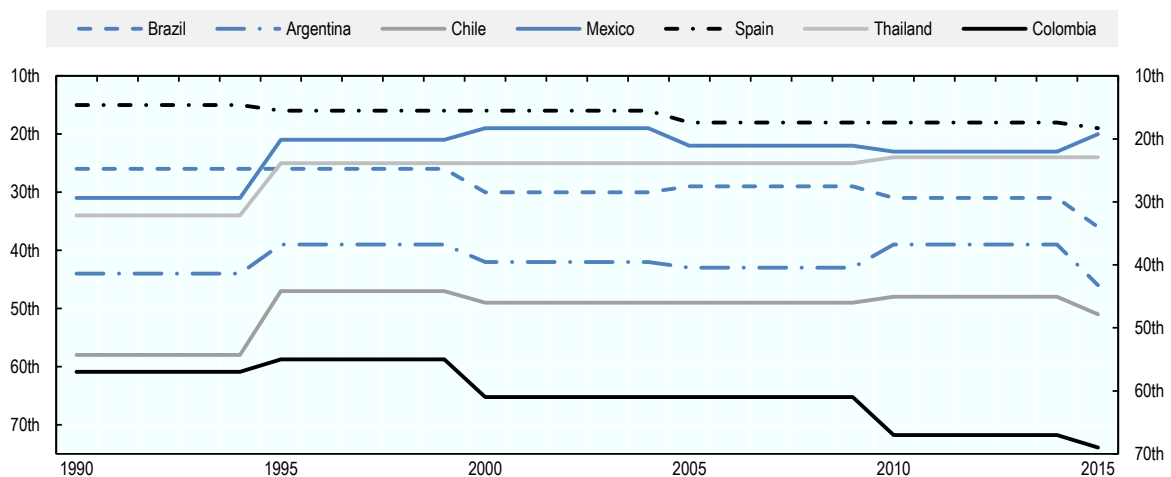
Note: Data for 2017 are provisional.

Source: Authors' elaboration on OECD National Accounts and DANE, 2018 <https://stats.oecd.org/>; <https://www.dane.gov.co>.

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Despite a relatively long tradition of manufacturing in Colombia, this activity is becoming less relevant and less competitive. From 1990 to 2015, Colombia fell in the United Nations Industrial Development Organization (UNIDO) Competitive Industrial Performance (CIP) index ranking, which benchmarks the ability of countries to produce and export manufactured goods competitively, from 57th to 69th position. During the same period Chile moved from 58th to 51st and Mexico from 31st to 19th (Figure 1.8). Colombia's drop in the CIP ranking is explained by the decrease in the share of value added of medium and high technology manufacturing. It declined from 25% in 1995 to 21% in 2015. As countries develop, value added manufacturing as a percentage of GDP frequently decreases, but in Colombia the reduction happened at a relatively earlier stage when compared with other OECD countries (i.e. when the country was at a lower level of GDP per capita than OECD countries (Figure 1.9). This trend signals a premature loss of manufacturing capabilities that could weaken the capacity of the local productive system to develop and diversify in the future (UNIDO, 2017^[7]; Martínez, Ortiz and Ocampo, 2011^[8]; UNCTAD, 2016^[9]; Ramírez and Higuera, 2017^[10]).

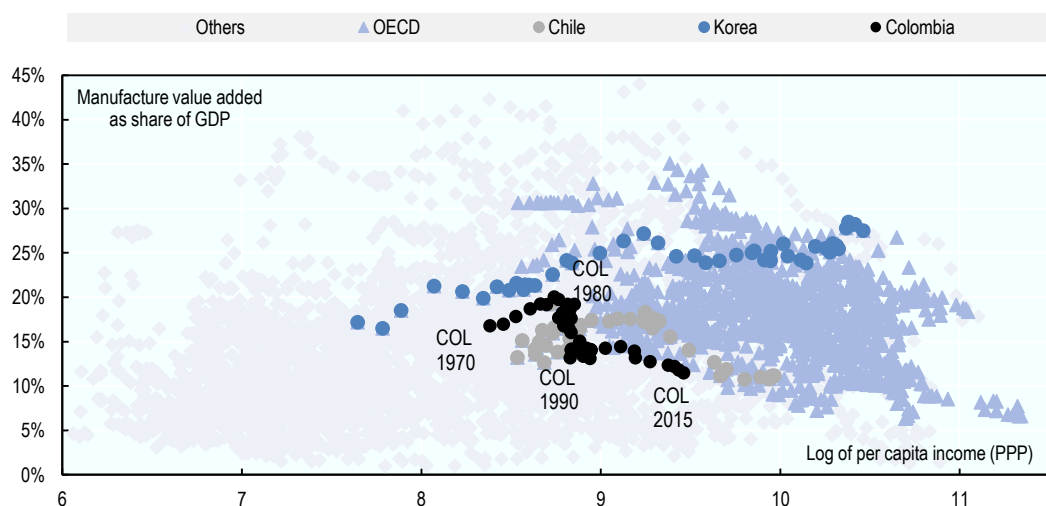
Figure 1.8. Competitive Industrial Performance (CIP) index ranking, Colombia and selected countries, 1990-2015



Source: Authors' elaboration based on UNIDO CIP data, 2018 <https://stat.unido.org/database/CIP>.

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Figure 1.9. Manufacturing value added (MVA) and GDP per capita, Colombia and OECD economies, 1970-2015



Note: Per capita income is in purchasing power parity (PPP) to secure comparability across time and countries. The transformation in a log-scale is useful to inform to the relative changes (multiplicative) of the per capita income.

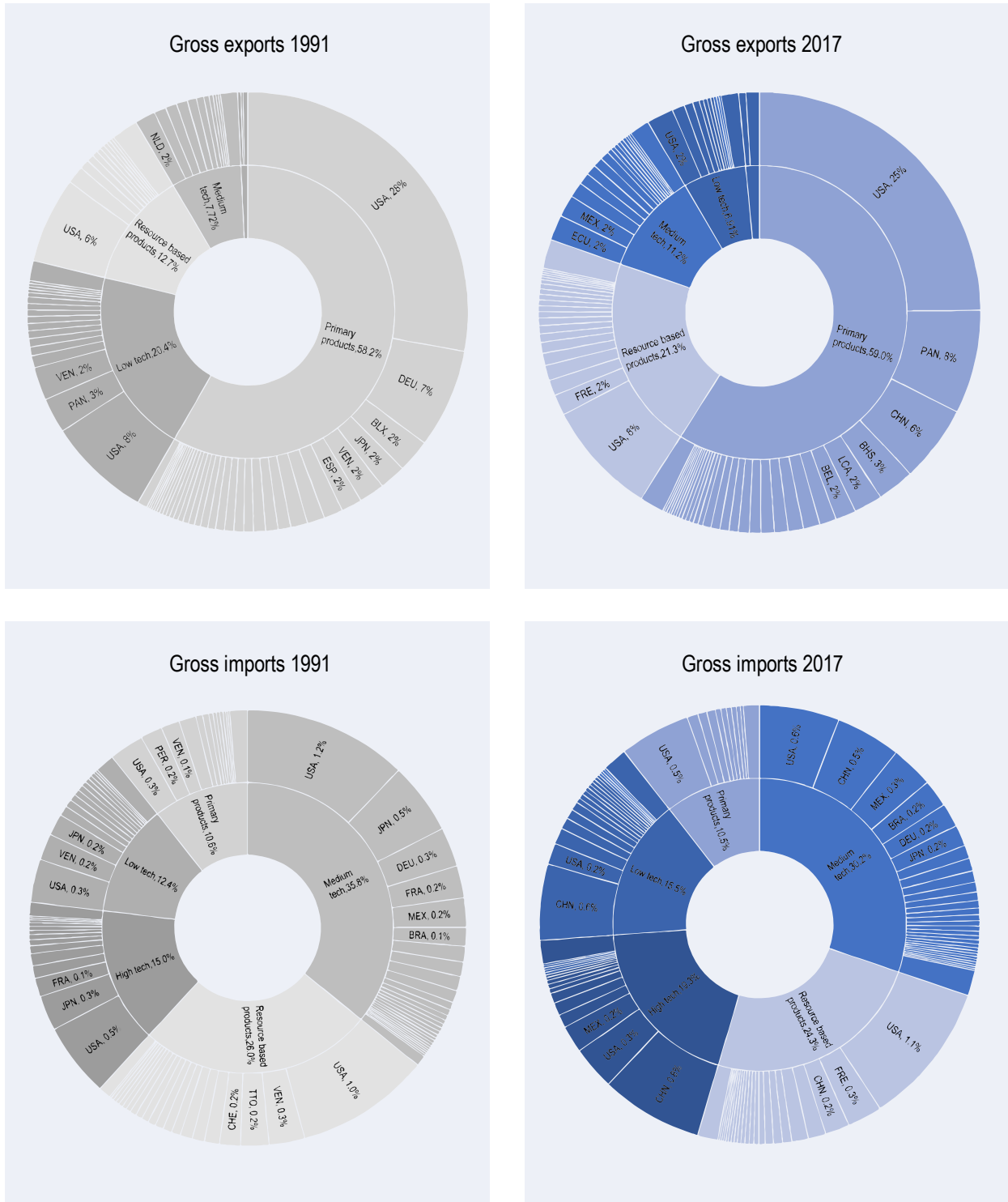
Source: Authors' elaboration based on UNIDO CIP data and World Bank Databank, 2018.

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Colombia mostly exports natural resources. In 2017, primary production and natural resource-based products accounted for 80% of exports, 10% more than in 1990 (Figure 1.10). Medium technology-intensive exports account for 11% of total exports, followed by low technology (7%) and high technology (3%) exports. At the product level, of the total of USD 37.8 billion (FOB) of exported products 34.5% were oil and its related products; 19.6% coal, coke and briquettes; 8.1% chemical and related products; 4.8% gold, and; 3.7% flowers. These top five products accounted for 70% of all exports. The United States is the main trade partner for Colombia, but the country is diversifying its source and destination markets. The United States accounts for almost 30% of domestic exports, while in the 1990s that share was almost 40%. China, in line with what is happening in other countries in Latin America, is an increasingly important partner for Colombia. It accounts for more than 20% of Colombia's imports, displacing Japan, and second only to the United States. Colombia imports mostly high and low technology products from China and primary and medium technology products from the United States. China, accounts for 5.5% of total Colombian exports, mostly linked to natural resources.

Regional trade is still limited, though it has slightly increased since the 1990s. About 10% of Colombia's total gross exports goes to the countries of the Pacific Alliance. These countries accounted for only 6% of gross exports in the 1990s. Imports have also increased, and the Pacific Alliance accounts today for 11% of total domestic imports, up from 6.5% in the 1990s. As Venezuela declined in importance as a trading partner, Colombia has increased its commercial ties with other countries in the region. Brazil, Panama, and Ecuador, for example, are now among the top ten destination markets for Colombian products with 3%, 5.8% and 4% of exports respectively. In 2000 they absorbed 2%, 1.5% and 3.4% (UN, 2018_[11]).

Figure 1.10. Exports and imports, by partners and technology intensity, Colombia, 1991-2017



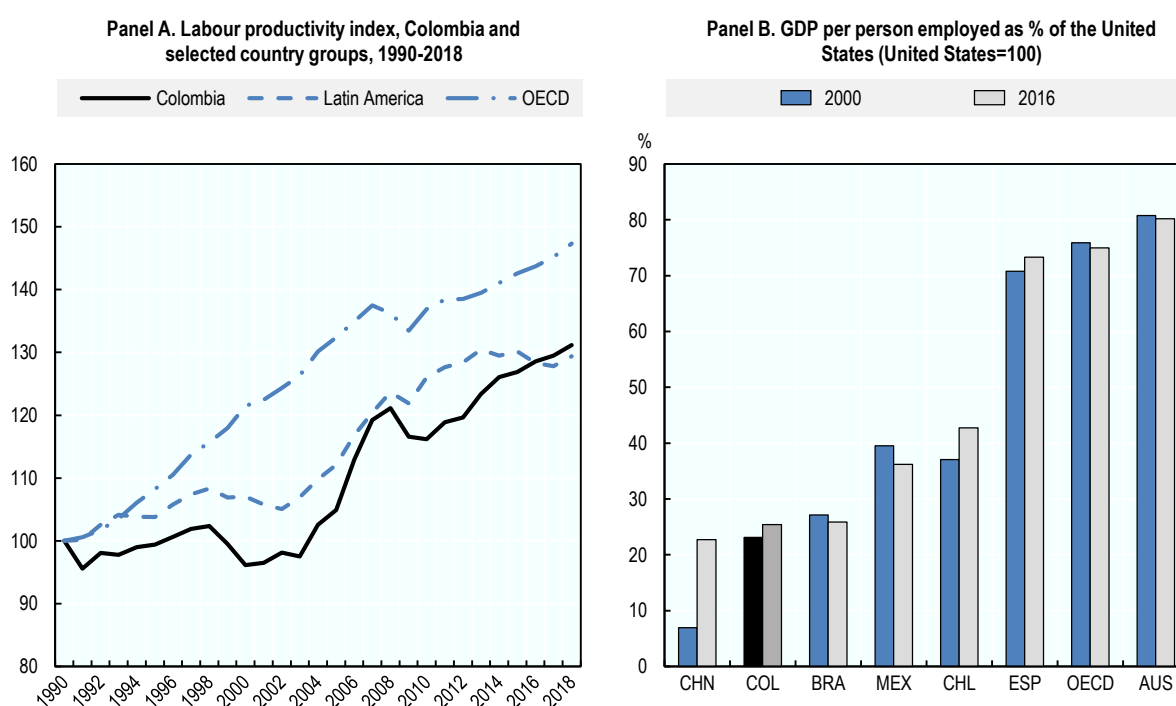
Note: The technological classification follows Lall, S. (2000) and Aboal et al (2015).
 Source: Authors' analysis based on UN (2018), Comtrade Database, <https://comtrade.un.org>.

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The productivity gap with the frontier persists

Labour productivity grew on average 1.8 % in 2001-2016 in Colombia, but the gap with frontier economies persists (Figure 1.11, Panels A and B). Since the 2000s, Colombia's labour productivity has been 25% of that of the United States. In contrast, during the same period, China's productivity gap with respect to the United States decreased by 400%. In addition, estimates suggest that the labour productivity gap between Colombia and the OECD explains four-fifths of the income gap between the two (OECD, 2017_[12]).

Figure 1.11. The productivity gap persists in Colombia

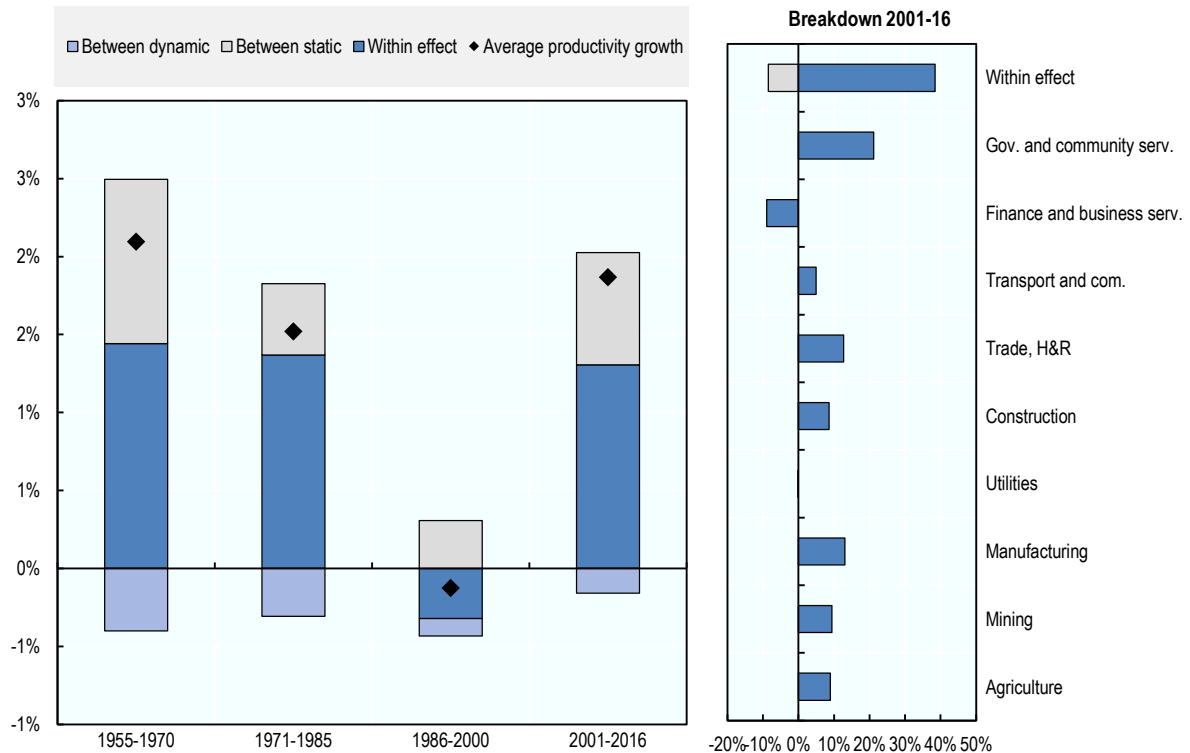


Source: Authors' elaboration based on the OECD National Accounts and Conference Board Total Economy Database™ (Adjusted version), 2018 <https://stats.oecd.org/>; <https://www.conference-board.org/data/economydatabase/>.

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The absence of a shift of labour to more dynamic sectors – activities in which productivity grows faster than the average – contributes to explain the persistency of the productivity gap with respect to the frontier (Figure 1.12). This is common in Latin American countries, while the dynamics of productivity in South East Asian economies have been the opposite: productivity increases have been determined by a change in specialisation towards more dynamic activities (Lavopa and Szirmai, 2018_[13]; Diao, McMillan and Rodrik, 2017_[14]; UNCTAD, 2018_[15]; Timmer, de Vries and de Vries, 2015_[16]). In Colombia, efficiency improvements and technological change within sectors explain almost 70% of labour productivity gains between 2001 and 2016. In addition, persistent structural gaps, such as poor infrastructure, low investment in innovation and structural heterogeneity (i.e. a relatively higher share of employment in low productivity activities) hamper the impact of productivity growth (Figure 1.13).

Figure 1.12. Decomposition of labour productivity growth by effect and economic activities, Colombia

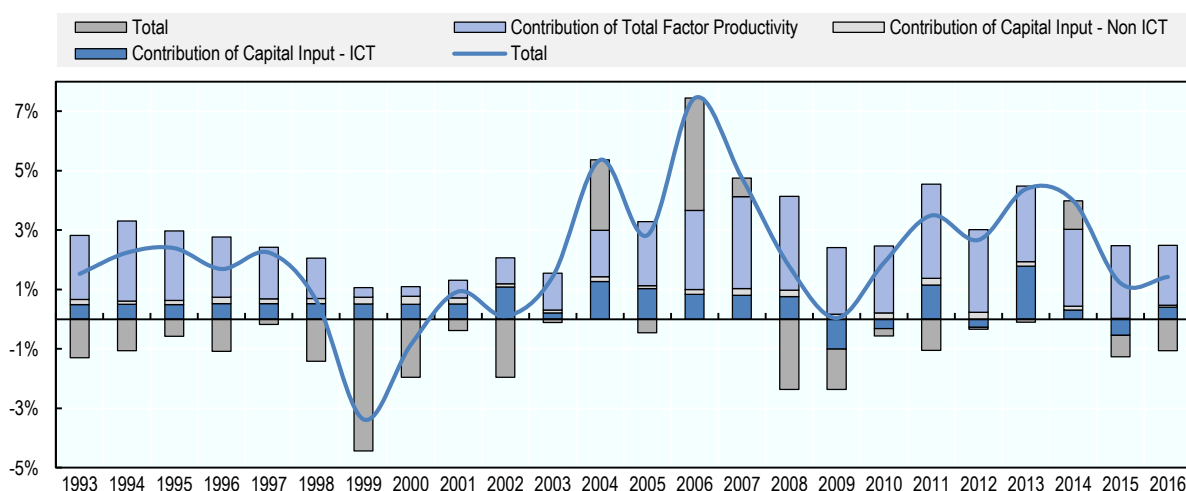


Note: The within effect measures the productivity growth in each sector of the economy due to capital, human and technological accumulation. The between effect (or reallocation) measures the productivity growth due to labour reallocation from less to more productive sectors. The between effect can be broken down into two effects: static, which measures the extent to which labour moved to sectors with above-average productivity level, and dynamic, which measures the joint effect of changes in employment shares and productivity growth in a sector.

Source: Authors' elaboration based on Penn State GGDC 10-Sector Database, DANE and OECD national accounts, 2018, <https://www.rug.nl/ggdc/productivity/10-sector/>; <https://stats.oecd.org/>; <https://www.dane.gov.co>.

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Figure 1.13. Decomposition of labour productivity growth, Colombia, 1993-2016

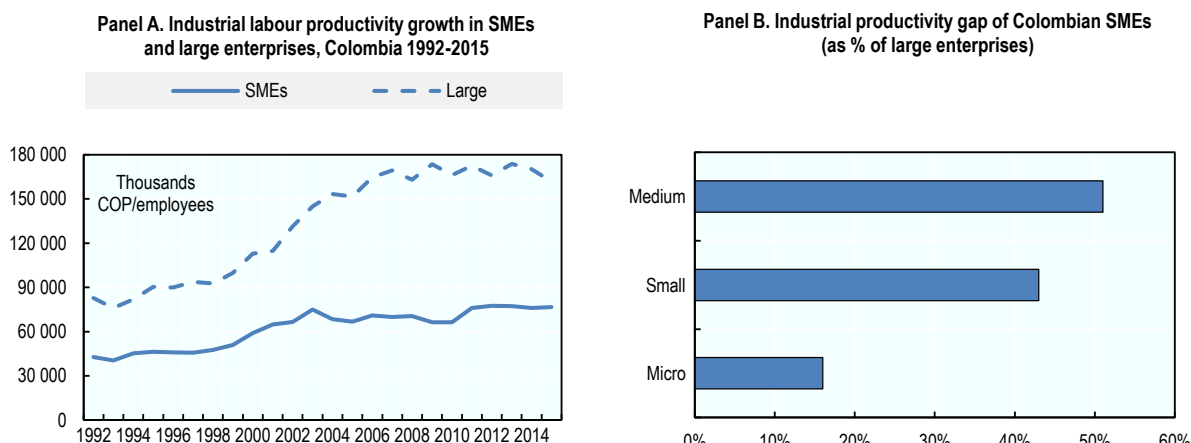


Source: Authors' elaboration based on the DANE and Conference Board Total Economy Database™ (Adjusted version), 2018, <https://www.dane.gov.co>; <https://www.conference-board.org/data/economydatabase/index.cfm?id=27762>.

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SMEs productivity lags in Colombia. In 2015, the labour productivity of micro-enterprises was just 16% that of large firms. For small and medium enterprises the figure was 43% and 51% respectively (Figure 1.14). Heterogeneity of firm-level productivity is common around the world, but the dispersion in Colombia is much higher than in OECD countries in general. In Colombia, firms in the 90th percentile of the productivity distribution are more than 500% more productive than those in the 10th percentile, in contrast with 200 % for equivalent firms in the United States (Busso, Madrigal and Pagés, 2013_[17]; Olaberria, 2017_[18]).

Figure 1.14. SMEs in Colombia face an increasing productivity gap

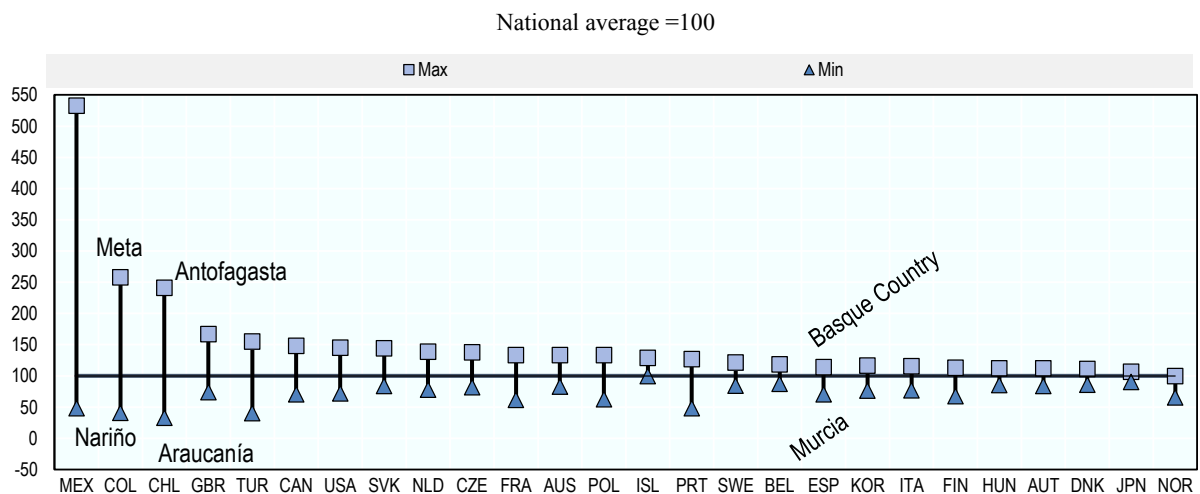


Source: Authors' elaboration based on DANE-EAM DANE-Microestablecimientos Colombia (2016) 2018. <https://www.dane.gov.co>.

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Colombia also suffers from the second highest labour productivity gap between regions in the OECD, after Mexico. This reflects regional differences in economic specialisation, such as mining, which drives up labour productivity in some regions (Figure 1.15). Nariño, a small department located in the south west of the country with an agricultural vocation, is 2.5 times less productive than the national average and 6 times less productive than Meta the top region, a department specialised in natural resource extraction. High inter-regional variation in productivity limits the development of effective national supply chains and reduces the aggregate productivity potential of the economy. In Spain, for example, the top region (the Basque Country) is only 1.6 times more productive than the bottom region (Murcia); the gap between the top and the bottom in Colombia is more than three times higher.

Figure 1.15. Regional variation in labour productivity, Colombia and selected countries, 2016



Note: The labour productivity is calculated by taking into account all business activities (ISIC 3.1)

Source: Authors' elaboration on OECD Regional Statistics database, 2018.
<http://www.oecd.org/governance/regional-policy/regionalstatisticsandindicators.htm>.

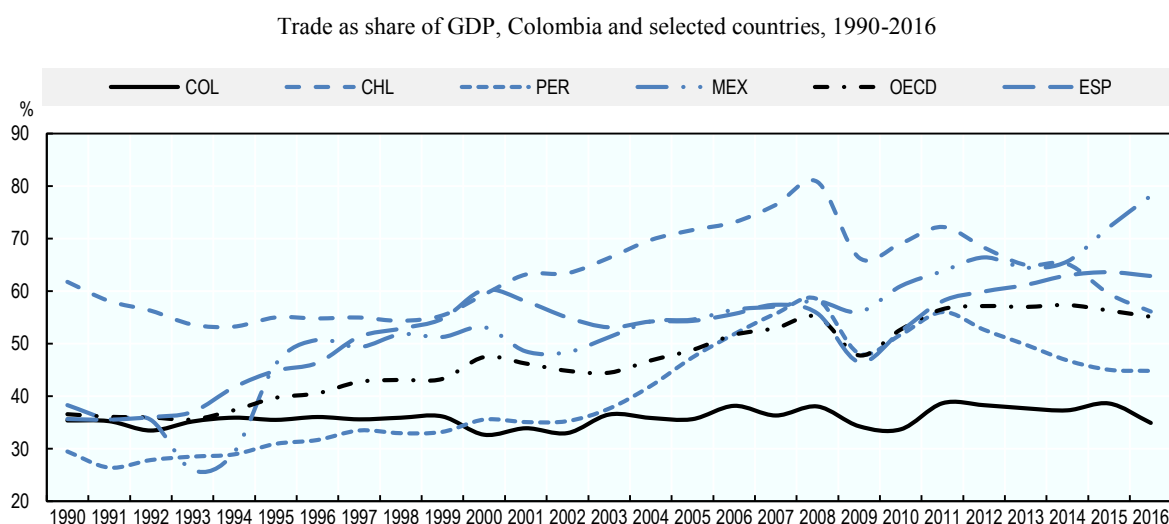
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Trade and investment could deliver more to the local economy

Colombia has not yet fully reaped the dividends from trade and investment. It has been a member of the customs union of the Andean Community (with Ecuador, Peru and Bolivia) since 1969, and, in the mid-1980s, it ratified bilateral preferential trade agreements with its traditional partners (such agreements with Nicaragua and Costa Rica came into force in 1984). Since the 1990s, in line with other countries in the region, Colombia has embraced a targeted process of economic liberalisation. The creation of the Ministry for Foreign Trade in 1991 exemplified this willingness to prioritise trade openness as a driver of development. In the mid-1990s, bilateral and regional trade agreements were ratified with Central American and Caribbean trade partners and the country joined the World Trade Organisation (WTO). Free trade agreements were ratified with the United States in 2012, with the European Union in 2013 and with Korea and the Pacific Alliance in 2016, and represent additional important steps in the densification of the network of agreements of the country.

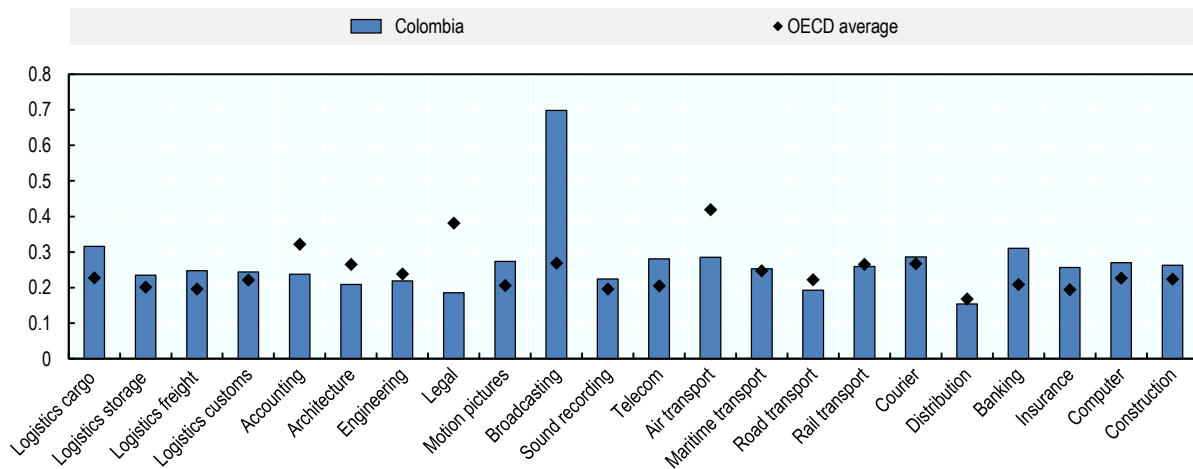
Since the 1990s, exports have tripled in volume, but trade as a percentage of GDP in Colombia has remained stable at 36%. Even though this could be explained by the size of the economy and by a growing capacity to rely on the domestic market with an increasing population and middle classes, this figure is significantly below the OECD average of 55%, and differs from other countries in the region that show more dynamic trade integration. Over the same period (1990-2016), Chile, Peru and Mexico almost doubled their trade as a percentage of GDP growing respectively from 35% to 56% (Chile), from 29% to 45% (Peru) and 38% to 76% (Mexico) (Figure 1.16). Colombia could do more to benefit from trade and investment. A positive aspect is that the country has a lower Services Trade Restrictiveness Index (STRI) than the OECD average. Colombia scores lower than the OECD average in 14 out of 22 sectors, with broadcasting being the sector ranking significantly higher than the average STRI across the OECD. This means that Colombia's national laws and regulations restrict trade in services less than in the average OECD country (Figure 1.17).

Figure 1.16. Trade as percentage of GDP has remained stable and relatively low since the 1990s in Colombia



Source: Authors' elaboration based on World Bank data, and OECD National Accounts data, 2018.
<https://data.worldbank.org/> <http://www.oecd.org/sdd/na/>.

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Figure 1.17. Services Trade Restrictiveness Index, Colombia 2017

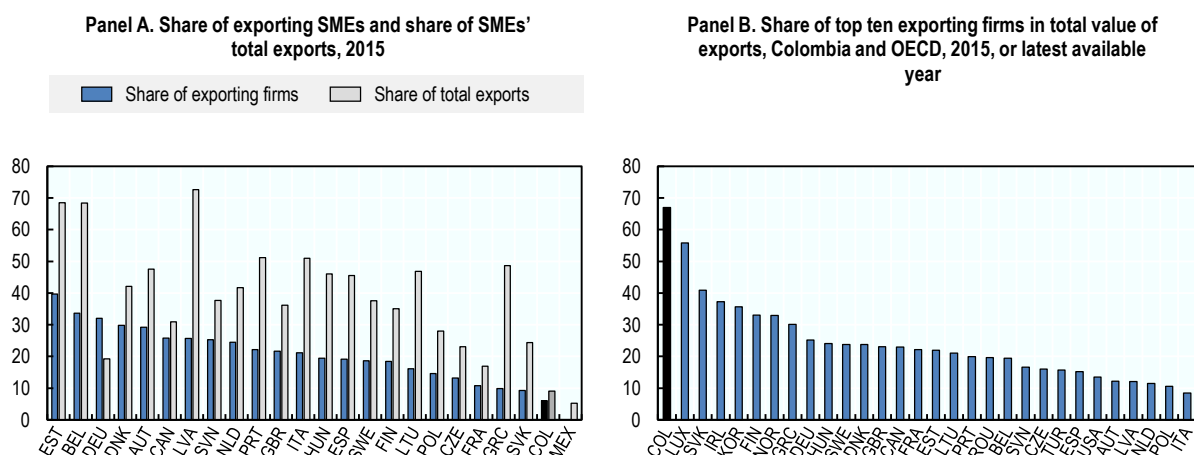
Note: STRI indices take a value from 0 to 1. Complete openness to trade and investment gives a score of zero, while being completely closed to foreign services providers yields a score of one.

Source: Authors' elaboration based on OECD STRI database and FDI Regulatory Restrictiveness Index <http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm>.

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This poor trade performance is also explained by the fact that SMEs in Colombia have a low propensity to export. In 2015, only 6% of SMEs were engaged in exports, accounting for 9% of total export value. In contrast, in Spain and Poland, two countries with a firm structure and market size similar to Colombia, 14% and 19% of SMEs engaged in exports, contributing 45% and 30% of total exports respectively (Figure 1.18, Panel B). In Colombia, exports are concentrated in a few firms. This is similar to other countries specialising in natural resources. In Colombia, the top ten exporting firms account for 81% of exports in primary and resource-based products, and for 67% of total domestic exports. In contrast, in Spain and Germany, the top ten firms account for 16% and 25%, respectively, of total exports (Figure 1.18, Panel B).

Figure 1.18. The top ten exporting firms account for 65% of total exports

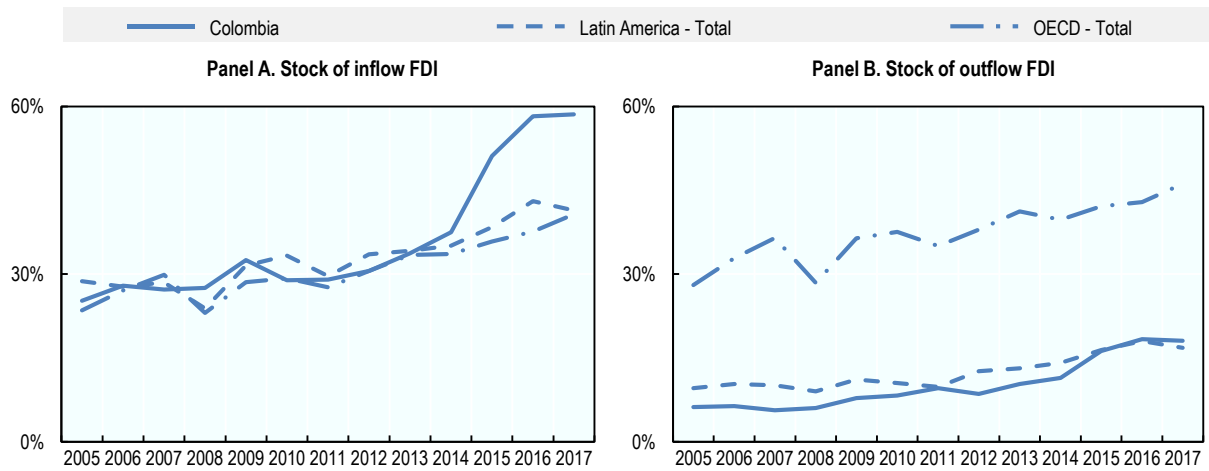


Note: Panel A. Data for FIN, HUN, ESP, SWE, LTU POL, CZE FRA refers to 2014; Panel B: Data for BEL, CAN, CZE, ESP, EST, FIN, GBR, IRL, LUX, NLD, NOR, POL, ROU, USA, TUR refer to 2014.

Source: Authors' elaboration based on OECD TEC database, OECD SDBS database and RUES database - Registro Unico Empresarial [Single Enterprises Registry]-Confercamaras, Colombia, 2018 <http://www.oecd.org/sdd/its/trade-by-enterprise-characteristics.htm>; <http://www.oecd.org/sdd/business-stats/> <https://www.rues.org.co/>.

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In 2017, Colombia's inward stock of Foreign Direct Investment (FDI) reached 57% of GDP, ranking among the highest in the Latin America and Caribbean region and above the OECD average. The Outward Foreign Direct Investment (OFDI) stock is in line with Latin America's average. It increased by three times in 2007-17, reaching 18% of GDP, but it remains below the OECD average (Figure 1.19). Inward FDI concentrates on natural resources, but is becoming more diversified both in terms of activities and investors. More than half of the country's total FDI stock is in mining (34%) and oil (19%) and 14% goes into manufacturing. However, new activities, such as communications, consumer products and construction are increasingly attracting investment. In the early 2000s, the top three investing countries (Spain, the United States and Switzerland) accounted for more than 50% of total FDI. Today the top three countries (Brazil, Spain and the United States) account for around 40% of total FDI (Figure 1.20).

Figure 1.19. FDI as share of GDP, Colombia, Latin America and OECD, 2005-17

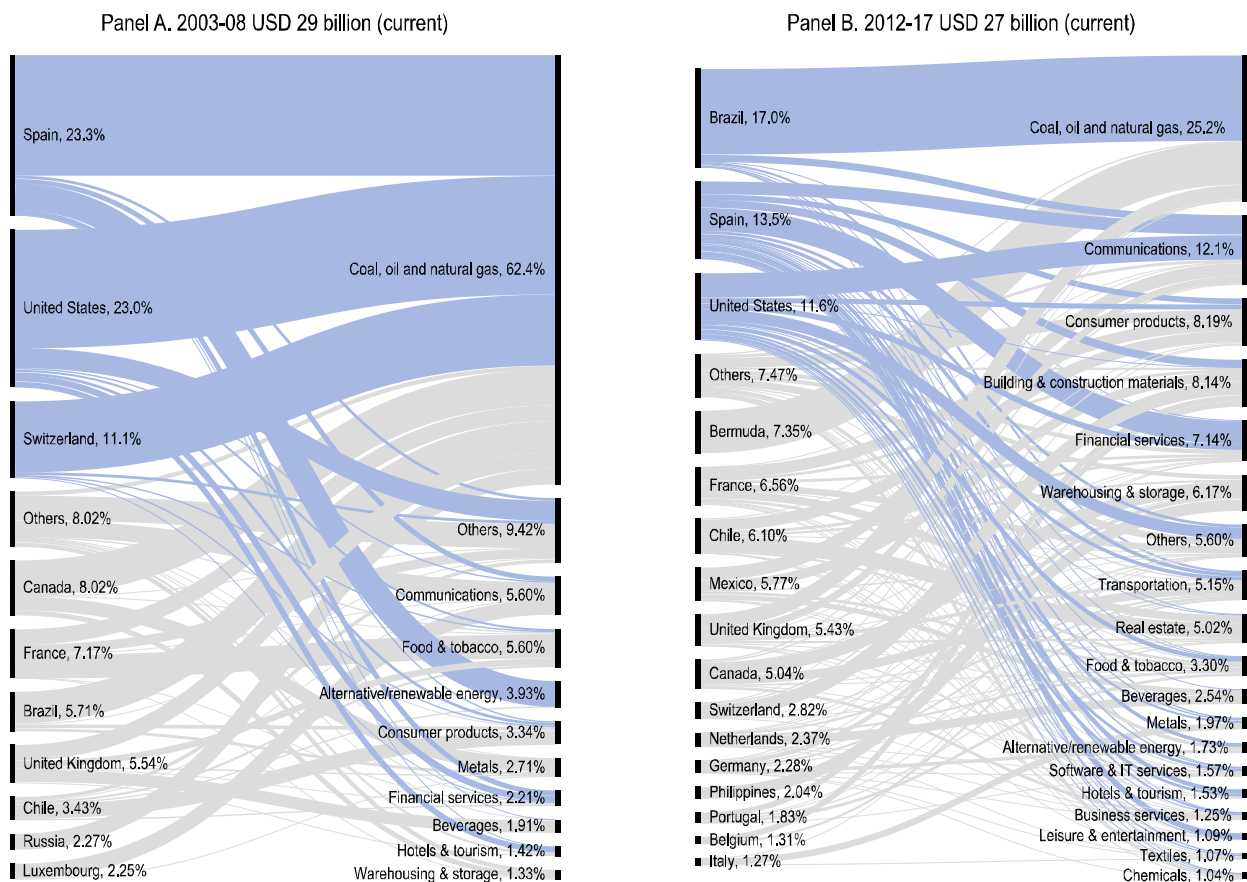
Source: OECD Investment Division, Directorate for Financial and Enterprises Affairs, OECD based on IMF data, 2017 <https://www.imf.org/en/Data>.

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Greenfield FDI created jobs mostly in services and in the northern regions of the country. Around 25% of these jobs were created in the capital district of Bogotá and 20% in Antioquia. In Bogotá, FDI concentrated mostly in activities such as professional services, retail and construction. Tourism and creative industries have also emerged as relevant areas for FDI attraction. In Antioquia the majority of greenfield FDI jobs have been created in construction and transport activities (Figure 1.21).

Figure 1.20. Brazil, Spain and the United States are the top investors in Colombia

Share of total capital investment of Greenfield FDI to Colombia, by origin and industry of destination, 2003-08 and 2012-17.



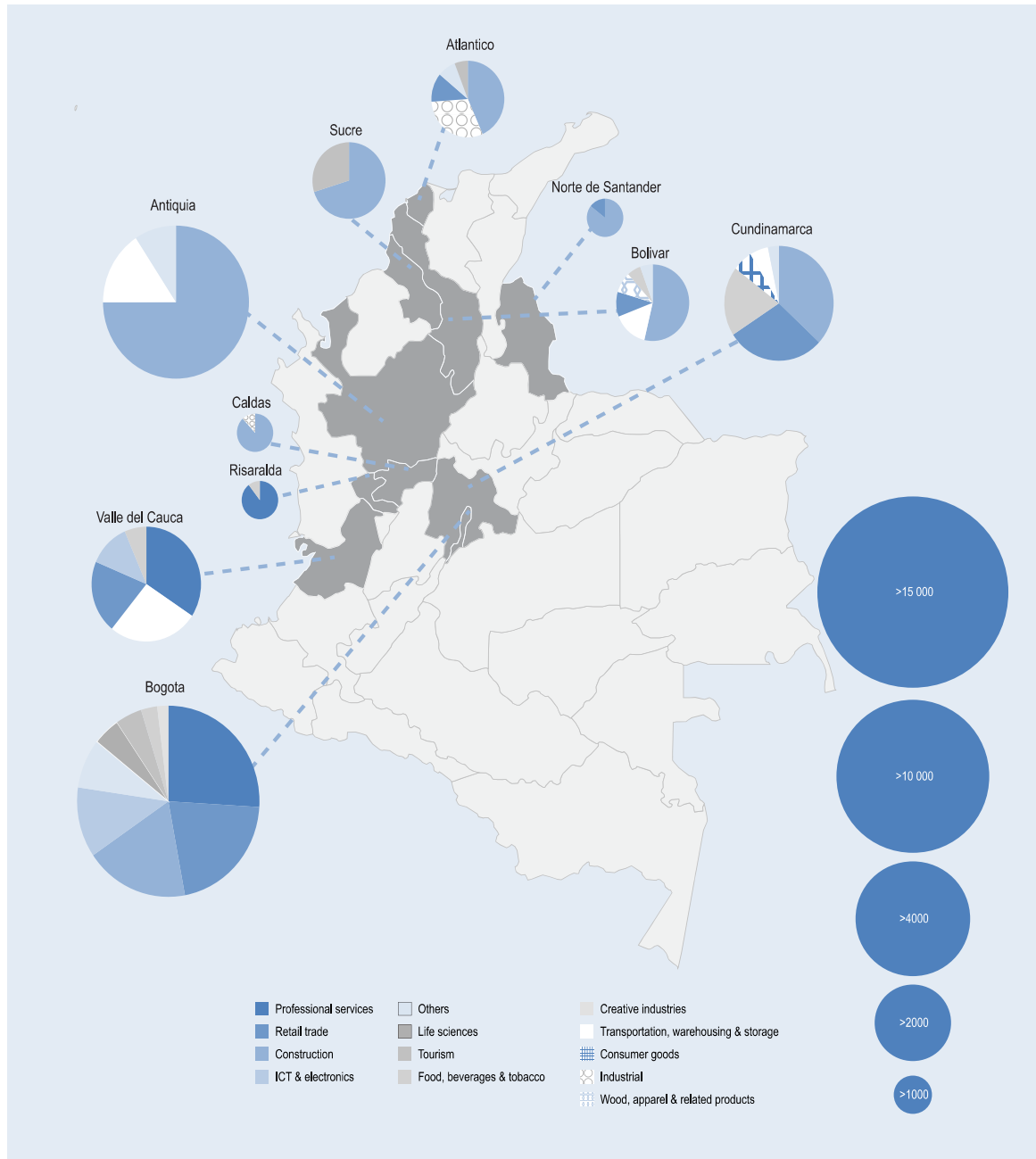
Note: Sectors of destination refer to the North American Industry Classification System (NAICS) 2007. Countries and sectors with less than 1% are grouped into the categories “others”. USD million at current prices.

Source: Authors’ elaboration based on Financial Times FDI Market database, 2018. <https://www.fdimarkets.com/>.

StatLink  <https://doi.org/10.1787/888933910775>

Figure 1.21. Three regions account for 63% of total inward FDI

Share of total jobs created by Greenfield FDI by department and economic activities, Colombia 2015-17.



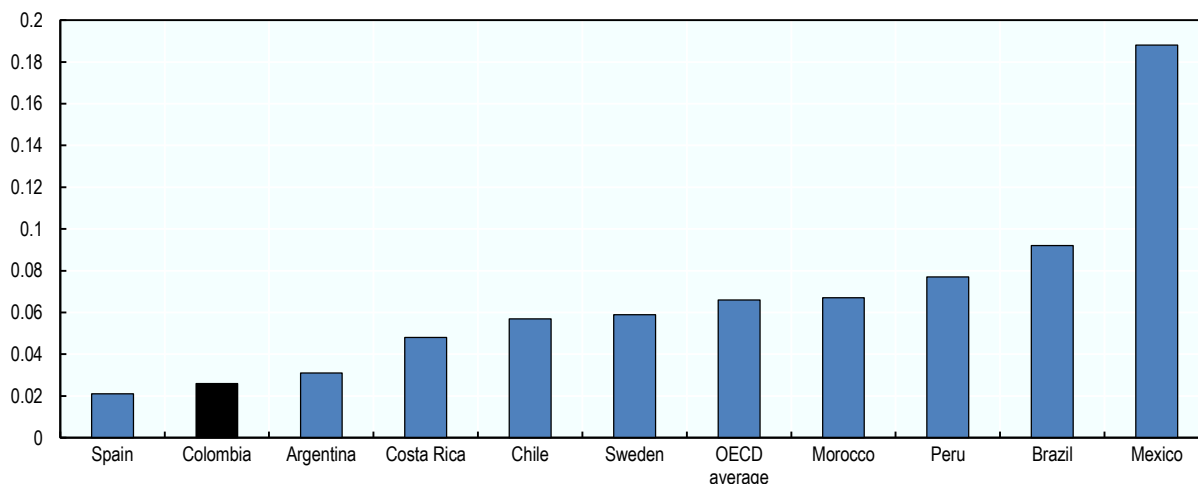
Note: Only departments that account for at least 1 000 jobs created are displayed. Total jobs created between 2015-17 are 56 691 units. Nevertheless, only 49 505 jobs associated with complete information in terms of destination city and economic clusters are taken into consideration.

Source: Authors' elaboration based on Financial Times FDi Market database, 2018. <https://www.fdimarkets.com/>

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Colombia could benefit more from its openness to FDI. The FDI Regulatory Restrictiveness Index (see Box 1.1 for definition of the Index) is half the OECD average (Figure 1.22). The country could identify channels through which FDI could also enhance the impact of trade on wages and productivity. Estimates at the global level suggest that firms engaged in FDI, and export and import at the same time, are on average six times more productive and pay salaries three times higher than firms engaged only in import-export (Figure 1.23).

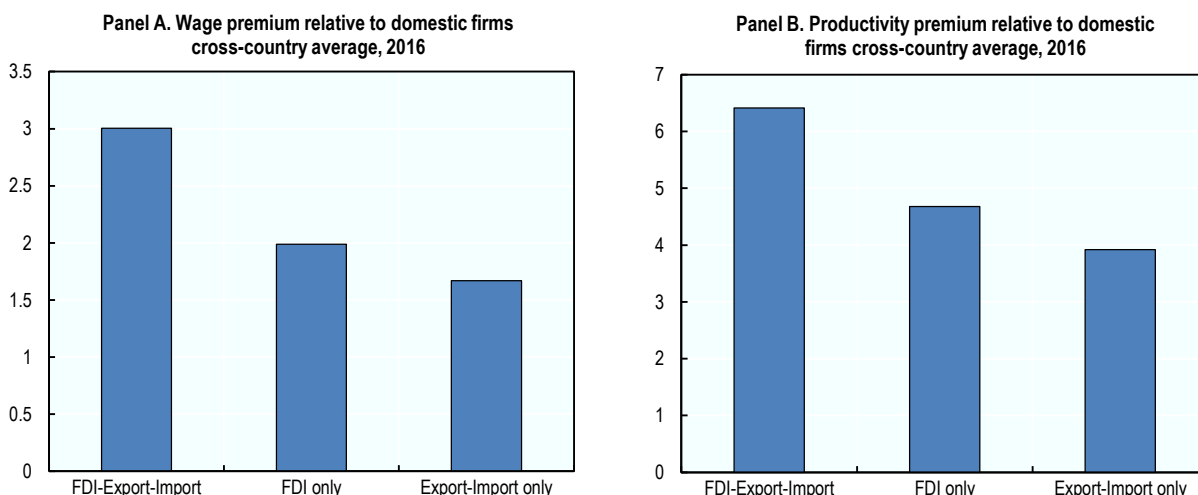
Figure 1.22. Restrictions to FDI are relatively low in Colombia



Source: OECD Investment Division, Directorate for Financial and Enterprises Affairs, OECD based on FDI Regulatory Restrictiveness Index <http://www.oecd.org/investment/fdiindex.htm>.

StatLink  <https://doi.org/10.1787/888933910813>

Figure 1.23. OECD estimates suggest that trade and investment together have greater impact on wages and productivity



Note: Manufacturing firms, 2016 or last available year of all countries in the World Bank Enterprise Surveys.

Source: OECD Investment Division, Directorate for Financial and Enterprises Affairs, OECD, 2018.

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Box 1.1. The OECD FDI Regulatory Restrictiveness Index

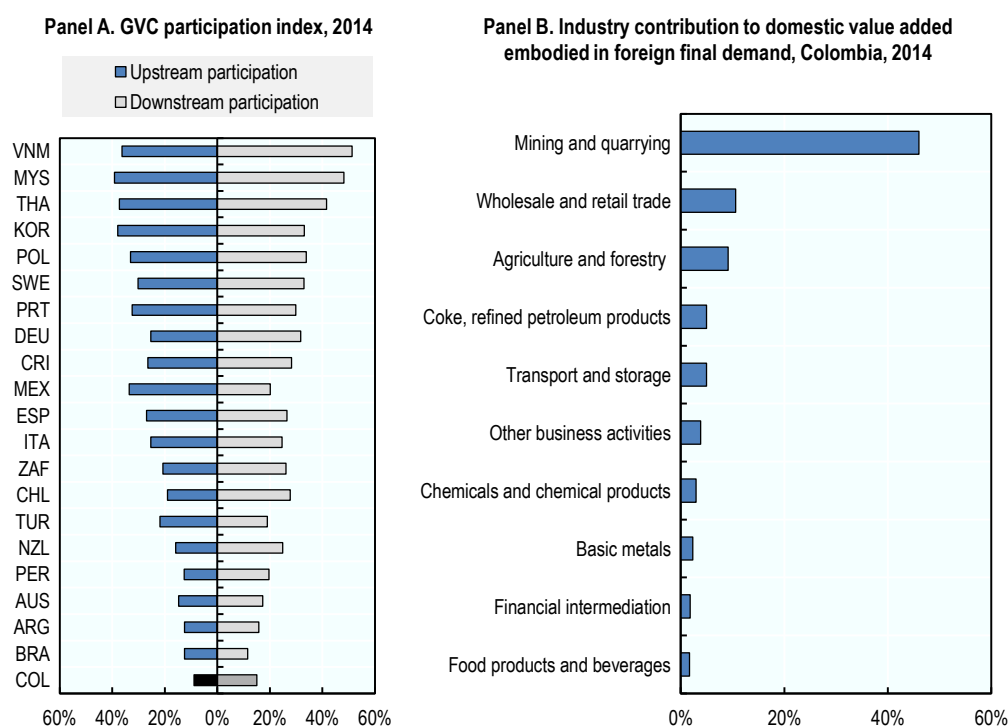
The FDI Regulatory Restrictiveness Index (FDI Index) measures statutory restrictions on foreign direct investment across 22 economic sectors. It is a composite indicator with values between 0 (open) and 1 (closed). It measures the extent to which a country's laws and regulations discriminate against foreign-owned businesses. It is available for 68 countries, including all OECD and G20 economies. It gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI:

1. Foreign equity restrictions;
2. Screening and approval of foreign investment projects;
3. Key foreign personnel employment;
4. Operational restrictions (e.g. restrictions on capital repatriation and land ownership).

The overall restrictiveness index is the average of sectoral scores. The discriminatory nature of measures, i.e. when they apply to foreign investors only, is the central criterion for scoring a measure. State ownership and state monopolies, to the extent they are not discriminatory towards foreigners, are not scored. The FDI Index is not a full measure of a country's investment climate. Here, a range of other factors comes into play, including how FDI rules are implemented. Entry barriers can also arise for other reasons, including state ownership in key sectors. A country's ability to attract FDI will be affected by other factors such as the size of its market, the extent of its integration with neighbours and even geography, among others. Nonetheless, FDI rules can be a critical determinant of a country's attractiveness to foreign investors.

Source: OECD's FDI Restrictiveness Index: 2010 Update", *OECD Working Papers on International Investment* No. 2010.

Firms in Colombia are not highly integrated in global value chains (GVCs). The foreign value added content of domestic exports (i.e. the extent to which foreign inputs add value to the country's production and exports) is among the lowest in Latin America: 9% for Colombia in 2014, compared to 20% for Chile, 13% for Peru and 12.5% for Argentina in the same year (Figure 1.24, Panel A). This is partly determined by the size of the economy (some local value chains exist, and producers can source components locally) and especially by the economic specialisation of the country. Oil and coal mining account for 45% of Colombia's exports. The country specialises in providing raw materials such as oil to other countries which then transform them into higher value-added products such as fuel and derivatives (Figure 1.24, Panel B).

Figure 1.24. Colombia's participation to GVCs is amongst the lowest in Latin America

Note: Panel A. Upstream: Foreign value added embodied in domestic exports as share of gross exports. Downstream: domestic value added embodied in other countries' gross exports as share of gross exports. Panel B. Only industry with at least 2% of contribution are displayed.

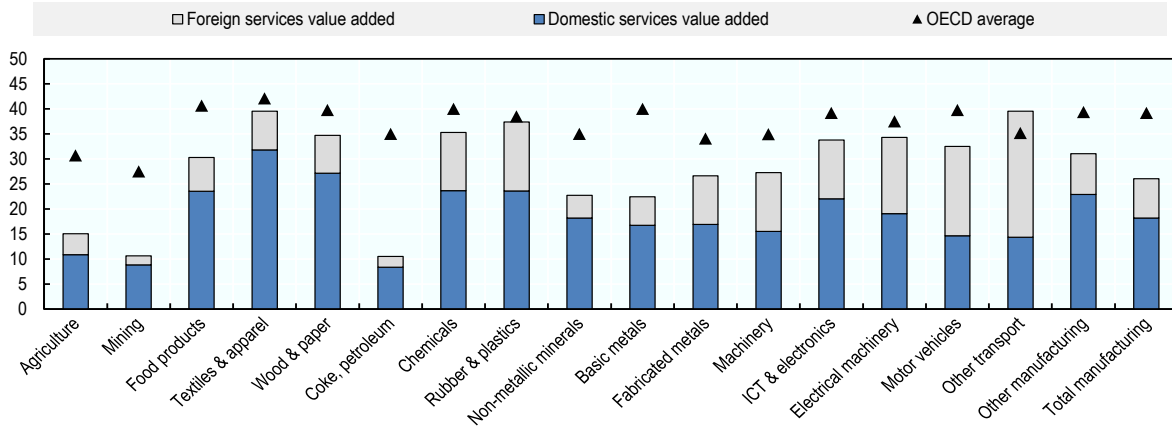
Source: Authors' elaboration on OECD-WTO Trade in Value Added Now casting database, 2018. <http://www.oecd.org/sdd/its/tiva-nowcast.htm>.

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Services could contribute more to increase the domestic value added of exports. In Colombia, the value added of services in gross domestic exports is 32% (according to the latest TiVA estimates for 2014), while the OECD average is 55%. In Colombia, the gap in terms of services contribution to gross exports value added is particularly high in mining, oil and coal, indicating the lack of sophistication of these activities in the country. The OECD average in these industries is three times higher than in Colombia (Figure 1.25). Services could also contribute to improving Colombia's trade performance in traditional activities such as food manufacturing. For example, business services account for 35% of value added in Chilean food manufacturing exports, while in Colombia they represent only 28% (Figure 1.26). Increasing the competitiveness of agro-food in Colombia is not only linked to better articulating the value chain, it is also linked to better exploitation of natural resources. Colombia exploits only 4% of its almost 45 million hectares of agricultural land. Chile, by comparison, uses 8% of its almost 16 000 hectares (FAO, 2018_[19]).

Figure 1.25. Colombia could improve its participation to GVCs through services

Share of services content in domestic industrial gross exports, 2014

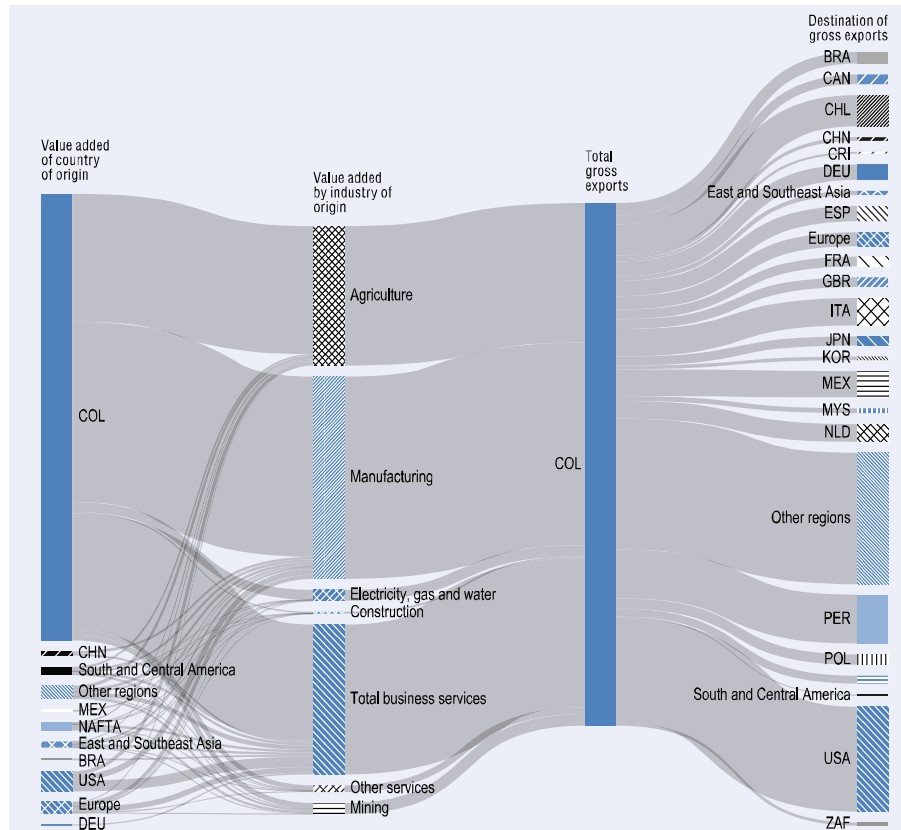


Source: Authors' elaboration on OECD-WTO Trade in Value Added Now casting database, 2018 <http://www.oecd.org/sdd/its/tiva-nowcast.htm>.

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Figure 1.26. Food manufacturing gross exports by origin and destination, Colombia, 2014

Value added of exports by origin and destination (%).



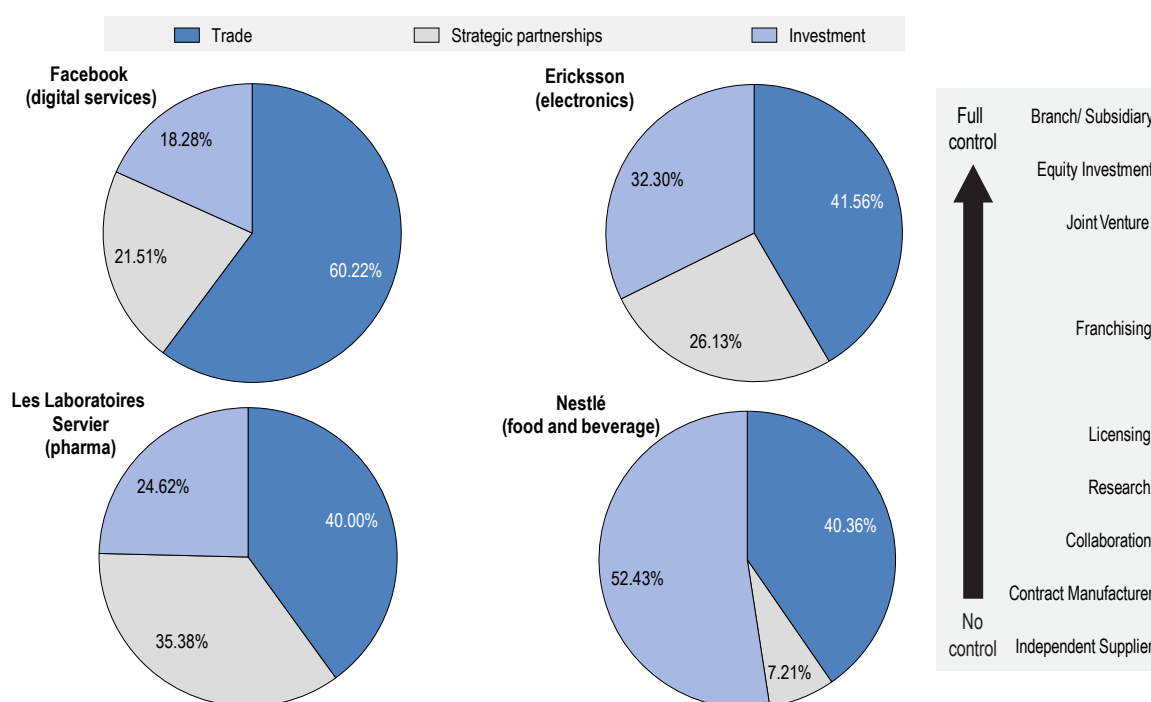
Note: Regional aggregates exclude member countries reported in the graph.

Source: Authors' elaboration on OECD-WTO Trade in Value Added Now casting database, 2018 <http://www.oecd.org/sdd/its/tiva-nowcast.htm>.

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Increasing participation in GVCs could help Colombia benefit more from trade and investment. To do so the country needs to take into account that strategic partnerships are varied and are becoming increasingly relevant in the activities of Multinational Enterprises (MNEs) (Figure 1.27). These include simple supply chain agreements, and more complex forms of joint ventures, equity investments and subsidiary/branch relationships. These different forms of partnerships imply different levels of control of MNEs with respect to local partners. In defining conditions in agreements with MNEs, it is important to take into account these different forms to obtain better deals (OECD, 2018_[20]).

Figure 1.27. MNEs establish different forms of partnerships in hosting countries



Source: OECD Investment Division, Directorate for Financial and Enterprises Affairs, OECD (2018_[20]), *Micro-evidence on corporate relationships in global value chains*.

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Addressing three economic gaps to achieve prosperity

This section discusses three main economic gaps that, if addressed by effective public and private actions, could help Colombia to achieve prosperity for all.

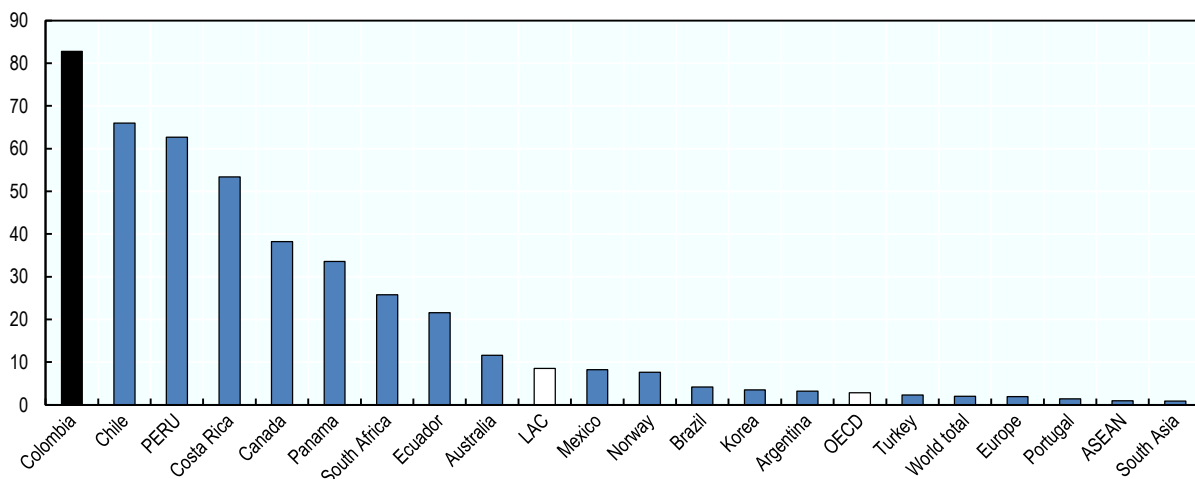
Modernising infrastructure

Infrastructure gaps in Colombia are holding back the country's growth. Existing infrastructure was dilapidated and investments in inter-urban transport networks have been limited during the country's turbulent past (OECD, 2016_[21]). Colombia's geography has also been a factor, with mountainous regions in the middle of the country raising connection costs. As a result, the country had the lowest quality of road and railroad infrastructure among OECD countries and the second lowest quality of port infrastructure

after the Slovak Republic, according to data from the World Economic Forum. This limits Colombia's trade efforts. In 2016, the cost of exporting a container in Colombia was 1.5 times higher than the world average and 2.2 times higher than the OECD average (World Bank, 2018^[22]). Infrastructure gaps in Colombia have a strong territorial dimension. An estimated two-thirds of the country's rural population lacks ready access to the road network (OECD, 2016). Information and communications technology (ICT) infrastructure in Colombia also needs modernisation to enable the country to reap the benefits of the digital revolution (see Chapter 3 of this report).

Colombia has taken steps to address the infrastructure gap, but more needs to be done to increase transport connectivity. The planned budget for infrastructure spending in the 2014-2018 National Development Plan has increased by 12% compared to 2010-14 and the country benefits from a Vice-Ministry of Infrastructure and a National Infrastructure Agency, created in 2012 to replace the former National Institute of Concessions. It has also streamlined public-private partnerships (PPPs) (OECD, 2016^[21]). In 2014 the Colombian government launched a new generation PPP infrastructure programme (fourth generation, or 4G) for road concessions, with aggregate capital expenditures of USD 15 billion and targets to reduce transport costs by 20% and travel time by 30% (OECD, 2016^[21]). However, investments in infrastructure need to increase beyond PPPs; in most OECD countries PPPs make up less than 10% of total infrastructure investments (OECD, 2016^[21]). To make PPPs more effective, improvements started in the past years should continue in the country (Box 1.2). Tackling high transport costs in Colombia compared to tariffs (Figure 1.28) is a challenge and this requires broad based policies linked to the policy-making process in infrastructure investment and active logistics policies.

Figure 1.28. Ratio of freight costs to tariffs, 2012-15



Note: Calculations based on imports from the US market. This figure shows the ratio of freight cost to tariffs on imports to the United States. ASEAN = Association of Southeast Asian Nations. LAC consists of 21 countries. Values are calculated as the median among 2012-15 values.

Source: OECD (2016), *Multi-dimensional Review of Peru: Volume 2. In-depth Analysis and Recommendations*, <http://dx.doi.org/10.1787/9789264264670-en>.

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Box 1.2. Towards a more effective PPP framework for the transport sector

Colombia has substantially improved the infrastructure governance framework in the last decade. Road concessions in Colombia presented continuous renegotiations of contracts, costlier and more recurrent than in other Latin American economies, which in turn raised the ultimate fiscal cost to the equivalent of more than three times the initial cost of concessions (Bitran, Nieto-Parra and Robledo, 2013^[23]).

However, in the recent years, a unified regulatory framework exclusively dealing with PPPs, the creation of a National Infrastructure Agency and a National Development Bank for Infrastructure, have increased private confidence and increased state capacity to deal with PPPs (OECD/CAF/UN ECLAC, 2018^[24]). Furthermore, the government has new mechanisms in place to assess infrastructure needs and improve the quality of the project preparation phase (mainly in the transportation sector).

Despite the improvements, there are other infrastructure governance challenges that have not yet been addressed. In particular, affordability, sustainability and capacity for value for money could be improved to achieve efficient project finance in infrastructure and attract foreign capital. Achieving more efficient and transparent consultation processes with local communities also remains as key challenge. This is particularly important in remote areas where the infrastructure gap is higher.

Cutting red-tape and ensuring legal stability

Red-tape and lack of legal stability continue to be barriers to private sector development. Colombia's regulatory environment is complex, with a high number of laws and regulations at the national and local level that businesses often find hard to meet. Regulations are often redundant or even contradictory and this reduces legal certainty for entrepreneurs. In addition, norms and regulations are continually changed. The business community in Colombia finds it difficult to operate when 14 tax reforms were approved in 1990-2016 (ANDI, 2017^[25]; CPC, 2017^[26]; CPC, 2018^[27]).

Colombia has taken steps to address this issue, but problems persist. The National Planning Department (DNP) and the Ministry of Trade, Industry and Tourism (MinCIT) are leading efforts to revise regulations that rely on technical substantiation. In 2005 MinCIT launched the one-stop shop that provides support for exporting firms to reduce the administrative burden on running a business. Additionally, as of 2018, a single one-stop shop has been set up in Bogotá (*Ventanilla Única Empresarial- VUE*). Nowadays in Colombia, starting a business requires roughly the same number of procedures as in countries like Chile and Spain, although it remains above the OECD average. Moreover, the cost of starting a business is higher than in neighbouring countries and above the OECD average (OECD, 2019^[28]). Trading across borders is still burdensome. Border compliance procedures in Colombia require almost 112 hours, almost double that of Chile and ten times more than the average of the OECD. Moreover, in 2018, settling commercial disputes requires 3.5 years, more than double than in Chile and Spain (Table 1.2).

Table 1.2. Colombia would benefit from cutting red-tape

	Colombia	Chile	Spain	OECD
Starting a business				
<i>Number of procedures</i>	8	7	7	4.9
<i>Time required (days)</i>	11	5.5	13	8.5
Getting electricity				
<i>Number of procedures</i>	5	5	5	4.7
<i>Time required (days)</i>	106	43	95	79.1
Registering property				
<i>Number of procedures</i>	7	6	5	4.6
<i>Cost (% of property value)</i>	1.9	1.2	6.1	4.2
Paying taxes				
<i>Time (hours per year)</i>	239	291	152	160.7
<i>Total tax and contribution rate (% of profit)</i>	69.7	33.0	46.9	40.1
Trading across borders				
<i>Time to export: Border compliance (hours)</i>	112	60	0	12.7
<i>Cost to export: Border compliance (USD)</i>	545	290	0	149.9
Enforcing contracts				
<i>Time (days)</i>	1 288	480	510	577.8
<i>Cost (% of claim value)</i>	45.8	28.6	17.2	21.5

Note: For more information on methodology see <http://www.doingbusiness.org>.

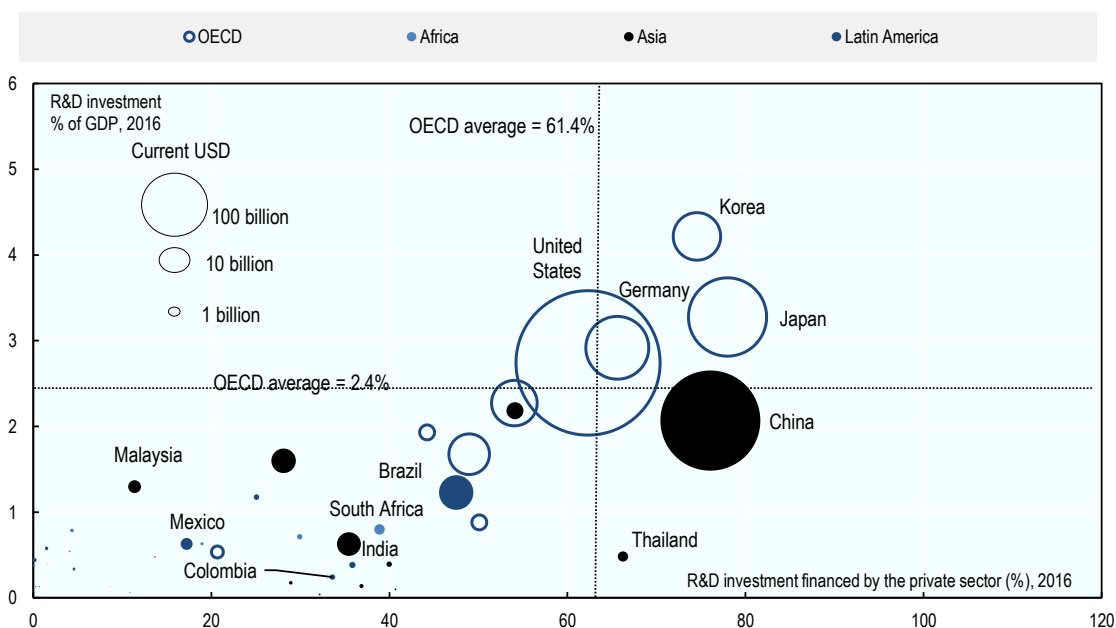
Source: Authors' elaboration based on (World Bank, 2018_[22]), *Doing Business 2018: Reforming to Create Jobs*.

Strengthening the knowledge base and fast-tracking innovation

Colombia invests little in science, technology and innovation. The share of research and development (R&D) expenditure as a percentage of GDP is stable at about 0.25% of GDP, well below the OECD average of 2.35%, and below other countries in Latin America such as Chile (0.39%), Mexico and Argentina (both around 0.5%) (Figure 1.29).

Private sector investment in innovation is also low. Business expenditure on R&D in Colombia is 0.11% of GDP, 20 times less than in Korea and 15 times less than the OECD average (Figure 1.29). Both SMEs and large firms in Colombia innovate less than firms in OECD countries. Of all SMEs in Colombia, only 21% claim to be innovative, versus 35% in Spain and 65% in Germany. In Colombia, 46% of large firms innovate. This figure is higher than Chile where only 30% of large firms declare to innovate, (OECD/UN, 2018_[29]). However this share is lower than countries such as Spain, where 77% of large firms innovate, and Germany, where 94% of large firms innovate (Figure 1.30).

Figure 1.29. Colombia invests little in R&D



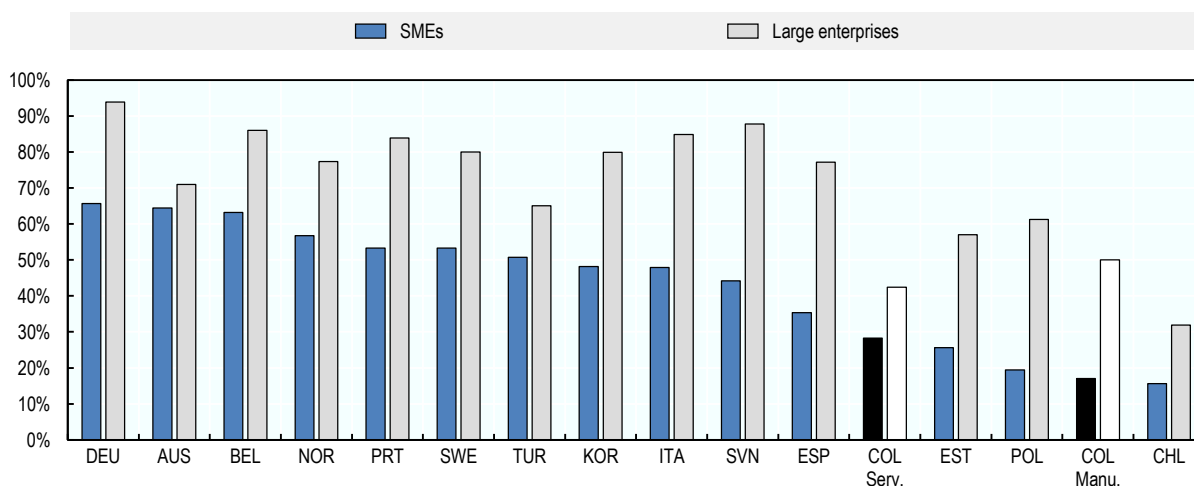
Note: GERD: Gross domestic expenditure in research and development; BERD: Business expenditure in research and development.

Source: Authors' elaboration based on OECD Main Science and Technology Indicators and OCYT Informe Anual de Indicadores de Ciencia y Tecnología 2017 and UNESCO Institute for Statistics <http://www.oecd.org/sti/inn>; <https://ocyt.org.co/>; <http://data.uis.unesco.org/>.

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Figure 1.30. On average only 20% of Colombian firms innovate

Share of innovative enterprises by size, Colombia and selected countries 2016



Source: Authors' elaboration based on EUROSTAT CIS 12 and 14, Colombia Manufacturing Innovation Survey EDIT-VIII and Services Innovation Survey EDITS-V, Chilean Enterprises Innovation Survey – IX, 2018, <https://ec.europa.eu/Eurostat>; <https://www.dane.gov.co>; <https://www.economia.gob.cl>.

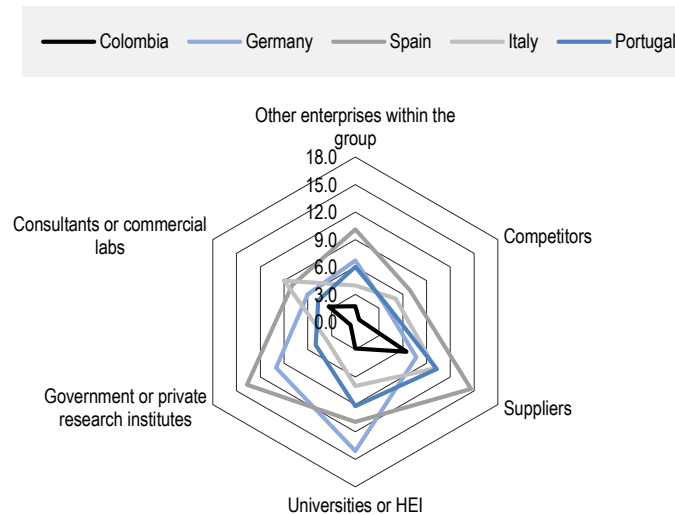
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Manufacturing firms in Colombia are among the least innovative in the country. The share of innovative firms in manufacturing is below the national average, at around 20%, versus 35% in services. In addition, the share of innovative firms in manufacturing in Colombia is lower than that of more advanced countries such as Spain, where 40% of manufacturing firms declare to be engaged in innovation activities; Italy and Portugal where more than half of all manufacturing firms innovate; and Germany where the share is 72%. This gap with advanced countries persists in all manufacturing activities, with food and beverages registering the highest gap (Table 1.3).

Despite the low propensity of the private sector to innovate in Colombia, the country has a network of research centres that has the potential to better support innovation. Colombia has 68 technology centres and laboratories accredited by Colciencias; more than 50% of them located in Bogotá, with 10% in Cali and 6% in Medellín. Among them, 19 are focused on health sciences, 10 on humanities and social sciences, 9 on agriculture and 5 on energy and mining. Colombia's research institutes work hand in hand with some businesses to sustain productivity in certain specialised agro-food research centres such as Cenicafé (Box 1.3). But these are exceptions. There is room for firms to increase business interaction with the national innovation system. Only 3% of innovative firms in Colombia co-operate with academia and only 0.5% with government and private research institutes. In Spain and Germany, 10% and 14% of firms are co-operating with universities and academia respectively, and 13.7% and 10% with Government and private research institutes (Figure 1.31).

Figure 1.31. Innovative firms in Colombia could co-operate more to innovate

Share of innovative firms that co-operate, by type of institutions, Colombia and selected countries, 2016



Source: Authors' elaboration based on EUROSTAT CIS 12 and 14, Colombia Manufacturing Innovation Survey EDIT-VIII and Services Innovation Survey EDITS-V, 2018, <https://ec.europa.eu/eurostat>; <https://www.dane.gov.co>.

StatLink  <https://doi.org/10.1787/888933910984>

Table 1.3. Firms in Colombia tend to innovate less than in other countries

Share of innovative firms by manufacturing activities and their share in overall MVA, Colombia and selected countries, 2017

Economic activity	Colombia		Germany		Spain		Italy		Portugal	
	% of innovative firms	% of MVA	% of innovative firms	% of MVA	% of innovative firms	% of MVA	% of innovative firms	% of MVA	% of innovative firms	% of MVA
Food products, beverages and tobacco	25.39	27.71	56.5	7.11	40	17.63	56.7	11.12	55.9	20.11
Textiles, apparel and leather	18.87	9.91	76	1.17	29	18.25	36.7	9.90	44.5	4.08
Wood and products of wood and cork	13.98	1.11	67.6	1.14	26.9	4.35	45.1	1.93	47.8	1.38
Paper and paper products	24.35	3.58	69.4	1.77	40.6	4.10	51.2	2.16	60.3	2.12
Printing and reproduction of recorded media	16.78	1.71	70.9	1.19	33.9	1.94	41.9	1.75	59.9	2.27
Coke and refined petroleum products	30.36	9.77	78	0.92	61.4	2.70	70	0.97	61	2.07
Chemicals and pharmaceuticals	35.60	11.91	92.5	11.07	77	6.33	79	8.25	71	12.76
Rubber and plastics products	19.47	2.80	78.7	4.55	49.4	5.61	56.4	5.05	65.8	4.20
Non-metallic mineral products	21.39	12.27	66.1	2.66	27.3	5.78	40.1	3.95	53.1	3.74
Basic metals and metal products	16.21	5.49	67	11.96	41.3	10.51	49.5	15.24	61	12.68
Computer, electronic and optical products	33.33	1.97	76.3	12.81	41.8	4.62	62.5	8.07	67	5.67
Machinery and equipment n.e.c.	19.05	4.26	87.9	15.17	52.3	3.81	57.9	14.77	69.7	7.50
Motor vehicles and transport equipment	27.00	2.19	79	22.05	60.1	6.47	65	8.00	63	13.44
Furniture, other manufacturing	19.50	2.21	76.4	3.84	32.4	4.68	57.1	5.37	58.1	3.68
Repair and installation of machinery and equipment	23.08	3.12	64.7	2.55	24.2	3.21	44.8	3.56	45	4.30
Total manufacture	21.7		72.4		40.0		51.0		53.5	

Note: For Germany, Spain, Italy and Portugal the share of innovators refers to 2014 whereas the manufacturing VA refers to 2016. For Colombia the share of innovators refers to 2016 whereas the manufacturing VA refers to 2017.

Source: Authors' elaboration based on EUROSTAT community innovation surveys (CIS) 12 and 14, Colombia Manufacturing Innovation Survey EDIT-VIII and, OCYT: *Informe Anual de Indicadores de Ciencia y Tecnología* 2017, 2018.

Box 1.3. Partnerships foster innovation: Examples from the United States and Colombia

The United States relies on partnerships between the private sector and academia in emerging technologies (e.g. robotics and nanotechnology). Manufacturing USA was established in 2014 following the “Revitalize American Manufacturing and Innovation Act.” It is a network of 14 institutes, operated by the interagency Advanced Manufacturing National Program Office (AMNPO), headquartered in the Department of Commerce. Federal funding is around USD 100 million in each institute and this is matched or exceeded by the private sector and other non-federal sources. Manufacturing USA aims to encourage linkages between stakeholders to facilitate the diffusion of knowledge, provide access to shared equipment, and target resources to identified priority issues.

Colombia is the third biggest coffee producer in the world with 810 000 metric tons produced annually. It has a dedicated private-funded research institute: Cenicafé. The centre was created in 1938 by the National Federation of Coffee Growers of Colombia (*Federación Nacional de Cafeteros de Colombia* FNC) and it is in charge of developing research and technologies to help small and large coffee producers in the country. Cenicafé has an extension programme that operates across the country and enables technology transfers. In the sugar sector, Cenicaña, founded in 1977 by the Association of Sugarcane Growers of Colombia (*Asocaña*), contributes to the development and competitiveness of the industry by generating and spreading technical knowledge. It is financed by private donations from sugar mills and cane suppliers located in the Cauca River Valley. Both Cenicafé and Cenicaña also implement projects co-financed by other entities, linked especially to programmes co-ordinated by Colciencias. Reinforcing public-private partnerships could unleash the potential for innovation in other sectors in Colombia.

Source: (NIST, 2018_[30]; Cenicana, 2018_[31]; Cenicafé, 2018_[32]).

Conclusions

Colombia is a growing, relatively stable economy. Peace has led to new aspirations. But the country needs a new pact for development to deliver new opportunities for all. This requires addressing the pending structural challenges of the country (little economic diversification, persistence in productivity gap with more advanced economies and reduced local spillovers of trade and FDI) by adopting a two-fold development agenda. A short-term agenda focusing on those issues on which there is consensus and which, if properly addressed, could be solved relatively soon. These include cutting red tape, ensuring legal stability, and addressing the infrastructure gap (including digital connectivity as discussed in Chapter 3 of this report). But there is also a long-term agenda that shall focus on avoiding marginalisation and ensuring that the country can benefit more both from its own assets and from global opportunities. This means addressing structural transformation and enlarging the knowledge base of the economy to transform its production structure.

References

- America Economica (2016), *Ranking Multilatinas 2016*, [5]
<https://rankings.americaeconomia.com/2016/multilatinas/> (accessed on 17 December 2018).
- ANDI (2017), *Estrategia para una nueva industrialización: Colombia un país de oportunidades*, ANDI, Bogotá, https://www.google.fr/_chrome/newtab?espv=2&ie=UTF-8 [25]
 (accessed on 6 June 2018).
- Bitran, E., S. Nieto-Parra and J. Robledo (2013), “Opening the Black Box of Contract Renegotiations: An Analysis of Road Concessions in Chile, Colombia and Peru”, *OECD Development Centre Working Papers*, No. 317, OECD Publishing, Paris, [23]
<https://dx.doi.org/10.1787/5k46n3wwxxq3-en>.
- Busso, M., L. Madrigal and C. Pagés (2013), “Productivity and resource misallocation in Latin America”, *The B.E. Journal of Macroeconomics*, Vol. 13/1, pp. 1-30, [17]
<https://ideas.repec.org/a/bpj/bejmac/v13y2013i1p30n3.html> (accessed on 29 August 2018).
- Carranza, J. and S. Moreno (2013), “Tamaño y estructura vertical de la cadena de producción industrial colombiana desde 1990”, *BORRADORES DE ECONOMIA*, [39]
<https://ideas.repec.org/p/col/000094/010416.html> (accessed on 17 December 2018).
- Cenicafé (2018), *Colombia's national coffee research center*, <https://www.cenicafe.org/> [32]
 (accessed on 28 November 2018).
- Cenicana (2018), *Colombian Sugarcane Research Center*, [31]
http://www.cenicana.org/quienes_somos/cenicana/index_eng.php (accessed on 28 November 2018).
- Confecámaras (2016), *Nacimiento y Supervivencia de las empresas en Colombia*. [4]
- CPC (2018), *Informe Nacional de Competitividad 2018-2019*, Consejo Privado de Competitividad, Bogotá, https://compite.com.co/wp-content/uploads/2018/10/CPC_INC_2018-2019_Web.pdf. [27]
- CPC (ed.) (2017), *Informe Nacional de Competitividad 2017-2018 -*, [26]
<https://compite.com.co/informe/informe-nacional-de-competitividad-2017-2018/> (accessed on 6 June 2018).
- DANE (2018), *Boletín técnico Censo Nacional de Población y Vivienda (CNPV) 2018 pr*, [1]
 Departamento Administrativo Nacional de Estadística, Bogotá,
<https://www.dane.gov.co/files/censo2018/informacion-tecnica/cnpv-2018-boletin-tecnico-2da-entrega.pdf> (accessed on 7 December 2018).
- Diao, X., M. McMillan and D. Rodrik (2017), *The Recent Growth Boom in Developing Economies: A Structural Change Perspective*, National Bureau of Economic Research, Cambridge, MA, <http://dx.doi.org/10.3386/w23132>. [14]

- Eslava, M. et al. (2009), *Trade Reforms and Market Selection: Evidence from Manufacturing Plants in Colombia*, National Bureau of Economic Research, Cambridge, MA, <http://dx.doi.org/10.3386/w14935>. [38]
- Eslava, M. and J. Haltiwanger (2017), “The Life-cycle Growth of Plants in Colombia: Fundamentals vs. Distortions”, *Research Department working papers*, <https://ideas.repec.org/p/dbl/dblwop/1105.html> (accessed on 27 March 2018). [37]
- FAO (2018), *Land Use (indicators)*, <http://www.fao.org/faostat/en/#data/RL> (accessed on 8 October 2018). [19]
- Fernández, C. and L. Villar (2018), “The impact of lowering the payroll tax on informality in Colombia”, <http://scioteca.caf.com/handle/123456789/1337>. [43]
- Gómez, H. and S. Borda (2018), “Diagnóstico de microempresas y pymes: políticas e instituciones de fomento en Colombia”, in Dini and Stumpo (eds.), *MIPYME en América Latina: un frágil desempeño y nuevos desafíos para las políticas de fomento*, Cepal, Santiago de Chile. [35]
- Gómez, H. and L. Higuera (2018), “Crecimiento Económico: ¿Es posible recuperar un ritmo superior al 4% anual?”, *Cuadernos de Fedesarrollo*, Vol. 57, <https://www.repository.fedesarrollo.org.co/handle/11445/3553> (accessed on 26 September 2018). [2]
- IRENA (2018), *Renewable Energy and Jobs: Annual Review 2018*, https://irena.org/-/media/Files/IRENA/Agency/Publication/2018/May/IRENA_RE_Jobs_Annual_Review_2018.pdf (accessed on 20 September 2018). [41]
- Lavopa, A. and A. Szirmai (2018), “Structural modernisation and development traps. An empirical approach”, *World Development*, Vol. 112, pp. 59-73, <http://dx.doi.org/10.1016/J.WORLDDEV.2018.07.005>. [13]
- Martínez, A., J. Ortiz and A. Ocampo (2011), *Hacia una política industrial de nueva generación para Colombia*, <https://jaocampodotnet.files.wordpress.com/2012/03/haciaunapolc3adticaindustrialdenuuevage neracic3b3n.pdf> (accessed on 21 September 2018). [8]
- NIST (2018), *Manufacturing USA*, <https://www.manufacturingusa.com/> (accessed on 28 November 2018). [30]
- Ocampo Gaviria, J. (2017), *Historia económica de Colombia*, FCE - Fondo de Cultura Económica, https://books.google.fr/books?id=6NJSdWAAQBAJ&hl=it&source=gbp_book_other_versions (accessed on 5 June 2018). [42]
- Ocampo, J. (2017), *Historia económica de Colombia*, FCE - Fondo de Cultura Económica. [6]
- OECD (2019), *OECD Economic survey of Colombia*, OECD, Paris, https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-colombia_25222961. [28]

- OECD (2018), “Micro-evidence on corporate relationships in global value chains”, *DAF/INV/WD(2018)7/REV1*, OECD, Paris. [20]
- OECD (2018), *OECD Economic Outlook, Volume 2018 Issue 2*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_outlook-v2018-2-en. [46]
- OECD (2018), *Structural and Demographic Business Statistics (SDBS)*, OECD statistics, <http://www.oecd.org/sdd/business-stats/structuralanddemographicbusinessstatisticsssdbsoecd.htm> (accessed on 27 September 2018). [47]
- OECD (2017), *Economic Policy Reforms 2017: Going for Growth*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/growth-2017-en>. [44]
- OECD (2017), *Entrepreneurship at a Glance 2017*, OECD Publishing, Paris, https://dx.doi.org/10.1787/entrepreneur_aag-2017-en. [45]
- OECD (2017), *OECD Economic Surveys: Colombia 2017*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-col-2017-en. [12]
- OECD (2016), *Making the Most of Public Investment in Colombia: Working Effectively across Levels of Government*, OECD Multi-level Governance Studies, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264265288-en>. [21]
- OECD (2015), *OECD Economic Surveys: Colombia 2015*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-col-2015-en. [36]
- OECD/CAF/UN ECLAC (2018), *Latin American Economic Outlook 2018: Rethinking Institutions for Development*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/leo-2018-en>. [24]
- OECD/UN (2018), *Production Transformation Policy Review of Chile: Reaping the Benefits of New Frontiers*, OECD Development Pathways, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264288379-en>. [29]
- Olaberría, E. (2017), “Reigniting growth through productivity-enhancing reforms in Colombia”, *OECD Economics Department Working Papers*, No. 1424, OECD Publishing, Paris, <https://dx.doi.org/10.1787/dac4e274-en>. [18]
- Organisation for Economic Co-operation and Development. Development Centre. (2010), *Latin American economic outlook. 2011, How middle-class is Latin America?.*, OECD Development Centre. [33]
- Ramírez, J. and L. Higuera (2017), “Cambio estructural y desarrollo sostenible en Colombia”, in Cimoli, M. et al. (eds.), *Políticas industriales y tecnológicas en América Latina*, CEPAL, Santiago, <https://repositorio.cepal.org/handle/11362/43936>. [10]
- REN21 (2018), *Renewables Global Status Report 2018*, <http://www.ren21.net/status-of-renewables/global-status-report/> (accessed on 20 September 2018). [40]

- Timmer, M., G. de Vries and K. de Vries (2015), “Patterns of structural change in developing countries”, in *Routledge Handbook of Industry and Development*, Routledge, <http://dx.doi.org/10.4324/9780203387061-11>. [16]
- Tybout, J. (2000), “Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?”, *Journal of Economic Literature*, Vol. 38/1, pp. 11-44, <https://www.jstor.org/stable/2565358> (accessed on 28 November 2018). [34]
- UN (2018), *UN Comtrade | International Trade Statistics Database*, <https://comtrade.un.org/>. [11]
- UNCTAD (2018), *Trade and development report. Power, Platforms and The Free Trade Delusion*, <https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=2227>. [15]
- UNCTAD (2016), *Trade and Development Report, 2016. Structural transformation for inclusive and sustained growth*, <https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1610>. [9]
- UNDESA (2014), “World Population Prospects: The 2015 Revision, Key Findings and Advance Tables”, No. ESA/P/WP.241, https://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf (accessed on 26 September 2018). [3]
- UNIDO (2017), *Competitive Industrial Performance Report 2016 (Report), Volume II*, UNIDO, Vienna, <http://stat.unido.org/content/publications/volume-i%252c-competitive-industrial-performance-report-2016> (accessed on 27 November 2018). [7]
- World Bank (2018), *Doing Business 2018. Reforming to create job*, World Bank Group, Washington DC, <http://www.doingbusiness.org/content/dam/doingBusiness/country/c/colombia/COL.pdf> (accessed on 9 October 2018). [22]



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