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COLOMBIA

Systematic Country Diagnostic Update

Together for a Better Future

WORLD BANK GROUP

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Together for a Better Future

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The World Bank Group

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Latin America and Caribbean Region

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Abbreviations

ANDI	Asociación Nacional de Industriales
CAT-Bonds	Catastrophe bonds
CC	Climate Change
CSA	Climate-Smart Agriculture
DANE	Departamento Administrativo Nacional de Estadística
DNP	Departamento Nacional de Planeación
ECV	Encuesta de Calidad de Vida
FARC	Fuerzas Armadas Revolucionarias de Colombia
GDP	Gross Domestic Product
GEIH	Gran Encuesta Integrada de Hogares
GFSM	Government Finance Statistics Manual
GFW	Global Forest Watch
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas Emissions
GVCs	Global Value Chains
HCI	Human Capital Index
HFPS	High-Frequency Phone Survey
ICT	Information, Communication, and Technology
IDEAM	Instituto de Hidrología, Meteorología y Estudios Ambientales
IEA	International Energy Agency
IED	Improvised Explosive Devices
ITU	International Telecommunication Union
LAC	Latin America and the Caribbean
LAPOP	Latin American Public Opinion Project
LGBT	Lesbian, Gay, Bisexual, Transgender
MPI	Multidimensional Poverty Index
ND-GAIN	Notre Dame Global Adaptation Index
NEETs	Not in education, employment, or training
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development

PDET	Programas de Desarrollo con Enfoque Territorial
PISA	Program for International Student Assessment
PMR	Product Market Regulation
PWD	People with disabilities
RCP	Representative Concentration Pathway
RRI	Reforma Rural Integral
SCD	Systematic Country Diagnostics
SOEs	State-owned-enterprises
STEM	Science, Technology, Engineering, and Math.
STI	Science, Technology, and Innovation
TFP	Total Factor Productivity
TPS	Temporary Protection Status
US	United States
WDI	World Development Indicators
WEF	World Economic Forum
WGI	World Governance Indicators
WHO	World Health Organization

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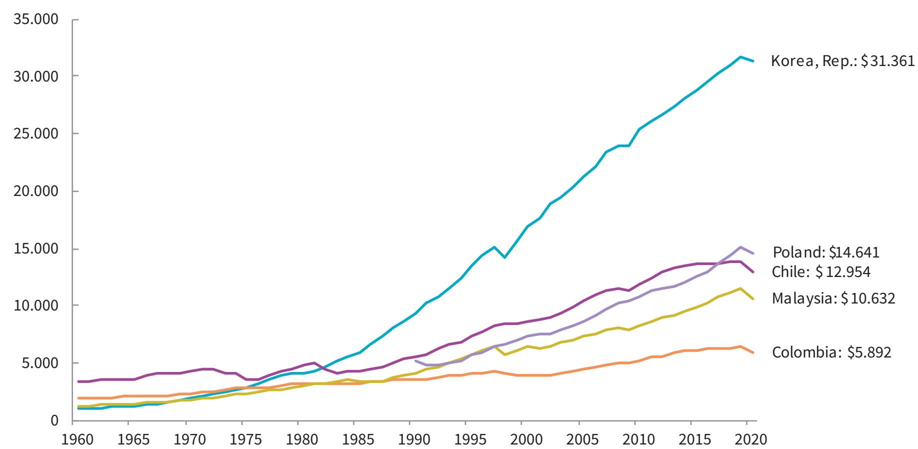
Overview

Colombia has long held great promise. The World Bank's 1950 report on Colombia, the institution's first ever study on a developing country, declared, "The potentialities for development in the future are great." The country boasts a vibrant culture, rich natural resources, and resilient people. Despite its great potential, the country's development has been disappointing. As recently as the early 1980s, Colombia's income per capita was similar to that of Chile, Malaysia, Poland, and the Republic of Korea (Figure 1). Subsequent growth in those countries has exceeded Colombia's, and the Republic of Korea is now four times richer in per capita terms than Colombia.

Figure 1. GDP Per Capita 1960-2020 for Colombia and Comparators (2015 US$)



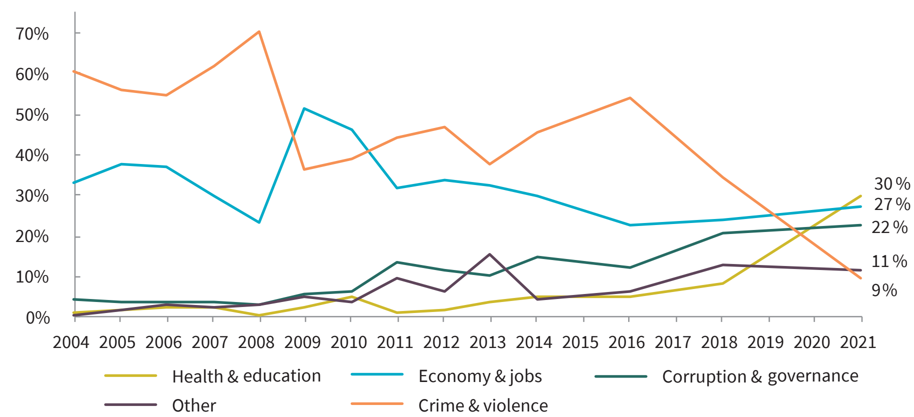
Source: World Development Indicators

Three interlocking long-run constraints have held Colombia back. The first is violence, which has claimed the lives of one million Colombians since 1948. The second is inequity rooted in the nation's history—the Currie Report highlighted 70 years ago that "a wide disparity in levels of income exists between a small wealthy group and the great mass of the population." The third is institutions that have favored the interests of an elite over inclusive growth.

Four major developments have taken place since 2015, when the World Bank published its initial Systematic Country Diagnostic for Colombia. First, the 2016 Peace Agreement with the FARC closed a chapter on a decades-long conflict. Second, 1.8 million Venezuelan migrants came to Colombia, fleeing deteriorating conditions in their home country. Third, there has been a sharp recognition that much of the nation's future will be determined by climate change. Fourth, the COVID-19 pandemic has killed more than 1 in every 400 Colombians and left lasting scars.

Each of these new developments presents both challenges and opportunities. Though violence has surged in more remote areas following the FARC's demobilization, since 2015 the nationwide homicide rate has consistently been at its lowest level since 1980, and the Peace Agreement has opened space to address the country's other enduring constraints. Colombia has also risen to the challenge of integrating Venezuelan migrants, welcoming them both from a spirit of solidarity and a recognition that they form a vital part of the country's future. And while dealing with climate change will require far-reaching changes, it also offers an impetus to protect the nation's biodiversity and natural resources, with ensuing benefits. Finally, the calamity of the pandemic has provided an opportunity to address weaknesses in public health, access to digital services, social protection, and education.

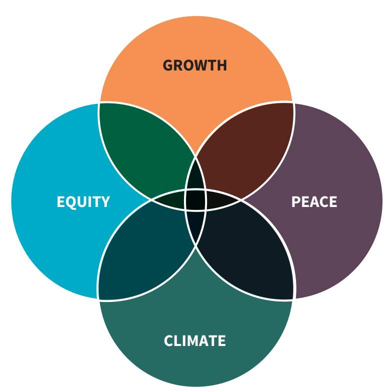
Figure 2. Answers to "What Is the Most Serious Problem Faced by Colombia?" by Respondent Shares



Source: Analysis of AmericasBarometer data. Categories shown are aggregated from a list of responses. "Health & education" in 2021 includes those responding "coronavirus" or "pandemic."

Reflecting these developments, the main concerns of Colombians have shifted dramatically since 2015. The share of Colombians rating crime and violence as the country's top problem in the AmericasBarometer opinion survey dropped from 54 percent in 2016 to 9 percent in 2021. Other concerns—the economy and inequality, corruption, and health and education, have moved to the top of the list (Figure 2).

Figure 3. Schematic of the Report's Structure



This report offers a tour of key issues for Colombia under four main themes: growth, equity, climate, and peace. The interrelationship between the four themes, as shown conceptually in Figure 3, is addressed throughout the report. A shorter spotlight section addresses the cross-cutting digital agenda. Underlying institutional weaknesses, including the weak rule of law and reach of the state in more remote parts of the country, are highlighted in the thematic sections. The organization of the diagnostic also maps into the structure of the *Visión Colombia 2050* document that the Government of Colombia is developing in consultation with civil society.[1] Where international comparisons are used, the report uses regional comparators Brazil, Chile, and Mexico and aspirational comparators Malaysia, Poland, Turkey, and the Republic of Korea.

Sputtering Engines of Growth

Colombia's economic growth has been modest, with employment dominated by low productivity sectors and exports driven by natural resources. Between 2000 and 2019 Colombia's economy grew at an average annual rate of 3.8 percent, underpinned by sound macroeconomic policies and high oil prices, only to be sharply reversed by the COVID-19 crisis. According to data from *Gran Encuesta Integrada de Hogares* (GEIH), sixteen percent of the workforce remains in agriculture and two-thirds in services. In parallel, the share of employment in industry has stagnated, reflecting the inability of the manufacturing sector to expand. This slow transformation is reflected in an export structure that remains dominated by natural resources, with the surge in tourists visiting the country since the Peace Agreement representing a positive development in the export of services.

The low capabilities of Colombian firms, institutional shortcomings, and inefficient markets for land, capital, and labor weigh on productivity. The managerial practices of Colombian firms compare poorly with other countries, translating into a limited ability to innovate. Colombian firms also face obstacles in their operating environment. About 60 percent of rural land is held without a formal property title, with negative effects on agricultural growth and productivity. Financial markets are dominated by a few players and unable to cater to the needs of small businesses and low-income households. Finally, while labor force participation is in line with OECD countries for both men and women, the combination of a high minimum wage and substantial non-wage labor costs discourages the creation of formal sector jobs.

Market competition is weak and holds back productivity and innovation. Firm level evidence indicates that the concentration of market power increased between 2008 and 2018, with firms with the highest profitability also appearing to be less productive, less willing to invest in ICT, and mostly active in traditional activities (clothing, textiles, beverages, furniture), which are also the sectors most protected from international competition.

Infrastructure weaknesses are a further obstacle to productivity and growth. Total investment has hovered around 21 percent of GDP since 1990, far less than successful emerging economies in Asia or Europe. Public investment in infrastructure has been modest, averaging 1.1 percent of GDP over 2015-19. At the same time, the country has increased private participation in infrastructure (PPI), chiefly in intercity toll roads, reaching 1.2 percent of GDP over the same period. The PPI projects have yielded notable improvements, but the quality of infrastructure remains low, particularly rural roads.

Digitally connected households and firms were better able to cope with the effects of the pandemic, but digital access is uneven. Access to internet is low for rural households, the poor, Afro-descendants, indigenous people, and the less educated. Overall, sophistication of internet usage is low, and this is reflected in the low penetration of digital finance: only 5 percent of Colombians have mobile money accounts. Despite progress, Colombia also lags in the provision of public services through e-government. Data affordability is a significant issue, with the cost of mobile and fixed broadband data as a share of income per capita three to four times higher than in other OECD countries. Increasing competition in telecommunications will help promote investment in infrastructure, digital uptake, and affordability.

Persistent Extreme Inequality

Colombia has both very high inequality and one of the lowest levels of social mobility in the world. Inequality is rooted in the country's colonial history and institutions which have historically not favored the welfare of the masses. Nevertheless, Colombia's institutions have become more inclusive over time and these changes can be credited in part with the modest declines in inequality and poverty in the first part of the century. However, poverty and inequality stagnated after 2015, before sharply worsening in 2020.

Three channels have resulted in persistent inequality. First, inequitable access for children to human capital services has created an intergenerational cycle of poverty along a public-private divide. Wealthier Colombians send their children to private school and have access to private health care while the rest use lower-quality public facilities. Low levels of learning are at the core of persistent inequality, and the pandemic has been a catastrophic setback: students endured an extended period of school closures, and global evidence suggests that this resulted in deep learning losses. Second, lack of good jobs limits opportunities. This is driven by multiple factors, including the combination of a high level of mandatory worker contributions and an elevated minimum wage, which discourages creation of formal employment. Just half of all Colombian workers and less than one in four in the poorest parts of the country earn at least the minimum wage. Third, historical policy neglect of lagging areas of the country and the lack of state presence in much of rural Colombia has reinforced inequalities across geography.

Colombia also faces challenges of inclusion of Venezuelan migrants, Afro-descendants, indigenous people, and women. Colombia has responded to the arrival of 1.8 million Venezuelan migrants with an ambitious and progressive integration program. Afro-descendants and indigenous people, who make up roughly 10 and 5 percent of the population, respectively, remain substantially poorer on average than other Colombians, and gaps in poverty rates have not changed in recent years. Finally, although sexual violence declined in conflict-affected areas following the Peace Agreement, women continue to face high levels of intimate partner violence.

The Climate and Biodiversity Challenges

Colombia faces the intertwined challenges of protecting its biodiversity, adapting to climate change, and meeting its ambitious commitments for reducing greenhouse gas emissions. Colombia's biodiversity is threatened by deforestation, which has accelerated since 2016. Climate change will depress growth and widen inequality, hitting poor and rural Colombians hardest. Rising temperatures also threaten to elevate the risk of conflict and violence, increase flooding along the coasts where poorer populations are concentrated, lead to water shortages aggravated by the loss of Colombia's glaciers, and drive down productivity. In a 2021 survey, 65 percent of Colombians said they are "very worried" about climate change, the second highest level among 31 countries.

Meeting Colombia's greenhouse gas emissions reductions commitments will require rapid and far-reaching transitions but also offer opportunities. Colombia will need to halt deforestation, expand climate-smart agriculture, and accelerate a renewable energy transition. While doing so it can develop the country's potential for eco-tourism, reap health benefits from reduced pollution, and use carbon pricing to reduce taxes on capital and labor to reduce informality and spur investment.

A Window for Sustained Peace

Since the 2016 Peace Agreement with the FARC, Colombia has seen a wide divergence in rates of violence across the country. Much of Colombia is now safer than at any time in the past four decades. At the same time, rates of homicide have increased in more remote rural areas since 2016, and assassinations of civic and environmental leaders in those areas have also surged. Smaller armed groups have moved into those areas in the power vacuum created by the FARC demobilization, and violence continues to be driven by conflict over coca cultivation, cocaine trafficking, and illegal mining.

Successful implementation of the 2016 agreement with the FARC is the core challenge the country faces to build a lasting peace. An enduring resolution of the conflict would attract investment, boost growth, and reduce poverty, particularly in those areas that have been most affected. The weakest point of implementation and the most critical from a development perspective has been the component on

Comprehensive Rural Reform. According to independent monitoring, as of November 2020, implementation of 4 percent of the rural reform provisions had been completed, and implementation of 82 percent of the provisions had either not started or been only minimally completed.

Priorities

The SCD team identified seven development priorities. Following the preparation of the initial diagnostic and extensive consultations with government, the private sector, civil society, and academia, a prioritization exercise was carried out within the broad framework of the 2015 SCD. Starting with the priorities identified in the 2015 SCD and drawing on the analysis and input provided in the consultations, the World Bank team rated candidate priorities for eliminating extreme poverty and boosting shared prosperity. The priorities are not intended to be a comprehensive set of areas for government action. Areas of more near-term concern are discussed in the SCD but were not identified as top priorities.

Prudent macroeconomic management, an area in which government action has proven to be effective, is an essential precondition for the pursuit of Colombia's development priorities. Colombia faces more challenging external conditions than in 2015. Rising debt levels and likely monetary tightening in advanced economies could jeopardize the sustainability of Colombia's public and external debt. Colombia should build on the strength of its fiscal and monetary institutions to maintain a prudent fiscal and monetary stance.

The revised priorities are closely aligned with the 2015 SCD priorities. The 2015 report identified eleven broadly defined priorities. The six "Tier 1" 2015 priorities were infrastructure gaps, low quality of education at all levels, financial sector issues, land issues, poor citizen security, and natural resource management. The five "Tier 2" 2015 priorities were slow total factor productivity (TFP) growth, disaster risk management, pollution, revenue issues, and labor market regulation. The revised priorities of this update all fall within the 2015 priorities but are defined in terms of actions rather than constraints and are more specific, reflecting new developments and analysis:

- **Implement the rural development measures under the 2016 peace accord.** Nothing is more important for the country's future than avoiding a third wave of violence. The rising tide of conflict in remote areas can be stopped by following through on commitments to fund rural development and resolve land issues and increasing the presence of the state in those areas. Particular attention is needed to improve the quality of rural roads, incorporating climate-resilient design. Although inter-city connections have improved with the expansion of toll roads, poor secondary and tertiary roads remain a key barrier for trade and rural development.
- **Boost learning in public schools.** The pandemic turned Colombia's learning crisis into a catastrophe. In the short term, teachers need to evaluate their

student's knowledge to be able to adjust their teaching to the right level. Over the long term, learning can be improved by expanding pedagogical support to teachers and using a prioritized curriculum focused on basic competencies. Improving the quality and coverage of early childhood development programs is also needed to ensure that students are ready to learn when they reach school age.

- **Halt deforestation.** Ending the destruction of Colombia's forests is critical to preserving the nation's biodiversity for future generations, meeting the country's emissions reductions commitments, and developing the country's high tourism potential. This priority is tied to the rural development and peace agenda and will involve securing land tenure, increasing territorial control, and expanding programs to compensate landowners for preservation.
- **Enhance market competition**. Whereas enforcement of competition policy across the board is essential to increase productivity, the short-term focus should be on telecommunications, the financial sector, public procurement, and internationalization policies, which all have important spillovers for the rest of the economy.
- **Boost firm capabilities and innovation.** Based on an evaluation of their effectiveness, it is essential to scale up enterprise support programs aimed at promoting productivity, innovation, and export orientation.
- **Reduce the cost wedge between formal and informal employment.** Both employers and employees pay a high level of mandatory contributions. In tandem with the high minimum wage, these contributions drive up the cost of hiring workers and make formal employment less attractive for workers. Trimming mandatory contributions for low-wage workers and moderating growth of the minimum wage would boost job creation.
- **Strengthen anti-corruption mechanisms.** The recent report of the Commission of Anti-Corruption Experts provides a roadmap of specific actions, including the better use of data and analysis in anti-corruption investigations and limiting the use of non-competitive public contracting.

Growth

- Colombia's economic growth, closely tied to the commodity cycle, continues to be insufficient to reduce poverty and generate shared prosperity.
- Low productivity stems from poor firm-level capabilities, weak institutions, inefficient factor and product markets, and a lack of quality infrastructure.
- Fostering competition remains key to unleashing productivity and innovation.

Colombia's GDP grew at an average of 2.4 percent in 2015-2019, slowing down substantially compared to 2010-15, a period of remarkable growth of about 5 percent per annum. After the large drop in commodity prices in 2014-15, the economy experienced an adjustment associated with a contraction in government spending and investment as oil revenues declined by 2.5 percentage points between 2014 and 2016. The deterioration in terms of trade also had a significant impact on private investment, which averaged 18 percent of GDP in 2017-19, down from 20 percent in 2015. The moderation in domestic demand, however, helped to reduce Colombia's external imbalance. The current account deficit went from a peak of 6.4 percent of GDP in 2015 to 3.2 percent two years later (2017). After a relatively smooth adjustment, economic activity picked up and reached 3.3 percent in 2019 (up from the 2.2 percent average growth that the economy registered in 2015-18) supported by the recovery in consumption.

Since the turn of the millennium, the key determining factors in Colombia's economic growth have been sound macroeconomic policies and oil prices. Prudent macroeconomic management consisted of inflation-targeting, a flexible exchange rate and a rules-based fiscal policy.[2] High international prices for Colombia's exports, particularly oil during 2010-2014, gave a further boost to growth and helped increase external and fiscal revenues. As a result, income per capita rose from $3,962 in 2000 to $6,390 in 2019 (in 2015 US$).

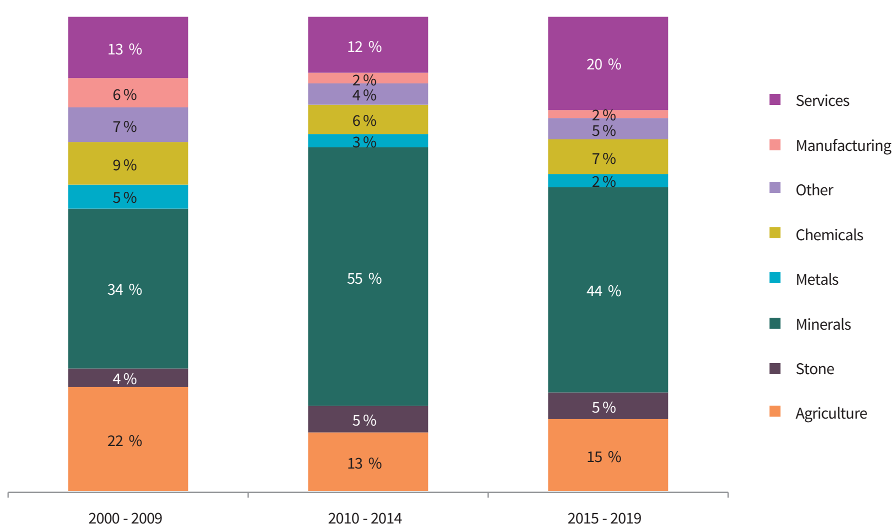
The COVID-19 pandemic crisis has exposed the fragility of this economic and social progress. GDP contracted sharply in 2020 by 7.0 percent.[3] Poverty is expected to have declined in 2021, although remaining higher than pre-crisis levels. Poverty in 2021 ($5.50 per day poverty line) is estimated at 30.1 percent, falling from a peak of 38.3 percent in 2020. Meanwhile, employment was still 5.4 percent below its 2019 average level and the unemployment rate was above pre-pandemic levels (13.7 vs. 10.5

percent). The female unemployment rate remained far above male unemployment rate as of end-2021 (15.1 vs. 8.4 percent respectively). While government support to mitigate the widespread socioeconomic impact of the pandemic has been decisive (with 10 percent of GDP in support expenditure), it has amplified debt vulnerabilities. The general government budget deficit increased to 7.2 percent of GDP and public debt jumped from 52 to 67 percent of GDP. In this context, a key challenge has been to balance the need for fiscal adjustment while supporting the economic recovery and maintaining measures for vulnerable groups.

Colombia's growth has been consumption driven. Since 2000, private consumption has been the main growth driver in Colombia, contributing 2.4 percent of the 3.8 percent annual GDP growth registered on average between 2000 and 2019, and has accounted for 65 percent of the economy since 2015. Consumption-led growth has been financed by fiscal and external deficits, which have made the economy vulnerable to shocks, such as COVID-19 (Kharroubi and Kohlscheen 2017). The contribution of net exports and investment to growth has been small, procyclical, and dictated by swings in commodity prices. From a sectoral perspective, services have been the main driver of growth, followed by industry, mainly oil.

Structural transformation of the economy has been slow. Sixteen percent of the workforce remains in agriculture (down from 23 percent in 2000 and 17 percent in 2015). Two-thirds of employment is in services, mostly in low-value-added sectors, which have absorbed the bulk of the agricultural workers that migrated to urban centers. The share of employment in industry has remained stagnant since the turn of the century, reflecting the inability of the manufacturing sector to expand.

Figure 4. Commodities Dominate Colombia's Export Basket



Source: SCD core team based on The Atlas of Economic Complexity.

The economy remains relatively closed to trade, and exports are concentrated in natural resources. While Colombia has signed numerous trade agreements, exports-imports are only 37 percent of GDP, while extractive and agricultural products continue to account for over two-thirds of exports (Figure 4). This is particularly concerning because the demand for Colombia's coal and oil exports is likely to decline as global energy markets eventually shift toward renewables. Commodities also drive Colombia's participation in global value chains (GVCs). With only 23 percent of manufacturing firms integrated in the world economy through GVCs, this is a missed opportunity. In 2018, Colombian manufacturing firms that participated in GVCs were 38 percent more productive than firms that did not. The expansion of services to one fifth of the total reflects the surge in tourists that took place following the Peace Agreement; international visits rose from an average of 1.9 million per year between 2000 and 2015 to 4.5 million in 2019.[4] A full review of trade issues can be found in the Internationalization Mission report (Ministry of Foreign Affairs, Ministry of Finance, Ministry of Trade and National Planning Department 2021).

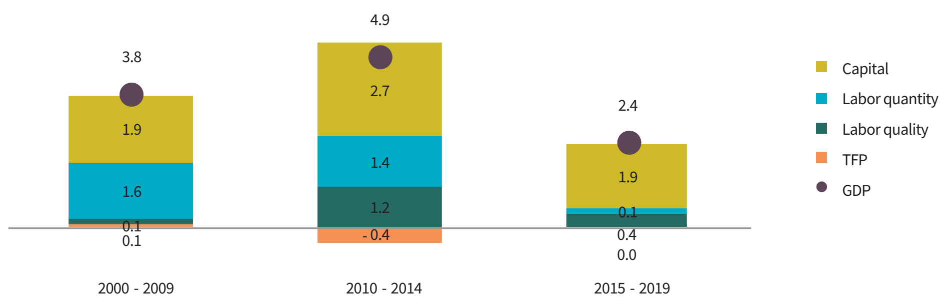
Foreign investment has increased substantially in the last decade and has mainly gone to extractives and the financial sector. Colombia's stock of financial net foreign direct investment (FDI) has been relatively high since 2010 (4.0 percent of GDP, compared to 2.5 percent for upper middle-income economies), with oil and mining the largest recipients, followed by financial services. The share of oil and mining in total FDI started to drop in 2013, in coincidence with lower oil prices, while FDI in the trade and financial sectors has notably increased in the past decade, reaching over a third of the total in 2019.

Inefficient taxation imposes a burden on growth. For its level of development, Colombia taxes corporate profits more and personal income less than comparator countries. The combination of high rates and generous exemptions in personal income taxes, corporate income taxes, and value added tax (VAT), creates differentiated treatment across sources of income, sectors of the economy and production chains. At the same time, distortive taxes such as the tax on bank account transactions and the local tax on sales (ICA) create economic inefficiencies along production chains. Finally, a complicated system of exemptions and deductions and the presence of a multiplicity of taxes that raise little revenue increase the cost of compliance. The objective of structural tax reforms should be to lower the burden on the productive sector and increase the progressivity of the tax system.

Colombia should focus more decisively on growth while continuing with prudent macroeconomic management to navigate a more volatile global environment. Colombia's fiscal and monetary institutions demonstrated their solidity with their prompt and effective response to the COVID crisis. The fiscal packages put in place in 2020 and 2021 helped mitigate the effects of the pandemic, while maintaining the credibility of the policy framework. At the same time, Colombia's independent central bank promptly lowered interest rates supporting a strong rebound of economic activity, with GDP growth expected to be around 10 percent in 2021. Over the next several years Colombia faces more challenging external conditions, owing to rising debt levels and likely monetary tightening in advanced economies, which could jeopardize the sustainability of Colombia's public and external debt. Colombia should build on its institutional strengths to maintain a prudent fiscal and monetary stance, while shifting the focus of its policies towards improving the quality of growth and lifting the economy's growth potential.

Inside the Engines of Growth

Figure 5. Growth Has Not Been Efficient: Growth Accounting and Total Factor Productivity, 2000-2019

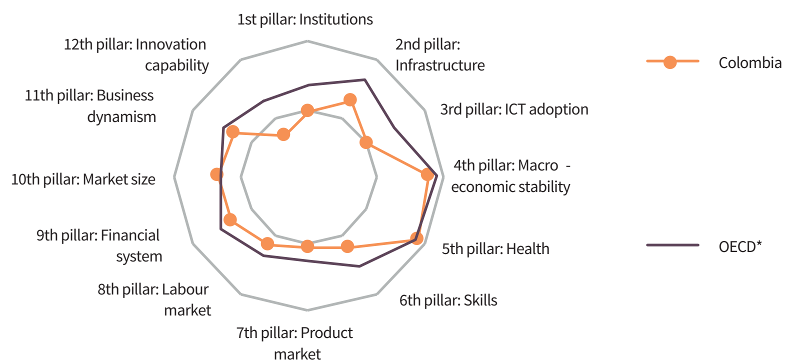


Source: The Conference Board Total Economy Database

Colombia has not used its assets productively. Colombia's economy grew at an annual rate of 3.8 percent between 2000 and 2019, much less than the 5.5 percent average of upper-middle-income countries in the same period. Growth has been achieved mainly through capital investment and a growing labor force, while increased *quality* of labor has contributed far less. More worryingly, the negative contribution of TFP indicates that the inefficient use of national assets has been a drag on growth (Figure 5). This is nothing new. Since 1950 Colombia has experienced economic contraction in only two years (1999 and 2020). Yet, over these 70 years, TFP has contributed negatively to GDP growth in 31 years; it has grown less than 0.5 percent in 40 years and less than 1 percent in 47 years.

Colombia's productivity lags because of the low capabilities of its firms, weak institutions, flawed markets, and poor infrastructure, as documented in the recent Country Private Sector Diagnostic (World Bank Group 2022). Colombia has a lower entry rate of manufacturing firms relative to the level predicted by its income per capita (World Bank, DNP, and Ministry of Trade 2021). The typical manufacturing firm in Colombia is stagnating, and there is a high share of small firms with low performance that survive without exiting the market (Becerra et al. 2019). The 12 pillars of the World Economic Forum Competitiveness Indicator can help explain these trends and are useful proxies for the drivers of productivity, both internal to firms and in their operating environment (Cusolito and Maloney 2018). Colombia stands out in terms of its low firm capabilities, weak institutions, less developed factor and product markets, and inadequate infrastructure (Figure 6).

Figure 6. Enterprise Capabilities, Institutions, and Infrastructure are Colombia's Main Weaknesses



Source: WEF, The Global Competitiveness Report 2019.

Note: OECD includes exclusively high-income members. Scores range from 1 (worst) to 7 (best).

Quality of Labor, Firm-level Capabilities, and Innovation

Productivity crucially depends on the level of human capital that can be employed in the economy. Colombia's Human Capital Index (HCI) is consistent with its upper-middle-income status but there are wide territorial disparities. While Bogota (0.67) has levels of human capital similar to the Slovak Republic (0.66), Hungary (0.68) or Greece (0.69), peripheral departments, such as Vichada, Guainía, and Vaupes, reported scores similar to Sub-Saharan Africa.

Despite fairly high levels of human capital, the capabilities of Colombian firms are generally low. Managerial and organizational capabilities, along with other production capabilities—such as skill development, on-the-job learning and training—are essential for productive efficiency (Cirera and Maloney 2017). Managerial and organizational practices in Colombia compare poorly with other countries (Centre for Economic Performance 2014). Furthermore, managers systematically overestimate the quality of their managerial and organizational structure.

Low firm level capabilities translate into limited ability to innovate. In 2020, Colombia spent only 0.83 percent of GDP in science, technology, and innovation (STI), substantially less than the 1.5 percent target for 2022 the country set for itself in the 2018-2022 National Development Plan. The use of advanced technologies by Colombian firms is similarly low: 8 percent of firms use the internet of things, 5 percent use big data, 3 percent use artificial intelligence, 3D printing and blockchain, and only 1 percent use robotics and virtual reality. Firms themselves identify lack of knowledge as the major obstacle to innovate, followed by regulatory barriers, an underdeveloped property rights system, and access to finance (Consejo Privado de Competitividad et al. 2020).

Institutions

The quality of institutions has been largely unchanged since 2015. Colombia continues to underperform compared to high income countries in most dimensions of governance as measured by the World Governance Indicators, the Bertelsmann Transformation Index, the World Justice Project, and the Open Budget Survey. Colombia ranks in the bottom half of countries worldwide in most subcomponents of the Rule of Law Index, which is based on a survey of perceptions of local experts and the overall population (World Justice Project, 2021). However, Colombia scores high (35 out of 139 countries) on the Open Government measure of "the extent to which a government shares information, empowers people with tools to hold the government accountable, and fosters citizen participation in public policy deliberations."

Figure 7. Rule of Law Index for Colombia

Measure	Global Ranking	Evolution of Score 2015-2021 '15	'16	'17 '18	'19	'20	'21
Overall Index	86/139	.50	.51	.50	.50	.50	.49
Open Government	35/139	.56	.64	.63	.63	.64	.62
Regulatory Enforcement	62/139	.49	.52	.51	.50	.52	.52
Constraints on Government Powers	72/139	.55	.53	.53	.53	.53	.53
Fundamental Rights	87/139	.55	.55	.56	.53	.53	.51
Civil Justice	91/139	.51	.50	.49	.48	.49	.47
Absence of Corruption	101/139	.43	.41	.41	.38	.39	.39
Criminal Justice	119/139	.34	.34	.34	.33	.34	.32
Order and Security	126/139	.57	.55	.57	.59	.56	.56

● Weaker than average country ● Stronger than average country

Source: World Justice Project (2021)
Note: '17 - '18 correspond to the same period

The fair application of justice is a critical issue. Colombia's scores on the Rule of Law Index's subcomponents of both civil and criminal justice are particularly low and have declined since 2015 (Figure 7). Justice system weaknesses are tied to the legacy of Colombia's long conflict. The Special Jurisdiction for Peace, established as a transitional justice mechanism by the 2016 Peace Accords, has been viewed as a moderate success and has carried out its work at a pace equal to or above that of similar mechanisms in other countries with peace agreements (Kroc Institute 2021).

Concerns about corruption remain substantial. Increasing numbers of respondents in surveys cite corruption as the country's principal challenge, though this may reflect in part the declining importance of other concerns as well as greater public information on corruption (Latin American Public Opinion Project 2021, Latinbarómetro 2020). In a survey of firm owners and managers, 14.7 percent said they were expected to give gifts to secure government contracts, 8.9 percent said they were expected to give gifts to get an operating license, and 62.1 percent identified corruption as a major constraint to business (World Bank 2017a). A recent commission convened by the think tank Fedesarrollo with the participation of other leading NGOs identified a series of actions that can be taken to fight corruption (Comisión de Expertos Anti-Corrupción 2021).

Factor and Product Markets

Land markets are dysfunctional, holding back productivity and investment. Approximately 60 percent of rural land in Colombia is held without formal property title (DNP 2018). This has a negative effect on agricultural growth and productivity. Farmers have little incentive to make better use of their land, invest in it, and use it as collateral to obtain bank finance, while they are forced to spend more time protecting their property rights in courts and through administrative processes. Poor tenure security can also increase transaction costs, notably through cumbersome legal processes, deterring private investors. Moreover, land informality is associated with poor land administration, increased deforestation, and ineffective disaster risk management. Finally, tenure insecurity has been associated, for decades, with land disputes and violence (World Bank 2018).

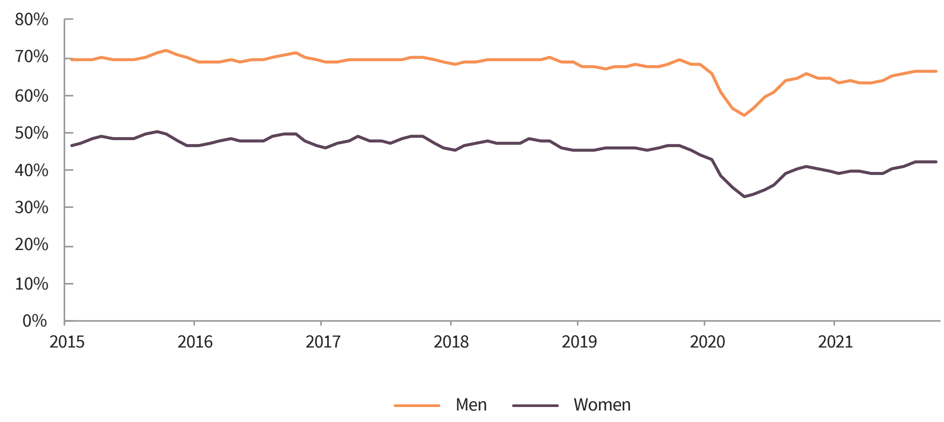
Financial markets are dominated by a few players and are not sufficiently diversified, limiting access to unserved segments of the population and financing for MSMEs. While more than 85 percent of adults owned at least one financial or deposit product in 2020, statistics on account usage are less impressive, and a large urban-rural gap remains (32 percentage points in the access indicator according to the 2020 *Reporte de Inclusión Financiera*) (Banca de las Oportunidades and SFC 2020). MSMEs resort to bank lending to a great extent, but an MSME financing gap remains, estimated to be equivalent to 1 percent of GDP. MSMEs are almost absent from capital markets, despite the creation of a hybrid bond issuance regime (*Segundo Mercado*). Recently approved regulations enabling new instruments to have a more permanent impact in the disintermediated market may substantially increase MSME's access to finance, while fintech developments can contribute to expand the outreach of financial products and services to underserved and unserved segments of the population.

The banking sector is concentrated and characterized by a large presence of financial conglomerates. The interlinkages between financial and real sector within these conglomerates warrant attention from the competition perspective. Market shares in the same financial products have remained relatively stable amid few market entries, exits and mergers, suggesting low market dynamics (World Bank Group 2022). While lending rates have declined over the past years and portfolio purchases between banks indicate competition for "bankable" retail clients, spreads between deposit and lending rates remain. While lending rates have declined over the past years and portfolio purchases between banks indicate competition for "bankable" retail clients, spreads between deposit and lending rates remain high. Further, high informality and the lack of documents and collateral, especially among lower income households and MSMEs, limit the pool of clients for whom banks compete.

The banking sector was hit by the economic contraction in 2020, but so far it appears to be resilient. Banks entered the crisis from a position of relative stability, with adequate capitalization and profit buffers. Debtor support and regulatory relief programs put in place as part of the crisis response caused non-performing loans (NPLs) to fall up to mid-2020, although they have edged up since, especially for consumer and microcredit. Banks increased their capital adequacy ratios during 2020 and the solvency of the banking system appears to be resilient to severe stress testing scenarios.

Labor force participation and employment rates for both men and women fell slightly in 2015-19 and are now recovering from the pandemic. In 2019, the female labor force participation rate for those aged 15-64 was modestly below the OECD average (62.2 vs. 65 percent), while the male labor participation rate was above the OECD average (84.6 vs. 80.7 percent) (OECD 2021b). Employment rates declined for both men and women during the pandemic, with a larger decline for women, who endured a greater burden of increased childcare due to school closures. In the period October-December 2021, the gap between men's and women's employment rates was 24.3 percentage points, compared to 22.4 percentage points for the same period in 2019 (DANE 2021d) (Figure 8). It is unclear whether the pandemic may have longer term impacts on women's employment.

Figure 8. Employment Rates for Men and Women Through December 2021



Source: DANE 2021d.

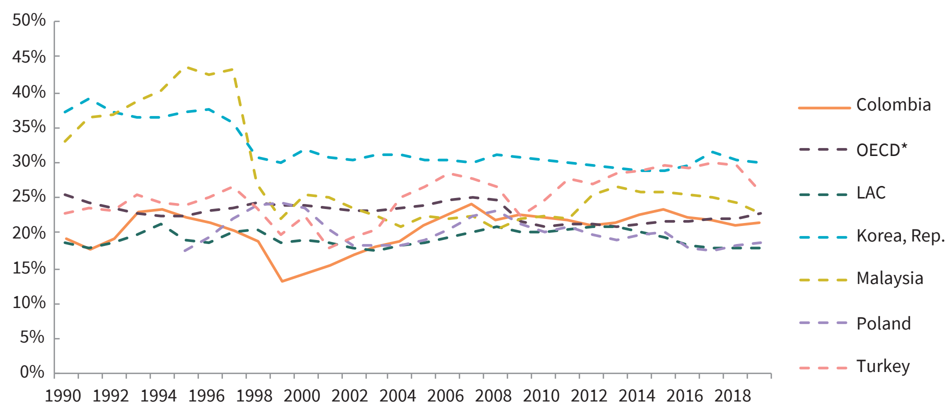
Competition in product markets is limited, with negative consequences for productivity, innovation, and exports. In 2019 Colombia scored 3.34 out of 7 in the perception of market dominance dimension of the WEF Global Competitiveness Index. Firm-level data corroborate these perceptions, with 26 percent of Colombian firms considering that they operate in monopoly, duopoly, or oligopoly markets. Market power has been increasing in Colombia between 2008 and 2018. Manufacturing firms with the highest markups and operational profitability are also less productive, less willing to invest in ICT, and less likely to export. They are mostly in traditional activities (clothing, textiles, beverages, furniture), which are also sectors that benefit from the most protective tariff and non-tariff measures (Iootty, Pop, and Pena 2020).

Competition would benefit from improving the business regulatory environment. SOEs play a dominant role in key sectors and do not face the same market conditions as private firms; SOEs benefit from preferential financial access and tax exemptions, whereas their governance practices are not aligned with international standards. The government holds shares in 105 SOEs and retains majority control in 39 (Ministerio de Hacienda y Crédito Público 2018). Entry of new market players is stifled by opaque regulatory procedures. Foreign investors face further limitations, such as restricted access to tendering for public works. Actions are needed to promote competitive neutrality between SOEs and private firms. There is a need to ensure that state support to both private and public firms is granted in a non-distortive way, and to effectively implement competition policy that tackles anticompetitive behavior and distortive regulations (Iootty, Pop, and Pena 2020; World Bank Group 2022).

Infrastructure

Colombia's investment in physical capital is low, although the level of private investment is relatively high compared to other countries. Total investment has hovered around 21.2 percent of GDP since 1990, far less than in successful emerging economies in East Asia or Europe (Figure 9). After picking up from the trough of the late 1990s, total investment started to decline again in the wake of the global crisis of 2008, reaching 22.1 percent of GDP in 2019. The decline in investment since 2008 is marked by the contraction of the private sector, which dropped from 89 percent of total investment in 2007 to 82 percent in 2019.

Figure 9. Investment Is Too Low to Build the Physical Capital Needed for Growth (Gross Fixed Capital Formation as Percentage of GDP)



Source: WDI.

*Note: OECD includes exclusively high-income members.

Colombia's investment gap is visible in the poor quality of its infrastructure. Colombia lags in transport infrastructure—roads, railroads, and ports—in comparison with most peers (World Bank Group 2022). Public investment in infrastructure has been modest, averaging 1.1 percent of GDP over 2015-19 (Inter-American Development Bank, Development Bank of Latin America, and Economic Commission for Latin American and the Caribbean 2021). At the same time, the country has increased (PPI), chiefly in intercity toll roads, reaching 1.2 percent of GDP over the same period (World Bank 2021g). The PPI projects have yielded notable improvements, but the quality of infrastructure remains low, particularly in rural roads. Only 14 percent of Colombia's total road network is paved, compared to 23 percent in Chile and 36 percent in Mexico. The secondary and tertiary road networks represent a key bottleneck in most rural areas, with a fifth of the secondary and one third of the tertiary network qualified as inadequate and unpaved. In comparison to its neighbors, goods in Colombia travel large average distances—280 km, or three times the average for

Brazil and Chile and six times that of Argentina—from production areas to the main ports (OECD, 2015).

Resources for public investment have been declining. The deficit reduction since 2015 was achieved primarily by containing investment spending, which contracted from 3 to 1.7 percent of GDP between 2014 and 2019. From a public investment management perspective, although Colombia has introduced good international practices in planning and budgeting, lack of strategic emphasis, budget fragmentation, a weak relationship between spending evaluations and resource allocation, and lack of multi-year planning and budgeting remain significant challenges.

Private sector investment can help Colombia meet its infrastructure needs. The 2018-2022 National Development Plan estimates overall infrastructure investment needs at US$85 billion, substantially higher than the actual historic levels of infrastructure spending. To address these challenges, the country put in place a strong regulatory framework for Public-Private Partnerships (PPP) underpinned by a sound contingent liability management system, which helped build a good track record of attracting private investment. A strong network of critical and sustainable infrastructure programs and projects was developed under the US$12.5 billion 5G Infrastructure Program umbrella, together with other large-scale investments in urban mobility, environmental restoration and the green energy sectors. These ambitious investment programs also have a strong focus on climate change mitigation and adaptation.

Spotlight: The Digital Economy

Digitally connected households and firms adapted more easily to the consequences of COVID-19. Access to the internet at home has made it easier to telework and continue education through remote learning. At the same time, digitally connected firms suffered fewer disruptions since they were able to buy and sell online and to allow their workers to work from home.

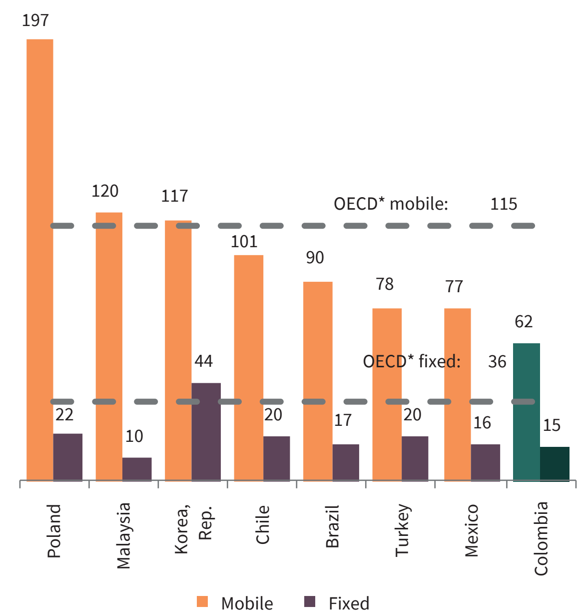
Job and income losses were greater for households without mobile internet access. Results from phone surveys show that among the more disadvantaged households job loss in May 2020 was 9 percent points higher for those without internet access (34 versus 25 percent). This job-loss gap was even larger for households classified as better-off: 29 percent for those not connected versus 16 percent (World Bank Group 2022).

Digitalization allowed firms to better cope with the lockdown. In May 2020, around 60 percent of firms reported using the internet to sell their products and services, 56 percent to buy inputs and 85 percent for carrying out payment transactions. However, as the mobility restrictions were lifted, the share of firms using digital means to buy and sell decreased by almost 20 percent, while the use of digital payments decreased by more than 10 percent. This indicates that digitalization was not adopted as a permanent measure in all firms (World Bank Group 2022).

Colombians increasingly use the internet, but there is a significant gap between rural and urban areas, and broadband penetration is modest. According to the International Telecommunication Union, ITU (2019), sixty-five percent of Colombians have access to internet. The great majority of connected households (81 percent) have a fixed internet connection while 39 percent have a mobile connection. Whereas two-thirds of urban households have either fixed or mobile internet, only 24 percent of rural households do. In the Pacific and San Andrés y Providencia regions, almost 7 out of 10 people do not have access to internet, while this is the case for only 2 out of 10 people in the capital Bogotá and 3 out of 10 people in Valle del Cauca. Broadband penetration, which allows people to fully benefit from digital connectivity, with 62 mobile lines and 15 fixed lines per 100 inhabitants, is below that of comparators.

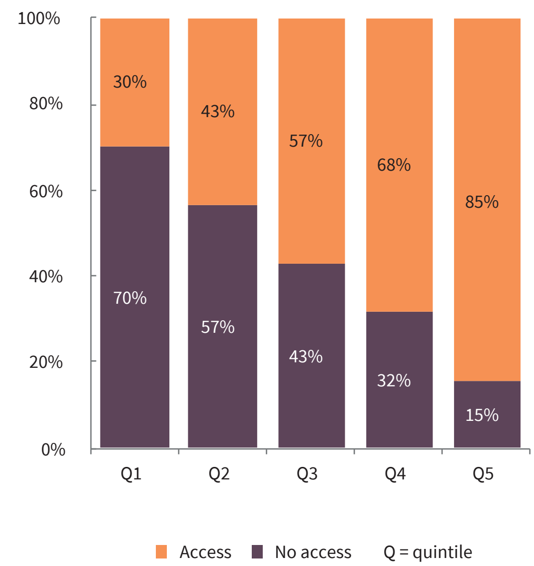
Figure 10. Broadband Penetration Remains Low

Fixed and mobile broadband lines per 100 inhabitants, 2020



Source: International Telecommunication Union (2020).

Figure 11. Internet Access Varies with Income



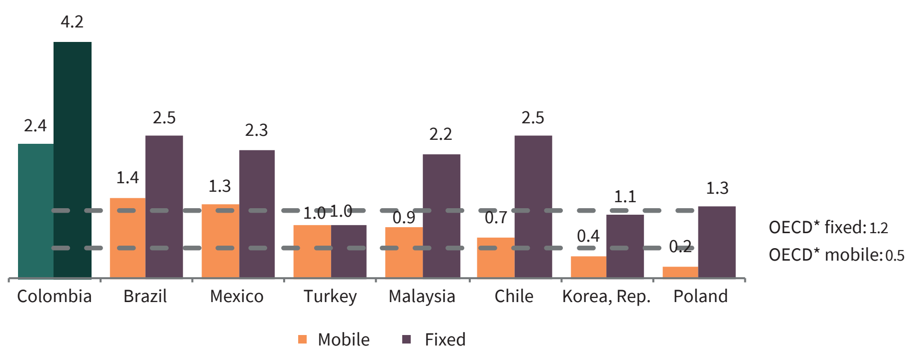
Source: own estimates based on ECV-2020. DANE

Access to internet is much lower for the most vulnerable, the less educated and the poor, although there is no significant gender gap. About three quarters of the rural and indigenous population, half of Afro-descendants and 42 percent of Venezuelan migrants are digitally deprived (World Bank Group 2022). Access to internet at home also varies substantially depending on the education level. Nearly 60 percent of people without any education and 35 percent of those with primary education are digitally deprived, compared to just 3.4 percent for those with tertiary education. At the same time, 70 percent of Colombians from the bottom fifth of the income distribution have no access to internet, compared to just 15 percent in the top fifth (Figure 11).

Data affordability is a significant issue. Unconnected households report cost of service to be the main reason for not having internet access (57 percent of urban households and 40 percent of rural households). The price of 1.5 GB of mobile broadband data and 5 GB of fixed broadband data represents 2.4 and 4.2 percent, respectively, of Colombia's income per capita, a much higher share than for the average OECD country (Figure 12).[5]

Figure 12. Internet Access Is Expensive

Cost of broadband data, fixed (5GB) and mobile (1.5 GB), % GNI per capita



Source: International Telecommunication Union (2021).

Sophistication of internet usage is limited. At the end of 2020, 30 percent of the population only used internet for communication and entertainment, 36 percent for accessing educational services or participating in conferences, and 15 percent for online shopping or banking (World Bank Group 2022). Mirroring the limited sophistication of internet usage, in 2019, Colombia ranked 94th out of 141 in the WEF's Digital Skills Index.

Digital transformation in the business sector is underway. According to the National Business Association of Colombia (ANDI), the share of large firms that have implemented a digital transformation strategy increased from 25.1 percent in 2016 to 63.5 percent in 2019. The main barriers to digital transformation identified by businesses are budgetary (59 percent), linked to lack of corporate culture (57 percent), lack of knowledge (55 percent), lack of mentality (42 percent), lack of leadership (26 percent) and inadequate human capital (22 percent) (World Bank Group 2022).

The use of digital financial services is in line with the regional average, but the gap with advanced economies remains wide. Close to 46 percent of the population in 2017 reported having a financial account, slightly below the regional LAC average of 49 percent but well below the 95 percent reported by the high-income members of the OECD. However, just 5 percent of Colombians have mobile money accounts, slightly below the LAC region (6.5 percent), but well below the OECD high-income countries (18.6 percent).

E-government effectiveness for public service delivery shows wide disparities within and across levels of government. Colombia ranks third in the 2019 OECD Digital Government Index (OECD, 2020) that measures the maturity of digital government strategies. However, it does not perform as well in terms of e-government effectiveness in the delivery of public services. Institutions at the national level perform better than their regional counterparts, yet there is also large variation in e-government effectiveness within levels of government (Agencia Nacional de Infraestructura, 2019). Página 31, OECD 2020 por (OECD 2020b).

Colombia has demonstrated constant improvement in its digital government journey. Colombia ranks among the most advanced countries globally in the World Bank's GovTech Maturity Index. It is one of the few countries in the region with a Ministry for ICT responsible for connectivity and digital policy design and delivery. The Ministry oversees and promotes digital economy policies, the digital government program and digital inclusion initiatives under a whole of government approach, which includes the *Consejería Presidencial para la Transformación Digital, Gestión y Cumplimiento* (CPTDGC) and DNP. Colombia's government has made significant improvements in two main areas: e-participation and online services. In terms of e-participation, the introduction of programs like "*Urna de Cristal*" (www.urnadecristal.gov.co), an online portal launched in 2010, has allowed people to participate in public consultations, make petitions, and comment on government program and initiatives, using different channels. The government has also established a "one-stop shop" for digital government services, with recent features like "*Carpeta Ciudadana*" and a Citizens Desktop Service that includes a single sign-on to access government services.

Colombia's open data policy and guidelines have been continuously updated and a Digital Security Strategy has been introduced. The strategy sets guidelines and standards by which the security and privacy model is adopted as an enabler of the Digital Government Policy. This is part of the national efforts to strengthen the Cybersecurity Agenda of Colombia to protect critical information and infrastructure and to implement incident response mechanisms. Training and capacity development remain areas that need attention.

Colombia has made progress in consolidating open data public policies and strengthening the implementation of such policies. These policies are aiming to promote openness and strengthen capacities in terms of quality, use and exploitation of open data. All this has contributed to the consolidation of the national open data portal and has been shown in the results of international indicators. In the latest version of the OurData index (2019), Colombia obtained the third-best score; in terms of Data Availability, the country's performance was similar to the first six OECD countries. Additionally, Colombia maintains a leadership position reaching the third regional place in the Open Data Barometer Latin America and the Caribbean 2020 edition.

A concentrated internet market may slow down digital development. Colombia has 474 fixed internet providers, out of which 96 percent have less than 10,000 users. The largest 7 providers concentrate 90.5 percent of users but have limited coverage (the one with largest coverage only serves 641 municipalities). In contrast, smaller providers serve only 9.5 percent of users but are present in all 1,112 municipalities. Thus, a bigger role for small and medium providers could help increase connectivity. The concentration in the mobile internet market is also high and has remained unchanged in the last five years. There are only 11 providers and 3 of them make up 94 percent of the market (World Bank Group 2022).

Reforming the regulatory framework to increase market competition will promote digital uptake and affordability. Colombian telecommunications regulations remain considerably more restrictive of competition than the OECD average. Indeed, Colombia scored 1.53 in the sub-indicator of barriers in network of the Product Market Regulation (PMR) indicators in 2018, above OECD high-income members average of 1.35 (0 to 6, from most to least competition-friendly regulation). Key measures to increase competition should include reducing government control over firms in the telecoms sector, introducing pro-competition tools such as fixed number portability and secondary spectrum trading, and reducing burdensome access obligations for new and smaller operators.

Equity

- Colombia has among the lowest levels of social mobility in the world.
- A principal challenge to equity is the low level of learning in public schools, which has been deepened by the pandemic.
- Gaps across geography and ethnicity reflect a history of neglect.

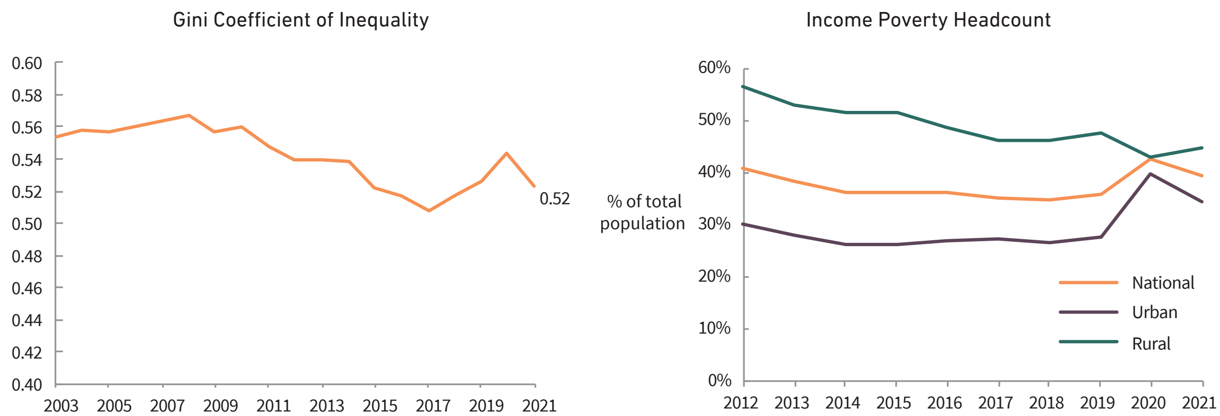
In few countries is the gap between rich and poor wider than in Colombia, and in no country is the link stronger between how much people earn in adulthood and their parents' income (Figure 13)**.** The measure of this link is known as the persistence of income across generations.[6] Colombia's extreme income persistence means that children growing up in poverty begin life at a great disadvantage. They are likely to be poor as adults, reflecting the profound inequality of opportunities that spans across geography, race and ethnicity, and social class. These issues are reviewed in the detail in the recent study *Building an Equitable Society in Colombia* (World Bank 2021b).

Figure 13. Colombia has High Inequality and High Persistence of Income Across Generations

Source: World Bank Global Database on Intergenerational Mobility and World Development Indicators. Data is most recent year available.

Measures of poverty and inequality stagnated after 2015, before sharply worsening in 2020. The Gini coefficient dropped slightly from its pandemic high to 0.52 in 2021 (Figure 14). The income poverty rate at the national level fell to 39 percent in 2021 but remained above pre-pandemic levels. In rural areas, income poverty declined in 2020 because of government transfers and the resilience of the agricultural sector during the pandemic. Poverty as measured using a multidimensional index was also unchanged in recent years but rose in 2020, due principally to the decline in school attendance (DANE 2021c). The middle class shrank in the 2020 recession and by one definition accounts for about one-fourth of the population (World Bank 2021h).

Figure 14. Poverty and Inequality Rates



Source: DANE 2021a

The roots of inequity lie deep in the country's history. The World Bank's first report on Colombia more than 70 years ago recognized that "a wide disparity in levels of income exists between a small wealthy group and the great mass of the population, in spite of efforts by successive governments to bring about greater equality through progressive taxation of incomes and the extension of social services" (World Bank 1950). The foundational work of Acemoglu and Robinson (2012) argues that persistent inequality in Colombia and across Latin America has been generated by the "extractive" institutions created by Spanish colonialists that favor the interests of an elite. While Colombia's institutions have become more inclusive over time, with advances in access to education, universal health coverage, and the expansion of social protection programs, inequality has remained stubbornly high. Three interlocking factors lie behind the continued high level of inequity in Colombia: human capital, access to good jobs, and uneven territorial development (World Bank 2021b).

The tax system does little to address inequalities. Because deductions and tax thresholds in the personal income tax (PIT) are very high, individuals start paying it only if their income is very high, about four times the median income. This deprives the state of resources that could be redistributed to the poorest. Also, value added tax (VAT) exemptions and zero rates, which are meant to make VAT less regressive, end up granting large tax discounts to high-income individuals: more than half (57 percent) of the tax expenditures on VAT benefit the top three deciles of the income distribution. Additionally, a large share of subsidies to gas, water, and electricity go to higher income households. It is estimated that based on their socioeconomic profile, over 65 percent of households receiving subsidies should either be receiving a smaller subsidy or no subsidy at all. Finally, the public pension system generates implicit subsidies that accrue mostly to recipients of high pensions (World Bank 2021b).

Human Capital

Table 1. Human Capital Index by Quintile of Household Income

	Income Quintile				
	Poorest	2nd Poorest	Middle	2nd Richest	Richest
Probability of Survival to Age 5	97%	98%	99%	98%	99%
Child Stunting Rate	15%	10%	9%	8%	5%
Learning-Adjusted Years of Education	6.3	6.9	7.4	7.9	8.8
Human Capital Index	0.53	0.58	0.62	0.66	0.73

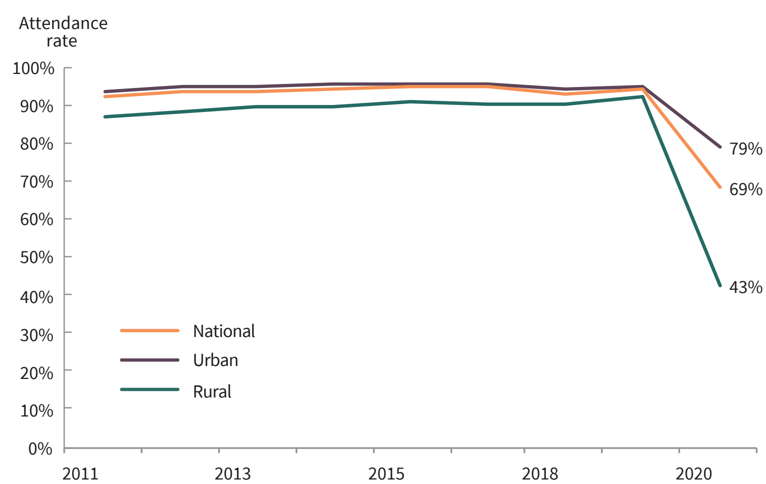
Source: World Bank 2021b

Substantial gaps remain in human capital accumulation between poor and wealthy children with no substantial change since 2015. A subnational version of the Human Capital Index illustrates some of these differences (Table 1). While rates of child malnutrition are low overall in Colombia, rates for the poorest quintile (15 percent) are triple those in the top quintile (5 percent). Children from the poorest households complete on average 6.3 years of learning-adjusted years of education, 2.5 years less than children in the wealthiest quintile.[7] In Colombia, the Human Capital Index for girls (0.61) is higher than for boys (0.59), with differences in terms of adult survival rates and healthy growth in favor of females. Harmonized test scores, on the other hand, are on average higher among boys.

COVID-19 has generated an education catastrophe that has further set back already low levels of learning. Schools were almost entirely closed between March 2020 and August 2021. Because many Colombian households lack internet access, effective distance learning was limited. Although Colombian-specific data is not yet available, studies from several other countries show severe drops in learning during the pandemic, averaging one month of learning loss for each month without in-person schooling. Pre-pandemic more than half (53 percent) of Colombian children were already "learning poor" at age 10, meaning that they could not read and understand a basic text (World Bank 2021b). In pre-pandemic standardized tests from across LAC, 83 percent of Colombian sixth graders were below the minimum level of competency in mathematics—a higher percentage than in Brazil, Mexico, and Peru (UNESCO 2021). School enrollment had risen in the decade before the pandemic, particularly in rural areas, where attendance rates for those aged 6-16 increased from 87 to 92 percent over 2011-2019. However, attendance dropped sharply during 2020 when only distance learning was available, falling to 69 percent overall and 43 percent in rural areas (Figure 15). Attendance rates are nearly identical for boys and girls.

While the divide between rich and poor is narrow for primary and secondary school attendance, it is wider for preschool and at the tertiary level. Figure 16 shows a school attendance pyramid from 2019 with enrollment by age and level for the poorest and wealthiest quintiles. Few people from poor households enroll in tertiary education, and wealthier children are twice as likely to be enrolled in preschool at age 4. The quality of preschool services is also largely unknown. Higher education enrollment rates for the poor and ethnic minorities remain very low despite existing student aid and loan programs. There is a big opportunity to expand enrollment to the less wealthy in both public and private colleges and universities.

Figure 15. Percentage Age 6-16 Attending School



Source: Analysis of Encuestas de Condiciones de Vida microdata

Figure 16. School Enrollment by Age, 2019

Source: Analysis of Gran Encuesta Integrada de Hogares microdata

Colombia has experienced minimal growth in higher education enrollment in recent years. Gross tertiary enrollment rose from 53 percent in 2015 to 55 percent in 2019 and then fell during the pandemic in 2020 (World Bank 2022b; Ministerio de Educación 2021). The government has sought to boost enrollment of less well-off students via student aid and loan programs of the *Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior* (ICETEX). The fraction of adults with tertiary degrees varies significantly within the country, from 15 percent in the Nariño department to 35 percent in Bogotá (OECD 2021a). Further increasing enrollment across the country will require both expansion in both the public and private sector. Recent work suggests that short-cycle higher education programs, particularly when provided by the private sector, are an effective and underutilized path to increasing skills and incomes (Ferreyra et al. 2021).

Differences in health and education outcomes across geography, income groups and ethnicity are marked and reflect sharp divisions along the public-private divide. Gaps across space are most vividly captured by differences in life-expectancy at birth across departments. A Colombian in Caquetá, Chocó, or Casanare will live on average more than eight years less than a *Bogotano*. In addition, differences in inputs for and access to care are compounded by examples of inequities in the quality of basic services received by the population. Less wealthy Colombian's depend largely on public health facilities for their care, while wealthier Colombian's access care at private facilities. Three quarters of births to those in the poorest quintile take place in public facilities, compared to 16 percent of those in the wealthiest quintile

(World Bank 2021b). A similar public-private split is seen for education. Among all 75 countries that administer the PISA exam, Colombia has the 5th highest rate of independent private school enrollment (17 percent of 15-year-old students) and the 4th largest gap in average reading scores between public and private schools (83 points) (OECD 2020). Private school students are overwhelmingly from wealthier households: just 1 in 50 children in the poorest decile attends a private school (based on analysis of Colombia 2018 PISA data). The public-private divide in Colombia also reflects that as the middle class has grown it has largely opted out of the social contract and sent children into private education rather than create political pressure to improve public schools.

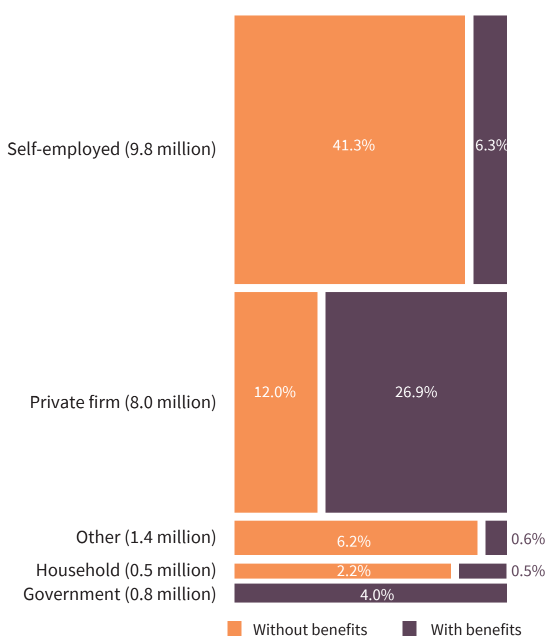
The COVID-19 pandemic has pointed to weaknesses in the health system that require further evaluation. The government's health response has demonstrated many strengths. The government has communicated transparently and used evidence to inform difficult decisions about restrictions. As of December 2021, 70 percent of the population had received at least a first dose of vaccine. However, 1 in 400 Colombians have been killed by the pandemic. In some of the poorest departments, where the state's presence is weak—notably in La Guajira and Chocó—vaccination rates are less than half the rate of that in Bogotá (Ministerio de Salud 2021a) y Ministry of Health por (Ministerio de Salud 2021b). A deeper review of the pandemic response, with an eye towards improving preparedness for future infectious disease outbreaks, is needed. Such a review will likely identify a need to improve the quality and capabilities of the public health system, which the bulk of Colombians in the bottom half of the income distribution rely on for their care. The pandemic has also decreased child immunizations rates, which require catch-up efforts: for five tracer immunizations tracked by the Ministry of Health, rates fell 10 percentage points between 2019 and 2021 (Ministry of Health 2021).

Colombia has a well-developed social assistance system, which was ramped up further during the pandemic to deliver additional cash support to households. To mitigate the negative impacts of the COVID-19 emergency, the Government expanded existing cash transfers programs, created new programs (*Ingreso Solidario* and *Devolución de IVA*), and introduced wage subsidies for formal employment. Key recent initiatives include modernizing the existing social registry and integrating it with other systems so that the government can respond efficiently to assist those affected by natural disaster shocks. Moving forward there is also opportunity to consolidate multiple social assistance programs to make them more efficient.

Jobs

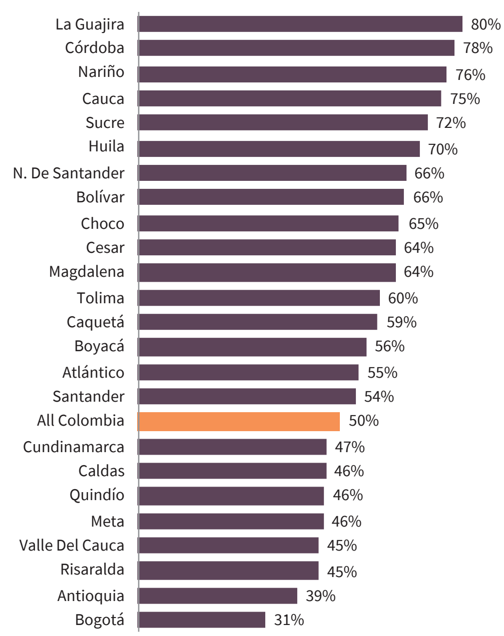
There are two principal drivers behind the scarcity of good jobs—meaning formal jobs with benefits (Figure 17)**.** One is the combination of a high minimum wage and high non-wage labor costs. Half of Colombian workers earn less than the minimum wage. As a share of the median wage, the minimum wage is far higher than in comparators Chile, Mexico, Poland, Turkey, and the Republic of Korea (OECD 2021c). With taxes and mandatory contributions, the minimum cost to an employer of hiring a worker is approximately 150 percent of the minimum wage. Especially in poorer regions of Colombia where labor productivity is low and nearly all earn less than the minimum wage (Figure 18), the combination of a high minimum and mandatory taxes and contributions discourages the creation of good jobs. A second driver is a constellation of factors that have depressed the demand for less skilled labor. These include bureaucratic hurdles to operating a business and weaknesses in the quality of infrastructure. The World Bank's recent Colombia Job Diagnostic as well as the Government's Employment Mission both highlight the high minimum wage and non-wage labor costs and provide a broader analysis of labor market issues (World Bank 2021e; Government of Colombia 2021).

Figure 17. Jobs By Employer Type and Benefits



Source: Analysis of 1st semester 2021 GEIH data.
Note: Benefits are proxied by whether the individual is enrolled in a pension plan.

Figure 18. Share of All Workers Earning Less Than Minimum Wage By Department



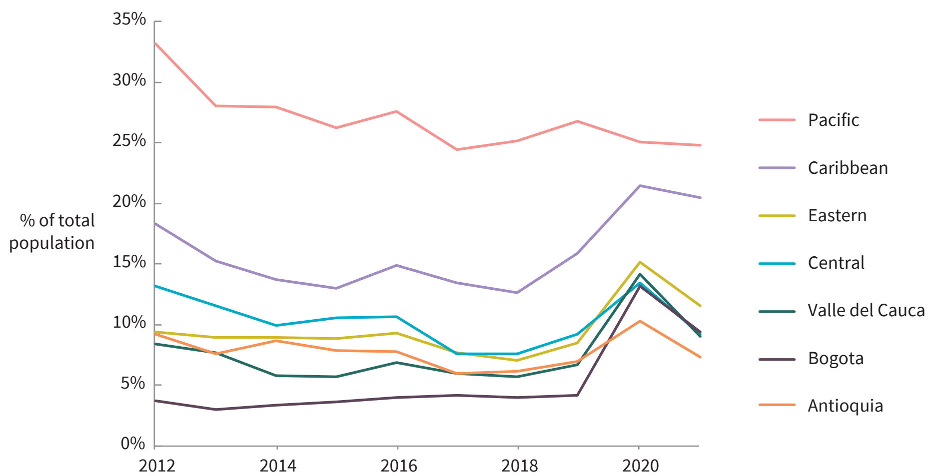
Source: Analysis of 2020 GEIH data

Scarring effects of the pandemic for employment are a major concern, particularly for young people who entered the labor market during the pandemic. Studies from North America, Japan, and Europe show that getting a first job during an economic downturn can depress earnings for up to 10 years (Andrews et al. 2020). It is unclear to what extent such effects will appear for Colombia.

Uneven Territorial Development

A third factor for inequity in Colombia is the country's persistent spatial inequity (Figure 19). Differences across regions in GDP per capita and extreme poverty have remained roughly constant over time. While nearly all municipalities in Colombia saw declines in a multidimensional poverty index (MPI) between 2005 and 2018, MPI rates at the municipal level were highly correlated (0.88) between the two years. Lagging parts of the country have, on the whole, weaker public infrastructure, less access to quality schools and healthcare, and weaker connectivity.

Figure 19. Extreme Poverty Rate



Source: DANE 2021b

Historically poorer parts of Colombia have been those with weaker institutions. These include poorly defined and more insecure property rights, a less efficient judiciary, and limited provision of public services (Fergusson et al. 2017). Poorer regions and those physically distant from the capital have seen little presence of the state. The lack of state presence is both a cause and effect of high levels of violence in many parts of the country.

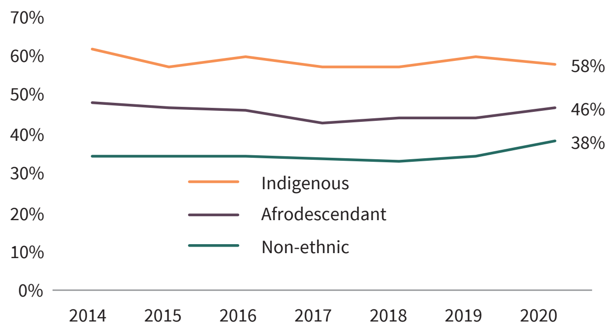
Inequity Across Groups

Colombia has made progress towards gender equality, but challenges remain in four areas. The prevalence of domestic violence during the past 12 months (18.4 percent) is much higher than Mexico (9.5 percent) and Peru (10.8 percent), the two LAC countries for which recent data is available (World Bank 2021f). Calls to domestic violence help-lines increased during the pandemic lockdown period (Ortega Pacheco and Martínez Rudas 2021). Second, many girls do not make a transition from secondary school to higher education or work. The share of young women aged 15-24 who are not in education, employment, or training is more than twice that of men, 32 percent compared to 16 percent, in 2019. Third, women are underrepresented in politics and STEM occupations. Fewer than one in five (18 percent) members of parliament were women in 2020, one of the lowest shares in the region. More women are enrolled in universities and have higher graduation rates than men, yet women are significantly less likely to enroll in STEM fields. Fourth, women remain underrepresented in firm management and ownership: just 18.9 percent of firms report having a female top manager and only 17.3 percent have majority female ownership (Enterprise Survey 2017). Both figures are below averages for Latin American and the Caribbean.

The socioeconomic situation of indigenous people and Afro-descendants reflect both the country's history and neglect by policymakers. Poverty rates are much higher among these two groups, and the gap across ethnic groups has changed little over time (Figure 20). The divide in living standards is related to the three general drivers of inequity in Colombia—human capital, good job access, and territorial development—as well as the broader historical legacy that stretches back to the earliest days of the colonial period.

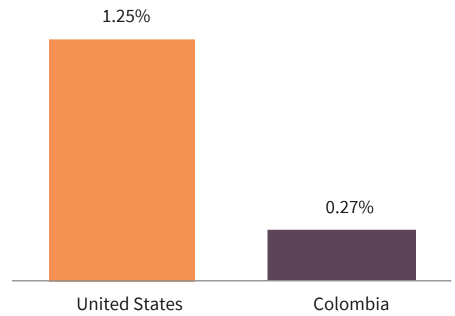
Indigenous populations experience elevated levels of poverty, segregation, and vulnerability. Indigenous Colombians, who make up 5 percent of the population, have lower levels of education and worse outcomes across a variety of measures of well-being (G. N. Freire et al. 2015) . The higher levels of poverty of indigenous people are in part linked to their location. One in 5 (21 percent) live in La Guajira, in the country's northeast and one of the poorest of Colombia's 32 departments. An additional 30.6 percent live in Cauca, Nariño, and Chocó, three departments of the Pacific region which are heavily affected by violence. Indigenous women often face the greatest disadvantages, weighed upon by the double constraints of ethnicity and gender. Indigenous people have often been caught in the crossfire of armed conflict, and areas reserved for indigenous groups, known as *resguardos*, continue to be affected by deforestation, coca cultivation, and mining and oil extraction.

Figure 20. Colombia Poverty Rates by Ethnicity



Source: Analysis of GEIH data from various years. Figures for 2020 are based on August-December data only, due to issues with the full year of data. "Non-ethnic" refers to those who are neither indigenous nor afrodescendants.

Figure 21. Share of Media Instances in the United States and Colombia that Mention Afro-Descendants and Related Terms



Source: Analysis of 2011-2021 data from Mediacloud.org

Afro-descendants, who make up approximately 10 percent of the Colombian population, remain marginalized and largely invisible in public discourse. Large numbers live in Medellín and Cali, the country's second and third largest cities, and in the departments along the Pacific and Atlantic coasts. Their geographical location reflects the legacy of slavery: enslaved people were brought from West Africa to work gold mines in the 16th and 17th centuries. The department of Chocó and its port city of Buenaventura, which have predominantly Afro-descendant populations, were deeply affected by armed conflict and continue to be plagued by criminal violence, weak governance, and political neglect (Centro Nacional de Memoria Histórica 2015). In Afro-descendant communities that successfully organized to obtain formal collective land titles, paramilitary attacks increased (Ahmed, Johnson, and Vásquez-Cortés 2020). Afro-descendants are remarkably unseen in much of Colombian society. "Afro-descendants" and related terms appear in just 0.27 percent of 3.4 million media instances 2011-2021 in Colombia. In contrast, in the United States, where Afro-descendants make up a similar share of the population, media appearances of terms referring to the population are nearly 5 times as frequent in Colombia (Figure 21). This in part reflects the relatively low population of Afro-descendants in Bogotá, where they are only 1 percent of the population, and the disproportionate focus of both politics and media on the capital. More broadly it reflects the fact that the country has not yet substantially reckoned with the painful and persistent historical legacy of slavery and racism. Afro-descendants also continue to be underrepresented in positions of power in both the public and private spheres (G. Freire et al. 2018).

Colombia has become the main destination for Venezuelan migrants. Between 2015 and 2021 the migrant population in Colombia grew tenfold, reaching 1.8 million Venezuelans—approximately one-third of all Venezuelan migrants in Latin America (Migración Colombia 2021). In March 2020 the government extended Temporary Protection Status (TPS) to Venezuelan migrants for a period of 10 years. The TPS for Venezuelan migrants anchors a series of measures and expansion of access to services. The government is expected to face challenges in implementing these measures, but the net effects of integration are expected to be positive. Analytical work by the World Bank estimates the long-term economic benefits of Venezuelan migration to Colombia could increase the average annual rate of growth between 0.7 and 0.9 percentage points in the medium to long term, mostly through the impact on the labor force. Evidence suggests that Venezuelan migrants may have reduced employment and/or wages somewhat for Colombians working in informal jobs (Caruso, Canon, and Mueller 2021; Rozo and Vargas 2021; Lebow 2021). The evidence is mixed on the impact of migrants for those holding formal jobs (Delgado-Prieto 2021; Santamaria 2019; Ibánez et al. 2021). Venezuelan migrant women are less likely to participate in the labor market than their male counterparts (53 percent vs. 79 percent) and significantly more likely to be unemployed (35 percent vs. 14 percent), principally because of household and care responsibilities (DANE 2021b) .

About 3.1 million Colombians have some form of disability and 1.8 million, constituting 4 percent of the population, have a severe disability (a level 1 or 2 disability on the Washington Group scale) (Departamento Administrativo Nacional de Estadística 2020). Although a substantial number of Colombians with disabilities are older, 61 percent are under age 60 (Ministerio de Salud 2020). Many people with disabilities (PWD) are victims of the country's civil conflict. The 1991 Constitution and law provide protection against discrimination and requires accommodation for PWD. The law requires inclusive education and the large majority of children with disabilities are in school (Correa Montoya, Lucas y Castro Martínez, and Marta Catalina 2016) .

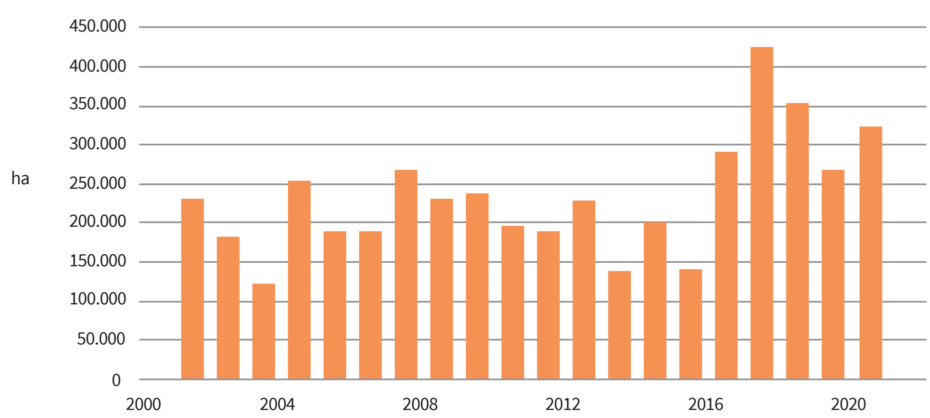
Colombian law is inclusive of LGBT people but discrimination and violence against LGBT people remains widespread. Colombian law prohibits discrimination on the basis of sexual orientation and gender identity and allows for the adoption of children by same-sex people. In a 2019 survey, 20 percent of LGBT respondents reported that they had been verbally abused by police or government officials, and rates of abuse were particularly high for transgender people. In the survey, LGBT reported high rates of psychological distress: more than half (55 percent) reported having had suicidal thoughts, and one in four had attempted suicide at least once. Violence is perpetrated against LGBT people as "part of the strategies of social and territorial control of the armed groups that impose behavioral norms and act as administrators of justice, subjecting LGBT people to a social policing by armed groups and the imposition of a unique moral order based on heterosexuality as the only socially approved path accepted by these groups, and strict adherence to traditional gender roles" (Choi et al. 2020). Despite statutory protections for LGBT people, they face high risks particularly in areas where the reach of the state is weak.

Climate Change

- Climate change will slow growth and exacerbate inequality.
- Biodiversity is threatened by deforestation which has accelerated since 2015.
- Meeting Colombia's greenhouse gas emissions reductions commitments will require rapid and far-reaching transitions but also provide opportunities.

Two major environmental developments in Colombia have taken place since 2015. First, recognition has sharply increased that climate change will shape the country's future. In a 2021 survey, 65 percent of Colombians said they were "very worried" about climate change, the second highest level among 31 countries (Leiserowitz et al. 2021). And in a 2019 global poll, 76 percent of Colombians said they saw climate change as a very serious threat to their country in the next 20 years ("The Lloyd's Register Foundation World Risk Poll" 2020). Second, the country's biodiversity has been increasingly threatened, in large part by accelerating deforestation. In response, the government has made strong commitments for ending deforestation and reducing emissions. Meeting Colombia's commitments for reducing greenhouse gas emissions, protecting its biodiversity, and adapting to climate change are an interconnected challenge.

Figure 22. Annual Tree Cover Loss in Colombia



Source: Global Forest Watch 2021

Colombia's biodiversity is part of the country's extensive natural wealth. With a vast panoply of ecosystems ranging across Caribbean reefs, high mountain paramos, and Amazon rainforest, Colombia has the second greatest variety of birds in the world and shares with Brazil the title for country with greatest overall biodiversity (World Bank 2017). The country's species and natural wealth have been threatened by environmental degradation due to the expansion of the agricultural/livestock frontier, unsustainable road infrastructure, land grabbing, mining and energy development, the continued prevalence of illegal drug cultivation, and the inefficient use and pollution of resources.

Deforestation has increased since 2015. The power vacuum in areas that used to be occupied by the FARC led to a sharp increase in tree cover loss (International Crisis Group 2021; Prem, Saavedra, and Vargas 2020; Clerici et al. 2020). The area of total tree cover lost in Colombia 2001-2020 is 4.6 million hectares (Figure 22), equivalent to more than twice the entire land area of Belize. Deforestation levels, measured using government data, are lower but also display a sharp rise after 2015 (DNP 2020). Pagina 47, cambiar World Bank 2017 por (World Bank 2017b). Deforestation continues to catalyze land degradation, biodiversity loss, soil erosion, and overall loss of ecological integrity, while increasing vulnerability to the effects of climate change. Projections indicate that in a business-as-usual scenario 79 percent of species in Colombia will go extinct by 2090 (Echeverría-Londoño et al. 2016).

Biodiversity loss impacts the overall economy and human well-being. Health impacts due to biodiversity loss include undernutrition, higher rates of disease, increase in animal pathogens, and injuries and deaths from reduced resilience to natural disasters (WHO and CBD 2015). A partial ecosystem collapse would reduce GDP growth by nearly 13 percent between 2021 to 2030 (Johnson, Ruta, and Baldos 2021)**.** Overexploitation and water pollution have severely affected freshwater fish, threatening the livelihoods of 150,000 Colombian families, 40 percent of whom depend exclusively on this resource (Instituto Alexander von Humboldt 2015). Nationwide, 15.4 percent of the high mountain paramos (alpine meadow regions) have been replaced by pasturelands (Sarmiento et al. 2017), in turn altering the water regulation of an ecosystem that is paramount to the proper functioning of 73 hydroelectric plants and 173 irrigation districts (Instituto Alexander von Humboldt 2015). Fragmentation of ecosystem connectivity between the Andes and Amazon biome will cause a disruption in the supply of water, sediments, nutrients and regulation of water levels—all upon which animal species and humans depend.

Colombia has untapped potential for the sustainable use of its renewable natural resources. Land use is inefficient and unsustainable practices predominate, resulting in high environmental impact and low land productivity. Land is heavily exploited for livestock, a substantial driver of land degradation and greenhouse gas emissions, and is underused for agriculture and agroforestry/silvopasture activities

(DNP, Fedesarrollo, and GGGI 2017). (Silvopasture is the practice of integrating trees, forage, and the grazing of domesticated animals and is one of several forms of agroforestry.) The incipient forestry sector is hindered by governance challenges, the low technical ability of plantation owners, the lack of scale economies in the sector, and a lack of scaling up community forestry. Similarly, fishing could be a stronger industry, but low policy enforcement, overexploitation, the degradation of aquatic systems, invasive species, and the effects of climate change have continued to reduce fish production by 60 percent over the past 50 years.

Colombia's agricultural potential is significant but has been underexploited. The sector's declining share of the economy has been attributed to lack of reliable cadaster, weak land tenure, inefficient land use and land degradation, limited financial instruments, relatively low foreign direct investment, weak infrastructure, limited policies supporting productivity, and social and environmental risks. Beyond its centrality to sustainable growth, export diversification and greater territorial inclusiveness, agriculture is also fundamental to the country's peace consolidation process and to poverty reduction (World Bank Group 2022).

Impacts of Climate Change

Climate change will widen inequality, hitting poor and rural Colombians hardest. An analysis of just some of the channels for impacts projects that climate change will result in annual GDP loss of 0.48-0.88 percent for Colombia in 2050 (World Bank 2021b). Measured as a share of income, income losses for Colombian households in the bottom 40 percent are projected to be 1.5-1.6 times larger than losses for the wealthiest quintile of households. Rural households are expected to suffer income losses 1.8-1.9 times higher than those of urban households, while wages for female workers would decline 2.5 percent compared to a decline of 1.4 percent for male workers (Figure 23). Vulnerable populations in Colombia are affected by climate change: many indigenous peoples and Afro-descendants live in areas at high risk of climate change impacts.

Climate change will increase the risk of conflict and violence (Koubi 2019). One meta-review found that with just a one standard deviation increase in temperatures or extreme rainfall, the frequency of interpersonal violence and intergroup conflict rises by 2.4 and 11.3 percent, respectively (Burke, Hsiang, and Miguel 2015). Such climate-driven conflict risk for Colombia is one reason the United States has identified Colombia as one of 11 countries of "great concern from the threat of climate change" (National Intelligence Council 2021).

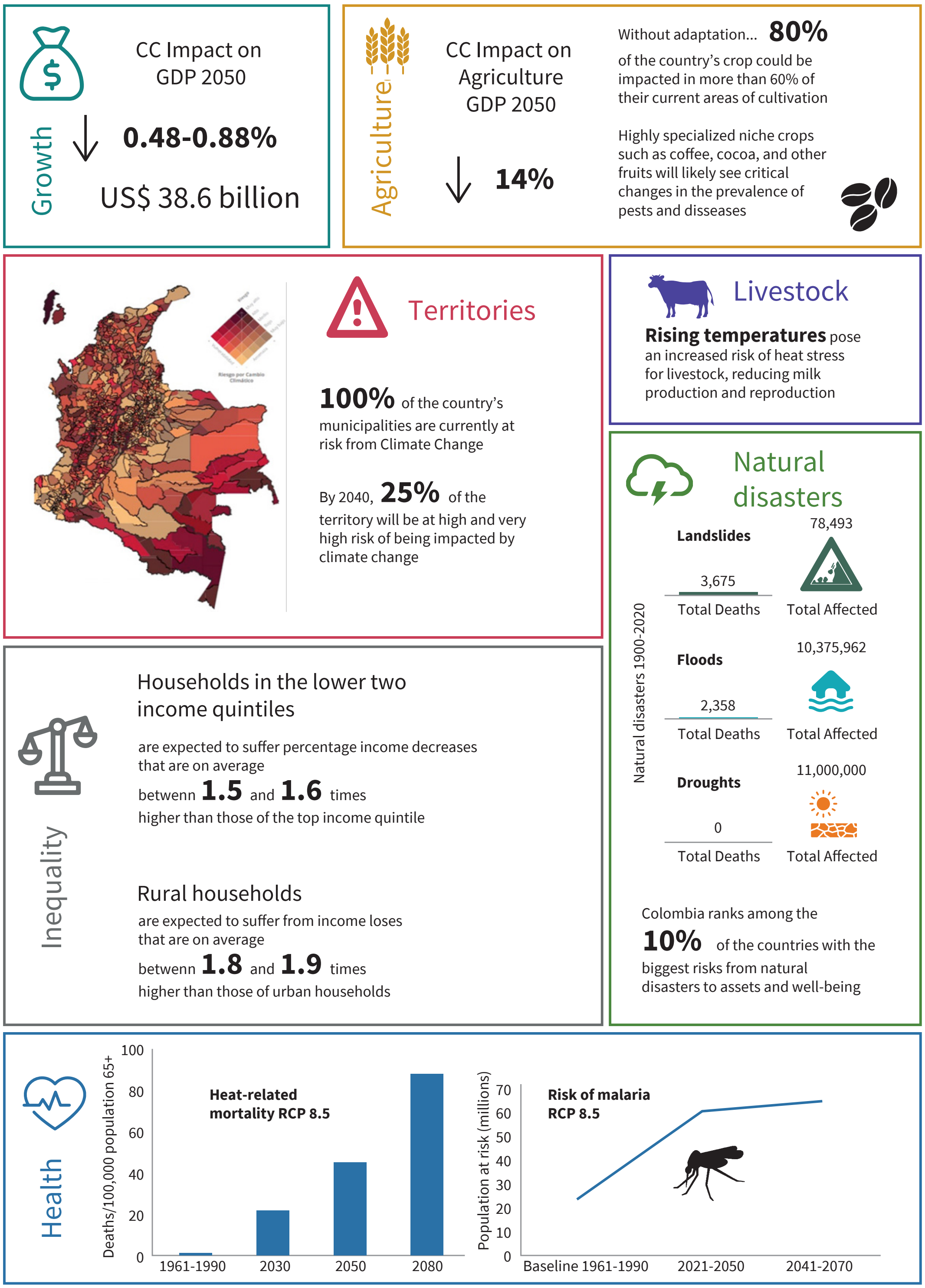
Vulnerability to climate change varies considerably across the country. While the Andean mountain ranges are at risk from soil instability produced by years of unsustainable farming and livestock practices, people on the Pacific and Caribbean coasts face rising sea levels and flooding from diminished coastal protection, and the Amazon is vulnerable to extreme precipitation, flooding, and droughts. Droughts are likely to be more common during the drier seasons, leading to water supply shortages, aggravated by the loss of glaciers (Arora 2019; World Bank 2021c). Mortality will rise and productivity decline as the number of very hot days, when temperatures exceed 35°C, increases from 16 to 131 days annually by the end of the century, primarily impacting the Caribbean coast (DNP 2016). Droughts are also likely to be more common during the drier seasons, leading to water supply shortages (Arora 2019). Overall, the ND-GAIN Index that calculates vulnerability to climate change and other global challenges ranks Colombia 91st out of 182 countries (University of Notre Dame 2021) (Figure 23).

The expected decline in global fossil demand will force economic changes in Colombia. Sustainable development scenarios predict a major contraction in demand for coal and oil (IEA 2020a). In 2019, 56 percent of the country's exports were fossil fuels and refining products, and the sector accounted for 6.2 percent of its GDP (DANE 2021a). Colombia is the fifth largest thermal coal exporter in the world, accounting for 6 percent of global exports (IEA 2020b). Coal production is highly concentrated in the La Guajira and Cesar departments (Strambo and Atteridge 2018). On average over 1999-2016 oil accounted for 13.6 percent of the national government revenue (Gonzalo et al. 2019). Global decarbonization could decrease exports and government revenue, displace industry workers, and lead to stranded assets, including improperly closed coal mines.

Greenhouse Gas Emissions

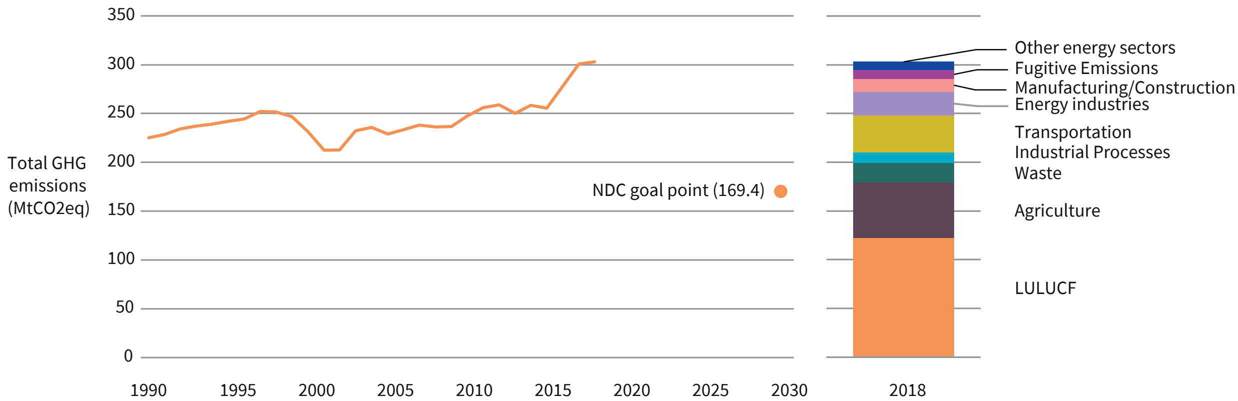
Colombia's greenhouse gas emissions have increased over time and rose 19 percent 2015-2018 (Government of Colombia 2022a). 2018 emissions derive from land use change and forestry (40.3 percent), energy consumption (30.7 percent), and agriculture (18.8 percent) (Figure 24). With a 0.57 percent share of global emissions in 2018, Colombia ranks 32nd among 193 emitting countries (Climate Watch 2021) and has relatively low emissions per capita (5.4 tCO_2eq) in comparison with regional peers.

Figure 23. Projected Impacts of Climate Change In Colombia



Source: World Bank 2021c, World Bank 2021b, WHO and UNFCCC 2015, IDEAM 2015.

Figure 24. Evolution of Total Greenhouse Gas Emissions and Sectoral Composition



Source: Government of Colombia 2022a.

Note: "Other energy sectors" include fuel burning activities from commercial, institutional, residential and agriculture sectors. LULUCF refers to land use, land-use change, and forestry.

Meeting Colombia's commitments for greenhouse gas admissions will require rapid and far-reaching transitions. The country has committed to a 51 percent GHG emission reduction by 2030 compared to business as usual and carbon neutrality by 2050, and these commitments are enshrined in law (Government of Colombia 2020). However, previous commitments have not translated into appreciable emission reductions. The country will not meet its commitments without massively reducing deforestation, expanding climate-smart agriculture, and accelerating a transition to decarbonized energy. These transitions will be challenging but also offer important opportunities, particularly for the private sector.

Halting deforestation is critical to reducing emissions, preserving Colombia's biodiversity, managing disaster risks, and preserving Colombia's tourism potential. Addressing deforestation requires improved territorial control and governance, securing land tenure, providing sustainable productive alternatives, protected areas and communal and indigenous territories. To complement its existing payments for environmental services program, the country could use fee-rebate schemes to reduce deforestation and forest degradation. This involves applying a sliding scale of fees on landowners who reduce their carbon storage and corresponding rebates to landowners who increase carbon storage (World Bank, 2021c). Nature-based solutions including tourism can bring development benefits to rural populations suffering from underinvestment and insufficient integration in the economy. Reducing deforestation also preserves substantial ecosystem services that are usually not monetized but are essential to a functioning economy. Indigenous peoples, Afro-descendants, and rural populations play a particularly critical role in mitigating and adapting to climate change, and their empowerment for community land governance in efforts to reduce deforestation is indispensable.

Climate-smart agriculture and sustainable forestry can improve the climate resilience of the food supply, reduce emission intensities, generate rural employment, and boost agricultural productivity. Climate-smart practices such as precision irrigation, crop diversification, the use of drought-resistant seeds, and silvopastoral and agroforestry systems provide opportunities to increase resilience and productivity at the same time. In addition, Colombia should reduce incentives for extensive farming and promote sustainable forestry value chains in fragile ecological areas (OECD 2014)[8]. The transformation of pastureland to silvopastoral systems can yield an increase of 25 percent in milk productivity and of 26 percent in the animal stocking rate, while also having positive environmental results (World Bank 2021d). CSA can be supported by improved land tenure, enhanced agricultural extension services, promotion of green private investment, development of agricultural insurance to tackle climate-related risk, and efforts to protect the health of animals, people, and plants.

Colombia can accelerate a transition to decarbonized energy through enhanced carbon pricing and other measures. Key actions will include supporting a shift towards electric vehicles and following through on implementation of a recently approved energy transition law to remove barriers to entry to market for non-conventional renewable energy sources. Expanding Colombia's carbon pricing regime can play an important role in reducing emissions and yield other benefits, such as reducing air pollution linked to cardiovascular and respiratory illnesses estimated to cost the Colombian economy US$ 7.5 billion/year (2.6% of GDP) (DNP 2017). Revenue from carbon pricing can also be used to reduce taxes on capital and labor, to spur investment and the creation of formal sector jobs.

Climate Adaptation

Colombia will also need to adapt to climate change. There are measures in three key areas: resilient infrastructure, adaptive social protection, and mobilizing private finance. In all three areas the government has made substantial progress and the task is to follow through on existing efforts.

Invest in resilient infrastructure. Addressing recurrent bottlenecks is a starting point for prioritizing resilient infrastructure investments in the country. Such bottlenecks include the need to reduce the susceptibility to water shortages during dry seasons, manage flood risks and address coastal erosion, strengthen the transport infrastructure resilience to natural disasters and develop guidelines to ensure the construction of resilient housing. Nature-based solutions are often cost-effective approaches for resilience.

Develop an adaptative social protection system. Given the rising risk of climate-related natural disasters, developing a response capacity that protects the poor is particularly important. A well-designed adaptive social protection system should support vulnerable households' capacity to prepare for and cope with shocks. This requires a larger investment in preparedness through the development of data and information systems such as social registries and early warning systems, the promotion of preplanned risk financing and risk layering for shock response, the use of financial instruments such as CAT-Bonds, insurance, and disaster funds with the goal of mainstreaming of adaptation in policy, planning, budgets, and monitoring (World Bank 2021a).

Mobilize private funding. The country can promote investments and mobilization of private capital for adaptation. This can be done by supporting further development of corporate and sovereign green bond markets and encouraging local institutional investors to align their portfolios with a low carbon economy and act as catalysts for green investments. The government is updating its climate finance strategy and has developed a sustainable finance taxonomy. The country can also promote capacity in the banking sector to understand and manage climate-related financial risks and encourage climate risk disclosure by nonfinancial firms.

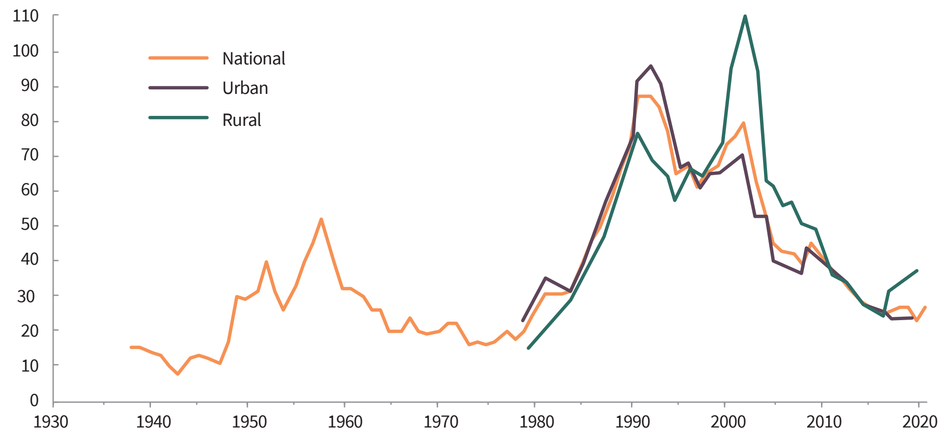
Peace

- Violence has increased in remote rural areas since 2016.
- Although the overall homicide rate in Colombia is near its lowest level in 40 years, Colombia's international reputation as a violent country is highly persistent.
- The weakest point of implementation of the 2016 Peace Agreement with the FARC has been the component on Comprehensive Rural Reform.

Colombia has experienced two major waves of violence in the last century. The first was the civil conflict known as "La Violencia" which took place between 1948 and the early 1960s. The second consisted of the combined conflagration involving guerrilla groups, paramilitaries, and drug traffickers between roughly 1980 and 2015. The second wave had two extreme peaks: one concentrated in the early 1990s in urban areas and another in rural areas in the early 2000s. In total, more than one million Colombians lost their lives to violence during these periods (Melo 2020). Although the country's reputation has yet to catch up to the reality and crime remains a concern, most of Colombia is safer now than at any time in the past four decades. Since 2015 nationwide homicide rates have been at their lowest levels since 1980 and below the average for Latin American and the Caribbean, though they rose in 2021 (Figure 25). The murder rate in Bogotá in 2021 was roughly half that of Washington, DC.[9] The demobilization of paramilitary groups and the peace process are among the primary factors behind the decline in violence. Surveys going back to the early 2000s showed roughly half of Colombians consistently rated crime and violence as the most serious problem facing the country. This figure declined steadily after 2016, reaching 9 percent in 2021.[10]

A major development since 2015 is the Peace Agreement with the FARC, which offers an opportunity to build peace but has faced many challenges in implementation. Various armed groups have asserted control in areas previously dominated by the FARC to profit from the drug trade and illegal mining, and continuing elevated levels of conflict remain a core constraint to poverty reduction and shared prosperity. Violence is now geographically concentrated in remote, rural areas and places most associated with cocaine production and trafficking**.** Rates of homicide are particularly high in the four departments which form the country's Pacific coast and Norte de Santander along the border with Venezuela.

Figure 25. Long-Run Homicide Rates In Colombia



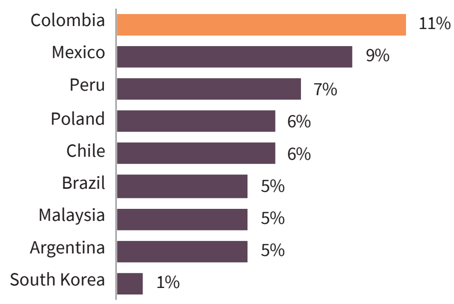
Source: DNP (1938-1978 and 2021), Bank analysis of vital statistics data (1979-2020). 2021 data is for January-September, annualized. Homicide rates are per 100,000 population.

Impacts of Conflict and Violence

Conflict has generated high costs across Colombian society. The most severe effects of conflict have been on its direct victims. The government's registry records more than 9.1 million victims—approximately 1 in 5 Colombians—including more than 8.1 million who have suffered forced displacement (Unidad de Victimas 2021). The surge in violence displaced 73,974 people in 2021, according to UN figures (Reuters 2022).The displaced experience significant drops in consumption and labor income, substantial asset losses, often harsh conditions in destination sites, and a severe disruption of risk-sharing mechanisms. Additionally, displaced children can experience long disruptions in their schooling (Ibáñez and Moya 2010). In total during the conflict, people have been dispossessed of 7.3 million hectares of land, equivalent to 87 percent of the land used for agriculture (Ibáñez Londoño and Velásquez Ospina 2018).

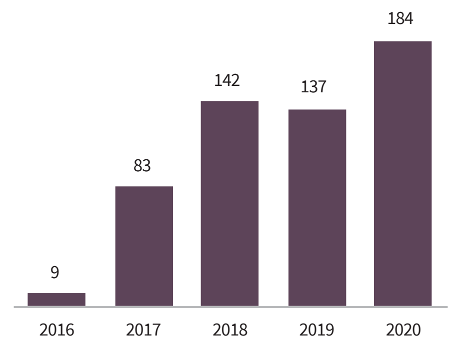
Violence also has substantial effects on economic activity. Increased violence locally depresses the production of firms, causes firms to exit the market, reduces aggregate production, and destroys jobs (Rozo 2018; Rozo and Winkler 2019; Camacho and Rodriguez 2013). In conflict areas, where farmers face fear and uncertainty, they produce low-return seasonal crops and invest less in their lands, thus generating lower incomes (Arias and Ibáñez Londoño 2012). Global studies have also found that political violence deters tourism (Neumayer 2004) and foreign direct investment (Hayakawa, Kimura, and Lee 2013). Unfortunately for Colombia those effects may persist even long after violence has largely subsided, because the country has an international reputation maintained in part by media portrayals. Eleven percent of mentions of Colombia in the US press during 2011-2021 included the word 'violence,' a greater frequency than for all comparators (Figure 26). Despite declining levels of violence over this period, this figure remained roughly constant over the decade.

Figure 26. Share of Articles in US Media Referring to Country that Include the Word 'Violence'



Source: World Bank analysis of 2011-2021 data from Media Cloud

Figure 27. Environmental Leaders Murdered by Year



Source: Indepaz

Assassinations of social and environmental activists have risen sharply. While sources differ on precise figures, there is wide agreement that murders of human rights, social, and environmental activists have increased since the signing of the Peace Agreement (Defensoría del Pueblo 2021). By one analysis, Colombia saw the highest number of environmental leaders murders in the world in both 2019 and 2020 (Global Witness 2021). A Colombian NGO counts 611 such leaders killed since the Peace Agreement (Observatorio de DDHH y Conflictividades de Indepaz 2021) (Figure 27). Of those, a majority (332) were indigenous Colombians, and the killings were concentrated in the west and southwest of the country. These murders are tragedies in themselves and threaten local efforts to protect the environment.

Landmines remain a challenge for rural development. Past conflict left many areas littered with mines. Landmines and unexploded ordinance have been reported in over half of Colombia's municipalities (Landmine & Cluster Munition Monitor 2018). Mine contamination prevents use of land for agriculture, reduces access to services such as schools, and poses a direct threat to residents. The number of victims of antipersonnel mines has risen since 2016, as other armed groups have planted new landmines following the demobilization of the FARC. The government counts 173 landmine victims in 2020 and using a broader count of victims of landmines, munitions, and IED, the Red Cross identified 389 victims in 2020, more than one per day (Long 2021; Alto Comisionado por La Paz 2021).

Decades of conflict have been particularly destructive for women. Women are more likely to have been victims of sexual violence and forced labor. During the conflict, the rate of sexual violence was higher in areas with FARC activity and had fallen two years after the signing of the Peace Agreement (Tribín-Uribe, Diaz, and Salas 2020). Women have tended to be the caregivers for family members disabled by war (Bouvier 2016). Rural women are particularly vulnerable, as they have limited access to and control over land and other assets (World Bank 2019). The Victims and Land Restitution Law (2011) established preferential treatment for displaced women seeking restitution and provides specific reparations for survivors of sexual violence. However, gender discrimination prevents applicants from receiving property rights after their husbands have died or disappeared (García-Godos and Wiig 2014). Access to justice also remains a challenge for victims of conflict-related sexual violence (United Nations Secretary-general 2021).

Venezuelan migrants are vulnerable to crime and violence. When homicides rose in border areas after the arrival of migrants in 2016, the increase was entirely driven by increased crimes against migrants (Knight and Tribin-Uribe, 2020). Migrants also face considerable risk of sexual exploitation and human trafficking (Otis 2021). Evidence does not suggest that Venezuelans are disproportionately involved in criminal activity themselves.

Drivers of Violence

Colombia's violence has complex roots. The country has had extended periods of relative peace, including most of the first half of the 20th century, as well as the 1960s and 1970s, when the country's homicide rate was similar to that of Latin America as a whole. Nonetheless, long-run historical factors have elevated the country's conflict risk. These include extreme levels of inequality and social exclusion coupled with the weak presence of the state in areas outside major cities. These factors, coupled with highly polarized politics, were manifested in La Violencia of the 1940s and 1950s and the subsequent formation of guerrilla groups. The 1980-2015 wave of violence, and the continued high levels of conflict in rural areas today, have been fueled principally by drug trafficking, and, to a lesser extent, illegal mining.

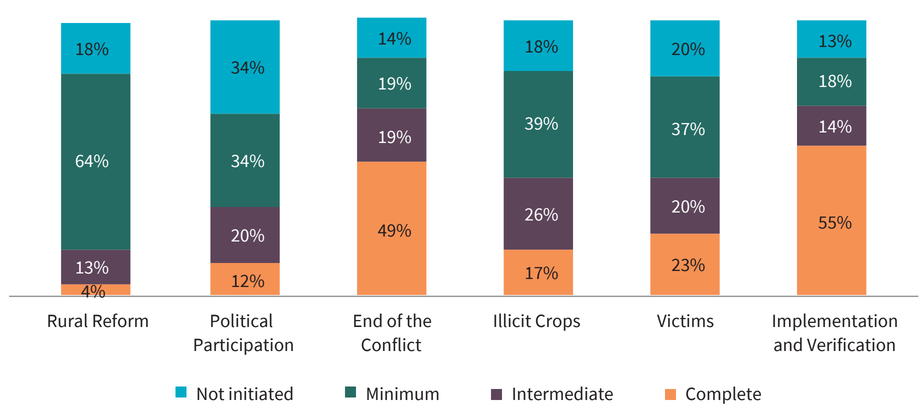
Cocaine trafficking has been strongly associated with violence in Colombia since the 1980s (Mejia and Restrepo 2013)**.** Although overall levels of violence have plummeted, the spatial association remains strong. Coca cultivation takes place in a small number of municipalities that are home to just 13 percent of the country's population but were the location of 1 in 4 homicides in 2020. Armed groups have also used violence to take control of areas for illegal mining (Defensoría del Pueblo 2018). More aggressive anti-drug enforcement could potentially displace trafficking, but it is unlikely to reduce violence (Castillo and Kronick 2020; Kugler, Verdier, and

Zenou 2005; Eck and Maguire 2000; Maccoun and Reuter 2001; Reuter, Peter 1989; Riley 1998; Abadie et al. 2013; Becker, Grossman, and Murphy 2004; Keefer, Loayza, and Soares 2008). Two prominent studies find evidence that greater enforcement increased violence in Mexico, and a systematic review showed that 91 percent of studies that examined the issue found a significant association between levels of drug law enforcement and drug market violence (Werb et al. 2011; Castillo, Mejía, and Restrepo 2020; Dell 2015).

Implementation of the Peace Agreement

Successful implementation of the 2016 agreement with the FARC is the core challenge the country faces to build a lasting peace. Enduring resolution of the conflict would attract investment, boost overall growth, and reduce poverty particularly in those areas that have been most affected. One channel is via a human capital peace dividend. The permanent ceasefire declared by the FARC during peace negotiations generated a sizable improvement in education outcomes in conflict-affected areas (Prem, Vargas, and Namen 2021). Since the Peace Agreement, credit applications and disbursements for small-scale farmers have increased in areas most exposed to the FARC (De Roux and Martínez 2021). Stock returns on the Colombia stock market increase on days associated with the peace accord (Mejía-Posada, Restrepo-Ochoa, and Isaza 2021). Peace could also unleash Colombia's high potential for tourism, including for example among those eager to visit the country with the highest diversity of birds in the world (Maldonado et al. 2018). Overall estimates of the impact of the Peace Agreement on medium-term annual GDP growth vary widely, from 0.17 to 2.3 percent (Betancur, Libos, and Ortiz 2020; Clavijo, Vera, and Ríos 2017; Hofstetter 2016; Rodríguez 2014).

Figure 28. Status Of Implementation of 2016 Peace Agreement



Source: Kroc Institute 2021

Independent monitoring has rated the component on Comprehensive Rural Reform (*Reforma Rural Integral, RRI*) as the weakest point of implementation of the peace accords. The most recent monitoring report by the Kroc Institute found that as of November 2020, implementation of 4 percent of the rural reform provisions had been completed, and implementation of 82 percent of the provisions had either not started or was minimally completed (Figure 28). Separate Government tracking shows RRI implementation to be 46 percent completed as of January 2022 (Government of Colombia 2022b). Both SIIPO and the Kroc Institute report show that the strongest areas of implementation have been measures to end the conflict and verification mechanisms. Core RRI elements include 1) adjudication and formalization of land along with expanding the distribution of land via a Land Fund and 2) agriculture and rural development programs in areas particularly effected by poverty, the conflict, weak institutions, and illegal economies (*Programas de Desarrollo con Enfoque Territorial, PDET*). A recent evaluation by the Attorney General's office highlights three issues: implementation of the Land Fund is weak in the areas most affected by conflict, the program of land rights remains at an early stage, and there is no information system which would make it possible to track PDET programs (República de Colombia, Procuraduría General de la Nación 2021).

A key aspect of the Peace Agreement is the updating of the national Cadaster. The Cadaster is an inventory of who owns (formally or informally) what piece of land. In Colombia, the Cadaster was traditionally designed to assist in land taxation and real estate conveyance. Today the multipurpose cadaster information, according to international standards, is meant to be used in land tenure regularization, dispute resolutions for land tenure-related conflicts, urban and rural planning, land use management, disaster risk management, and environmental monitoring. Updating of cadastral information protects land tenure rights, enabling land-related conflicts resolution, and facilitating massive land tenure regularization policies, all of which are critical factors in conflict-affected areas. Additionally, updated cadastral information will serve to enhance adequate, productive, and sustainable use of land. As of March 2022, 20.35 percent of Colombian territory had updated cadastral information (DNP 2022).

The Peace Agreement has the potential to foster the construction of a new social contract. The Agreement, through the *Hoja de Ruta,* defined mechanisms for community participatory planning in the implementation of programs in 170 territories (PDET municipalities) which were prioritized according to criteria such as poverty, conflict dynamics, presence of illicit crops and absence of government. Global experience suggests that to support conflict recovery, how services are delivered is as important as what is delivered, with an emphasis on making communities partners in service delivery to foster strengthened connections between communities and the state (World Bank and United Nations 2018).

Knowledge and Data Gaps and a Selection of Recent World Bank Studies

The 2015 SCD identified a set of knowledge gaps that merited further research. These included the fiscal implications of the Peace Agreement, the potential for Colombian agriculture, inefficiencies in public spending, trade openness, the extent to which excessive regulations stifle entrepreneurship and growth, and enforcement of anti-monopoly regulation. Work by the Bank and others has been produced on these topics since 2015. The following is a selection of key recent analytical reports that filled some of the knowledge gaps identified in 2015 and were primary inputs for this SCD update**:**

- **Building an Equitable Society in Colombia** (2021)
- **Internationalization Mission Final Report** (2021) [produced jointly by the National Planning Department, the Ministry of Trade, and the World Bank]
- **Colombia Jobs Diagnostic** (2021)
- Colombia Country Private Sector Diagnostic (2022)
- Colombia Public Expenditure Review (2022)

Colombia overall has sophisticated data collection systems and makes substantial amounts of data widely available to the public. Notably, the Government of Colombia publishes comprehensive fiscal, firm-level and household-level data. It has also been a model of data transparency regarding the COVID-19 pandemic, providing continuously updated summaries as well as open access to microdata case and mortality data. The team identified the following data gaps:

1. **Roads.** Data to monitor progress in the quality of roads, particularly those monitored at the subnational level, is not available.
2. **Ethnicity**. The 2018 census showed a 30 percent drop in the number of Afro-descendants from the count in the 2005 census. This appears to be the result of a change in wording of the question and challenges in census administration. It is important to ensure that going forward data on ethnic identity is widely recognized to be reliable.
3. **Fiscal data.** The Government can strengthen the publication and dissemination of fiscal data. This would include adopting the GFSM 2014 standard, publishing detailed revenue and spending data for the general government and the public sector, improving consolidation of data (especially on government debt), adopting a common list of public sector entities, and disseminat-

ing high frequency data on revenue and spending that are comparable with annual aggregates.

4. **Health data.** The Government can encourage standardization of administrative data so that it is internationally comparable, make data and performance measurement more accessible to citizens, and support data use for electronic health records.
5. **Education data.** Colombia has a national data education systems and regular standardized tests. This data would be more useful if it were available on a more timely basis. The tests would be more informative if they were vertically equated, so that learning measures could be better compared over time, and across grades.

Annex: Comparison of 2015 and Updated Priorities

The SCD Update team identified seven development priorities to achieve the twin goals of eliminating extreme poverty and boosting shared prosperity. Following the preparation of the initial diagnostic and extensive consultations with government, the private sector, civil society, and academia, a prioritization exercise was carried out within the broad framework of the 2015 SCD. Starting with the priorities identified in the 2015 SCD and drawing on the analysis and input provided in the consultations, the World Bank team rated candidate priorities for eliminating extreme poverty and boosting shared prosperity. The priorities are not intended to be a comprehensive set of areas for government action. Areas of more near-term concern are discussed in the SCD but were not identified as top priorities.

The revised priorities are closely aligned with the 2015 SCD priorities. The 2015 report identified 11 broadly defined priorities. The six "Tier 1" priorities were: infrastructure gaps, low quality of education at all levels, financial sector issues, land issues, poor citizen security, and natural resource management. The five "Tier 2" priorities were: slow TFP growth, disaster risk management, pollution, revenue issues, and labor market regulation. The updated priorities (2022) all fall within the 11 priorities identified in 2015 but are defined in terms of actions rather than constraints; thus, they are more specific, reflecting developments and analyses conducted since 2015. The updated priorities are presented here with cross-references to the relevant 2015 priorities that are found separately in the table below.

Updated Priorities (2022)

- **Implement the rural development measures under the 2016 peace accord.** Nothing is more important for the country's future than avoiding a third wave of violence. The rising tide of conflict in remote areas can be stopped by following through on commitments to fund rural development and resolve land issues and increasing the presence of the state in those areas. Particular attention is needed to improve the quality of rural roads, incorporating climate-resilient design. Although inter-city connections have improved with the expansion of toll roads, poor secondary and tertiary roads remain a key barrier for trade and rural development. ***Specific elements of 2015 priorities #1, #4, #5, and #8.***
- **Boost learning in public schools.** The pandemic turned Colombia's learning crisis into a catastrophe. In the short term, teachers need to evaluate their student's knowledge to be able to adjust their teaching to the right level. Over the long term, learning can be improved by expanding pedagogical support to teachers and using a prioritized curriculum focused on basic competencies. Improving the quality and coverage of early childhood development programs

is also needed to ensure that students are ready to learn when they reach school age. ***Specific elements of 2015 priority #2.***

- **Halt deforestation.** Ending the destruction of Colombia's forests is critical to preserving the nation's biodiversity for future generations, meeting the country's emissions reductions commitments, and developing the country's high tourism potential. This priority is tied to the rural development and peace agenda and will involve securing land tenure, increasing territorial control, and expanding programs to compensate landowners for preservation. ***Specific elements of 2015 priority #6.***
- **Enhance market competition**. Whereas enforcement of competition policy across the board is essential to increase productivity, the short-term focus should be on telecommunications, the financial sector, public procurement, and internationalization policies, which all have important spillovers for the rest of the economy. ***Specific elements of 2015 priority #7 and #3.***
- **Boost firm capabilities and innovation.** Based on an evaluation of their effectiveness, it is essential to scale up enterprise support programs aimed at promoting productivity, innovation, and export orientation. ***Specific elements of 2015 priority #7.***
- **Reducing the cost wedge between formal and informal employment.** Both employers and employees pay a high level of mandatory contributions. In tandem with the high minimum wage, these contributions drive up the cost of hiring workers and make formal employment less attractive for workers. Trimming mandatory contributions for low-wage workers and moderating growth of the minimum wage would boost job creation. ***Specific elements of 2015 priority #11.***
- **Strengthen anti-corruption mechanisms.** The recent report of the Commission of Anti-Corruption Experts provides a roadmap of specific actions, including the better use of data and analysis in anti-corruption investigations and limiting the use of non-competitive public contracting. ***Not reflected in 2015 priorities.***

Table A1. Priorities from Colombia 2015 Systematic Country Diagnostic

Tier 1	1. Infrastructure gap (particularly transport infrastructure) across regions/departments hinders output and productivity growth, while gaps in the delivery of public services (particularly utilities such as water, sewage, health, citizen security, and urban transport) across regions/departments directly contributes to poverty/inequality outcomes. These issues are closely linked to institutional constraints, such as a fragmented social protection system, lack of coordination across levels of government and limited local capacity to design and implement projects and policies.
	2. Low quality of education at all levels, insufficient access at early childhood and post-secondary levels, and lack of access to training in job skills. Combined, these hinder output and productivity growth, and contribute to widening wage inequalities.
	3. Financial sector does not provide adequate support for private firm development and access to financial services in general by individuals and small firms, affecting economic growth and inclusion.
	4. Land tenure and land market institutions hinder growth and equity in rural areas. This compounds already limited re-employment possibilities for internally displaced people and victims due to losses of land, human capital, and other productive assets.
	5. Poor citizen security as a consequence of the armed conflict and of expanding criminal activities, whether related or not to the conflict itself, hinders economic growth and inclusion, as well as social sustainability.
	6. Insufficient/limited forest, land, and natural resource management (including in the oil and mining sectors) in post-conflict areas that are increasingly opening up.
Tier 2	7. Slow TFP growth in non-extractive activities, which is linked to limited exposure to domestic and external competition, limits economic growth.
	8. Inadequate disaster risk management and adaptation in the face of worsening natural disasters and climate change.
	9. High pollution levels, particularly air pollution in Colombia's largest cities, and low levels of wastewater treatment.
	10. Volatile natural resource public revenues pose additional challenges to the fiscal consolidation plan set under the fiscal rule. The current implementation strategy, based on public expenditure reduction, does not seem realistic or socially desirable. Moreover, the Tax/Transfer system is of limited progressivity and the pension system is regressive and will require increasing amounts of funding.
	11. Labor market legislation leads to relatively high labor costs for the average labor productivity of the country. In parallel, unequal opportunities and outcomes in labor markets for women, displaced population, and ethnic minorities such as indigenous and afro-Colombians, affect economic growth and social inclusion.

Endnotes

1. Visión Colombia 2050 has five axes: State, Democracy, and Security; Equity and Social Development; Productivity and Competitiveness; Biodiversity and Risk Mitigation; and Innovation and Digital Society.
2. The Sovereign regained investment grade status in 2011 but lost it in 2021, in the aftermath of the COVID crisis.
3. Contrary to what was registered at the aggregate level, the agricultural sector showed positive growth of 2.0 percent. This is mainly explained by the 2.9 percent growth of agricultural crops, and the less severe restrictions to which the sector was subjected during the time of confinement.
4. Tourist arrivals plummeted to 1.9 million in 2020 and to 0.8 million in January-July 2021 (UNWTO 2021).
5. ICT prices according to the current basket definition in terms of USD, PPP$ and as a percent of monthly GNI per capita.
6. Specifically, the persistence of income across generations is the coefficient from the regression of the logarithm of an individual's income as an adult on his or her parents' log income at a similar age.
7. The learning-adjusted education measures learning in terms of years in a high performing school, e.g students in the bottom quintile learn the equivalent of what they would learn in 6.3 years in of a high performing school.
8. The establishment of silvopastoral livestock management systems could reduce climate-related losses of productive assets in milk to zero and in beef by one-third (Ramirez and Perez, 2019).
9. Washington, DC recorded 198 homicides in 2021 and had an estimated population of 670,050, yielding a homicide rate of 29.6 per 100,000. Bogotá recorded 1126 homicides in 2021 and had an estimated population of 7,834,167, yielding a homicide rate of 14.4 per 100,000 inhabitants. The rate of 13.3 per 100,000 in 2020 was the lowest rate of any year in police records that go back to 1962.
10. Based on analysis of Latinobarómetro surveys.

References

Abadie, Alberto, M. C. Acevedo, Maurice Kugler, and Juan Vargas. 2013. "Inside the War on Drugs: Effectiveness and Unintended Consequences of a Large Illicit Crops Eradication Program in Colombia." Working Paper Harvard Kennedy School y Universidad del Rosario.

Acemoglu, Daron, and James A. Robinson. 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*.

Agencia Nacional de Infraestructura. 2019. "Formulario Único Reporte de Avances de La Gestión 2019." https://www.ani.gov.co/politicias-gestion-administrativa/formulario-unico-reporte-de-avance-de-la-gestion-furag.

Ahmed, Ali T., Marcus Johnson, and Mateo Vásquez-Cortés. 2020. "Land Titling, Race, and Political Violence: Theory and Evidence from Colombia."

Alto Comisionado por La Paz. 2021. "Estadísticas de Asistencia Integral a Las Víctimas de MAP y MUSE." September 30, 2021. http://www.accioncontraminas.gov.co/Estadisticas/Paginas/Estadisticas-de-Victimas.aspx.

Andrews, Dan, Nathan Deutscher, Hambur, Jonathan, and Hansell, David. 2020. "The Scarring Effects of Downturns on Young Workers." https://voxeu.org/article/scarring-effects-downturns-young-workers.

Arias, María Alejandra, and Ana María Ibáñez Londoño. 2012. "Conflicto armado en Colombia y producción agrícola: ¿aprenden los pequeños productores a vivir en medio del conflicto?" https://repositorio.uniandes.edu.co/handle/1992/8368.

Arora, Diksha. 2019. "Extreme Weather Events (Drought) and Its Impact on Assets, Livelihoods and Gender Roles Case Study of Small-Scale Livestock Herders in Cauca, Colombia." Report. https://cgspace.cgiar.org/handle/10568/99725.

Banca de las Oportunidades, and SFC. 2020. "Reporte de Inclusión Financiera 2020." https://bancadelasoportunidades.gov.co/sites/default/files/2021-07/REPORTE_DE_INCLUSION_FINANCIERA_2020.pdf.

Becerra, Oscar, Santiago Caicedo, Marcela Eslava, Marc Hofstetter, Jose Ignacio López, David Perez-Reyna, Guillermo Perry, Miguel Urrutia, and Daniel Wills. 2019. "Nota Macroeconomica 04. El Deficit de Productividad En Colombia." Facultad de Economía, Universidad de los Andes. https://repositorio.uniandes.edu.co/bitstream/handle/1992/41144/nota-macroeconomica-04.pdf?sequence=1&isAllowed=y.

Becker, G. S., M. Grossman, and K. M. Murphy. 2004. "The Economic Theory of Illegal Goods: The Case of Drugs." *NBER Working Paper*.

Betancur, Juan S., Sammy Libos, and Mónica Ortiz. 2020. "Beneficios Económicos Del Acuerdo de Paz En Colombia," December. https://www.repository.fedesarrollo.org.co/handle/11445/4056.

Bouvier, Virginia M. 2016. "Gender and the Role of Women in Colombia's Peace Process." UN Women and United States Institute of Peace. https://www.usip.org/

sites/default/files/Gender-and-the-Role-of-Women-in-Colombia-s-Peace-Process-English.pdf.

Burke, Marshall, Solomon M. Hsiang, and Edward Miguel. 2015. "Climate and Conflict." *Annu. Rev. Econ.* 7 (1): 577–617.

Camacho, Adriana, and Catherine Rodriguez. 2013. "Firm Exit and Armed Conflict in Colombia." *Journal of Conflict Resolution* 57 (1): 89–116. https://doi.org/10.1177/0022002712464848.

Caruso, German, Christian Gomez Canon, and Valerie Mueller. 2021. "Spillover Effects of the Venezuelan Crisis: Migration Impacts in Colombia." *Oxford Economic Papers* 73 (2): 771–95.

Castillo, Juan Camilo, and Dorothy Kronick. 2020. "The Logic of Violence in Drug War." *American Political Science Review* 114 (3): 874–87. https://doi.org/10.1017/S0003055420000246.

Castillo, Juan Camilo, Daniel Mejía, and Pascual Restrepo. 2020. "Scarcity without Leviathan: The Violent Effects of Cocaine Supply Shortages in the Mexican Drug War." *The Review of Economics and Statistics* 102 (2): 269–86. https://doi.org/10.1162/rest_a_00801.

Centre for Economic Performance. 2014. "World Management Survey." 2014. https://worldmanagementsurvey.org/.

Centro Nacional de Memoria Histórica. 2015. *Buenaventura: Un Puerto Sin Comunidad*. Centro Nacional de Memoria Histórica.

Choi, Soon Kyu, Shahrzad Divsalar, Jennifer Flórez-Donado, Krystal Kittle, Andy Lin, Ilan H. Meyer, and Prince Torres-Salazar. 2020. "Stress, Health, and Well-Being of LGBT People in Colombia."

Cirera, Xavier, and William F. Maloney. 2017. "The Innovation Paradox: Developing-Country Capabilities and the Unrealized Promise of Technological Catch-Up." The World Bank Group. https://openknowledge.worldbank.org/bitstream/handle/10986/28341/9781464811609.pdf?sequence=4&isAllowed=y.

Clavijo, Sergio, Alejandro Vera, and Andrea Ríos. 2017. "Dividendos, Beneficios y Costos Del Proceso de Paz de Colombia." *Revista Fasecolda*, no. 165: 52–63.

Clerici, N., D. Armenteras, P. Kareiva, R. Botero, J. P. Ramírez-Delgado, G. Forero-Medina, J. Ochoa, C. Pedraza, L. Schneider, and C. Lora. 2020. "Deforestation in Colombian Protected Areas Increased during Post-Conflict Periods." *Scientific Reports* 10 (1): 1–10.

Climate Watch. 2021. "Climate Watch Database." 2021. https://www.climatewatchdata.org/.

Comisión de Expertos Anti-Corrupción. 2021. "Recomendaciones Para Combatir La Corrupción En Colombia." https://www.fedesarrollo.org.co/sites/default/files/recomendaciones_comision_expertos_inticorrupcion_2.pdf.

Consejo Privado de Competitividad, Swiss contact, Colombia mas competitiva, and SECO. 2020. "Obstáculos a La Innovación En Empresas de Colombia y Oferta Pública de Instrumentos." https://compite.com.co/wp-content/uploads/2021/08/Obst%C3%A1culos-a-la-innovaci%C3%B3n-en-las-empresas-de-Colombia_Resumen.pdf.

Correa Montoya, Lucas y Castro Martínez, and Marta Catalina. 2016. *Discapacidad e Inclusión Social En Colombia. Informe Alternativo de La Fundación Saldarriaga Concha al Comité de Naciones Unidas Sobre Los Derechos de Las Personas Con Discapacidad*. Bogotá D.C., Colombia: Editorial Fundación Saldarriaga Concha.

Cusolito, Ana Paula, and William F. Maloney. 2018. *Productivity Revisited: Shifting Paradigms in Analysis and Policy*. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1334-4.

DANE. 2020. "Personas Con Discapaciad, Retos Diferenciales En El Marco Del COVID-19."

———. 2021a. "Estadísticas de Comercio Internacional y Cuentas Nacionales." 2021. https://www.dane.gov.co/index.php/estadisticas-por-tema/comercio-internacional.

———. 2021b. "Nota Estadística: Población Migrante Venezolana En Colombia, Un Panorama Con Enfoque de Género." https://www.dane.gov.co/files/investigaciones/notas-estadisticas/jul-2021-nota-estadistica-poblacion-migrante-venezolana-panorama-con-enfoque-de-genero.pdf.

———. 2021c. "Pobreza Monetaria: Indicadores de Pobreza Monetaria." https://www.dane.gov.co/files/investigaciones/condiciones_vida/pobreza/2020/anexo_pobreza_monetaria_20_nacional.xls.

———. 2021c. "Pobreza Multidimensional." https://www.dane.gov.co/index.php/estadisticas-por-tema/pobreza-y-condiciones-de-vida/pobreza-multidimensional.

———. 2021d. "Gran Incuesta Integrada de Hogares: Mercado Laboral." https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/anexo_empleo_sep_21.xlsx.

De Roux, Nicolás, and Luis Roberto Martínez. 2021. "Forgone Investment: Civil Conflict and Agricultural Credit in Colombia." https://repositorio.uniandes.edu.co/handle/1992/49802.

Defensoría del Pueblo. 2018. "Informe Especial: Economías Ilegales, Actores Armados y Nuevos Escenarios de Riesgo En El Posacuerdo."

———. 2021. "Conductas Vulneratorias En Contra de Líderes Sociales y Defensores de DDHH."

Delgado-Prieto, Lukas. 2021. "Immigration, Wages and Employment under Informal Labor Markets."

Dell, Melissa. 2015. "Trafficking Networks and the Mexican Drug War." *American Economic Review* 105 (6): 1738–79. https://doi.org/10.1257/aer.20121637.

DNP. 2016. "Plan Nacional de Adaptación al Cambio Climático. Adaptación Bases Conceptuales. Marco Conceptual y Lienamientos." https://www.minambiente.gov.co/images/cambioclimatico/pdf/Plan_nacional_de_adaptacion/1._Plan_Nacional_de_Adaptaci%C3%B3n_al_Cambio_Clim%C3%A1tico.pdf.

———. 2017. "Los costos en la salud asociados a la degradación ambiental en Colombia ascienden a $20,7 billones." 2017. https://www.dnp.gov.co:443/Paginas/Los-costos-en-la-salud-asociados-a-la-degradaci%C3%B3n-ambiental-en-Colombia-ascienden-a-$20,7-billones-.aspx.

———. 2018. "Documento CONPES 3951 CONCEPTO FAVORABLE A LA NACIÓN PARA CONTRATAR OPERACIONES DE CRÉDITO EXTERNO CON LA BANCA MULTILATERAL HASTA POR USD 150 MILLONES, O SU EQUIVALENTE EN OTRAS MONEDAS, DESTINADOS A FINANCIAR PARCIALMENTE EL PROGRAMA PARA LA ADOPCIÓN E IMPLEMENTACIÓN DE UN CATASTRO MULTIPROPÓSITO RURAL-URBANO." https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3951.pdf.

———. 2020. "Conpes 4021. Política Nacional Para El Control de La Deforestación y La Gestión Sostenible de Los Bosques." https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/4021.pdf.

———. 2022. "Sinergia." https://sinergiapp.dnp.gov.co/#IndicadorProgEnt/33/1160/5515.

DNP, Fedesarrollo, and GGGI. 2017. "Evaluación Del Potencial de Crecimiento Verde Para Colombia." https://colaboracion.dnp.gov.co/CDT/Ambiente/Mision%20Crecimiento%20Verde/diagnostico/EPCV%20Con%20ISBN.pdf.

Echeverría-Londoño, Susy, Tim Newbold, Lawrence N. Hudson, Sara Contu, Samantha L. L. Hill, Igor Lysenko, Enrique Arbeláez-Cortés, et al. 2016. "Modelling and Projecting the Response of Local Assemblage Composition to Land Use Change across Colombia." Edited by Piero Visconti. *Diversity and Distributions* 22 (11): 1099–1111. https://doi.org/10.1111/ddi.12478.

Eck, J., and E. Maguire. 2000. "Have Changes in Policing Reduced Violent Crime? An Assessment of the Evidence." *The Crime Drop in America*, 207–65.

Fergusson, Leopoldo, Carlos Molina, James Robinson, and Juan F. Vargas. 2017. "The Long Shadow of the Past: Political Economy of Regional Inequality in Colombia." *Documento CEDE*, no. 2017–22.

Ferreyra, María Marta, Lelys Dinarte Díaz, Sergio Urzúa, and Marina Bassi. 2021. *The Fast Track to New Skills: Short-Cycle Higher Education Programs in Latin America and the Caribbean*. World Bank Publications.

Freire, German, Carolina Diaz-Bonilla, Steven Schwartz Orellana, Jorge Soler Lopez, and Flavia Carbonari. 2018. "Afro-Descendants in Latin America."

Freire, German Nicolas, Steven Daniel Schwartz Orellana, Melissa Zumaeta Aurazo, Damasceno Costa Costa, Jonna Maria Lundvall, Martha Celmira Viveros Mendoza, Leonardo Ramiro Lucchetti, Laura Moreno, and Liliana Do Couto Sousa. 2015. "Indigenous Latin America in the Twenty-First Century: The First Decade." The World Bank.

García-Godos, Jemima, and Henrik Wiig. 2014. "The Colombian Land Restitution Programme. Process, Results and Challenges, with Special Emphasis on

Women." 2014:14. NIBR. https://oda.oslomet.no/oda-xmlui/bitstream/handle/20.500.12199/5915/2014-14.pdf?sequence=1&isAllowed=y.

Global Forest Watch. 2021. "Colombia Deforestation Rates & Statistics." 2021. https://www.globalforestwatch.org/dashboards/country/COL?category=forest-change.

Global Witness. 2021. "Última Línea de Defensa." https://www.globalwitness.org/es/last-line-defence-es/.

Gonzalo, Miguel, Gonzalo Andrade-C, Leonardo Donado, Donado Garzón, John Fernando, Escobar Martínez, Mario García, et al. 2019. *Informe Sobre Efectos Ambientales (Bióticos, Físicos y Sociales) y Económicos de La Exploración de Hidrocarburos En Áreas Con Posible Despliegue de Técnicas de Fracturamiento Hidráulico de Roca Generadora Mediante Perforación Horizontal*. https://doi.org/10.13140/RG.2.2.29179.13608.

Government of Colombia. 2020. "Colombia Updated NDC." 2020. https://www4.unfccc.int/sites/NDCStaging/Pages/Party.aspx?party=COL&prototype=1.

———. 2021. "Misión de Empleo." https://www.misionempleo.gov.co/.

———. 2022a. "BUR 3. Tercer Informe de Actualización de Cambio Climático En Colombia." https://unfccc.int/sites/default/files/resource/BUR3%20-%20COLOMBIA.pdf.

———. 2022b. "Sistema Integrado de Información Para El Posconflicto." https://siipo.dnp.gov.co/.

Hayakawa, Kazunobu, Fukunari Kimura, and Hyun-Hoon Lee. 2013. "How Does Country Risk Matter for Foreign Direct Investment?" *The Developing Economies* 51 (1): 60–78.

Hofstetter, Marc. 2016. "Paz Y Pib (Peace and GDP)." *Documento CEDE*, no. 2016–19.

Ibáñez, Ana María, and Andrés Moya. 2010. "Vulnerability of Victims of Civil Conflicts: Empirical Evidence for the Displaced Population in Colombia." *World Development* 38 (4): 647–63.

Ibánez, Ana Marıa, Andrés Moya, Marıa Adelaida Ortega, Marisol Rodrıguez Chatruc, and Sandra V. Rozo. 2021. "Life out of the Shadows: Impacts of Amnesty Programs on Migrant's Lifes."

Ibáñez Londoño, Ana María, and Mauricio Velásquez Ospina. 2018. "Desarrollo Rural: Recomendaciones Para El Nuevo Gobierno 2018-2022."

IDEAM. 2015. "Analisis de Vulnerabilidad y Riesgo Por Cambio Climático En Colombia: Tercera Comunicación Nacional de Cambio Climático." http://documentacion.ideam.gov.co/openbiblio/bvirtual/023715/023715.html.

IEA. 2020a. "Change in Energy Demand by Scenario, 2019-2030 – Charts – Data & Statistics." IEA. 2020. https://www.iea.org/data-and-statistics/charts/change-in-energy-demand-by-scenario-2019-2030.

———. 2020b. "Coal 2020. Analysis and Forecast to 2025." https://www.iea.org/reports/coal-2020.

Instituto Alexander von Humboldt. 2015. “El recurso pesquero continental en Colombia.” 2015. http://reporte.humboldt.org.co/biodiversidad/2015/cap2/203/.

Inter-American Development Bank, Development Bank of Latin America, and Economic Commission for Latin American and the Caribbean. 2021. *INFRALATAM Database*. http://infralatam.info/en/home/.

International Crisis Group. 2021. “A Broken Canopy: Deforestation and Conflict in Colombia.” https://www.crisisgroup.org/latin-america-caribbean/andes/colombia/091-broken-canopy-deforestation-and-conflict-colombia.

Iootty, Mariana, Georgiana Pop, and Jorge Pena. 2020. “Corporate Market Power in Romania Assessing Recent Trends, Drivers, and Implications for Competition.” World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/34909/Corporate-Market-Power-in-Romania-Assessing-Recent-Trends-Drivers-and-Implications-for-Competition.pdf?sequence=5&isAllowed=y.

Johnson, Justin Andrew, Giovanni Ruta, and Uris Baldos. 2021. “The Economic Case for Nature.” https://openknowledge.worldbank.org/handle/10986/35882.

Keefer, Philip, Norman V. Loayza, and Rodrigo R. Soares. 2008. “The Development Impact of the Illegality of Drug Trade.” Policy Research Working Paper 4543. The World Bank. RePEc. http://ideas.repec.org/p/wbk/wbrwps/4543.html.

Kharroubi, Enisse, and Emanuel Kohlscheen. 2017. “Consumption-Led Expansions.” BIS. https://www.bis.org/publ/qtrpdf/r_qt1703e.pdf.

Koubi, Vally. 2019. “Climate Change and Conflict.” *Annual Review of Political Science* 22: 343–60.

Kroc Institute and Instituto Kroc de Estudios Internacionales. 2021. “El Acuerdo Final de Colombia En Tiempos Del COVID-19: Apropiación Institucional y Ciudadana Como Clave de La Implementación.” 2021. https://doi.org/10.7274/r0-86hg-jh77.

Kugler, M., T. Verdier, and Y. Zenou. 2005. “Organized Crime, Corruption and Punishment.” *Journal of Public Economics* 89 (9–10): 1639–63.

Latin American Public Opinion Project. 2021. “LAPOP Colombia 2021.” 2021. https://www.vanderbilt.edu/lapop/colombia.php.

Latinobarómetro. 2020. “Informe Latinobarómetro 2021.” 2020. https://www.latinobarometro.org/latContents.jsp.

Landmine & Cluster Munition Monitor. 2018. “Colombia.” November 19, 2018. http://www.the-monitor.org/en-gb/reports/2021/colombia/mine-action.aspx.

Lebow, Jeremy. 2021. “Immigration and Occupational Downgrading in Colombia.” *Unpublished Manuscript*.

Leiserowitz, A., J. Carman, N. Buttermore, X. Wang, S. Rosenthal, J. Marlon, and K. Mulcahy. 2021. *International Public Opinion on Climate Change*. New Haven, CT: Yale Program on Climate Change Communication and Facebook Data for Good.

Long, Gideon. 2021. "Colombia's Landmines Are More than a Legacy Issue." *Financial Times*, October 6, 2021. https://www.ft.com/content/146302bd-fc1f-4199-a41a-bbc7539f67f7.

Maccoun, Robert J., and Peter Reuter. 2001. *Drug War Heresies*. Cambridge University Press.

Maldonado, Jorge H., Rocío del Pilar Moreno-Sánchez, Sophía Espinoza, Aaron Bruner, Natalia Garzón, and John Myers. 2018. "Peace Is Much More than Doves: The Economic Benefits of Bird-Based Tourism as a Result of the Peace Treaty in Colombia." *World Development* 106 (June): 78–86. https://doi.org/10.1016/j.worlddev.2018.01.015.

Mejia, Daniel, and Pascual Restrepo. 2013. "Bushes and Bullets: Illegal Cocaine Markets and Violence in Colombia." *Documento CEDE*, no. 2013–53.

Mejía-Posada, Federico, Diana C. Restrepo-Ochoa, and Juan E. Isaza. 2021. "Do Investors React to Terrorism and Peace in Colombia?" *Emerging Markets Finance and Trade* 0 (0): 1–16. https://doi.org/10.1080/1540496X.2021.1903867.

Melo, Jorge Orlando. 2020. *Colombia: Una Historia Mínima*. Colombia: Editorial Planeta.

Migración Colombia. 2021. "Distribución de Venezolanos En Colombia - Corte 31 de Agosto de 2021." https://www.migracioncolombia.gov.co/infografias/distribucion-de-venezolanos-en-colombia-corte-31-de-agosto-de-2021.

Ministerio de Educación. 2021. "Información Estadística." https://snies.mineducacion.gov.co/portal/.

Ministerio de Hacienda y Crédito Público. 2018. "Reporte Anual de Empresas de La Nación." https://www.minhacienda.gov.co/webcenter/ShowProperty?nodeId=%2FConexionContent%2FWCC_CLUSTER-112768%2F%2FidcPrimaryFile&revision=latestreleased.

Ministerio de Salud. 2020. "Boletines Poblacionales: Personas Con Discapacidad-PCD I-2020."

———. 2021a. "Cobertura Vacunación Contra COVID-19." https://app.powerbi.com/view?r=eyJrIjoiNThmZTJmZWYtOWFhMy00OGE1LWFiNDAtMTJmYjM0NDA5NGY2IiwidCI6ImJmYjdlMTNhLTdmYjctNDAxNi04MzBjLWQzNzE2ZThkZDhiOCJ9.

———. 2021b. "Colombia Child Immunization Data."

Ministry of Foreign Affairs, Ministry of Finance, Ministry of Trade and National Planning Department. 2021. "Internationalization Mission." Misión de Internacionalización. 2021. https://www.dnp.gov.co/DNPN/mision-internacionalizacion/Paginas/que-es-la-mision-de-internacionalizacion.aspx

Murillo-Sandoval, Paulo J., Emma Gjerdseth, Camilo Correa-Ayram, David Wrathall, Jamon Van Den Hoek, Liliana M. Dávalos, and Robert Kennedy. 2021. "No Peace for the Forest: Rapid, Widespread Land Changes in the Andes-Amazon Region Following the Colombian Civil War." *Global Environmental Change* 69 (July): 102283. https://doi.org/10.1016/j.gloenvcha.2021.102283.

National Intelligence Council. 2021. "Climate Change and International Responses Increasing Challenges to US National Security Through 2040: National Intelligence Estimate." https://www.dni.gov/files/ODNI/documents/assessments/NIE_Climate_Change_and_National_Security.pdf.

Neumayer, Eric. 2004. "The Impact of Political Violence on Tourism: Dynamic Cross-National Estimation." *Journal of Conflict Resolution* 48 (2): 259–81.

Observatorio de DDHH y Conflictividades de Indepaz. 2021. "Líderes Ambientales Asesinados Desde La Firma Del Acuerdo de Paz."

OECD. 2014. "Environmental Performance Reviews: Colombia." 2014. https://www.oecd.org/environment/country-reviews/oecd-environmental-performance-reviews-colombia-2014-9789264208292-en.htm.

———. 2021a. *Education at a Glance*. Organisation for Economic Co-operation and Development.

———. 2021b. "Labor Fource Statistics by Sex and Age." https://stats.oecd.org/Index.aspx?DataSetCode=LFS_SEXAGE_I_R.

———. 2021c. "Minimum Relative to Average Wages of Full-Time Workers." https://stats.oecd.org/Index.aspx?DataSetCode=MIN2AVE.

———. 2020b. "Digital Government Index, 2019." https://www.oecd.org/gov/digital-government/digital-government-index-2019-highlights-es.pdf.

———. 2020a. *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*. Organisation for Economic Co-operation and Development OECD.

Ortega Pacheco, Yesid José, and Milena Martínez Rudas. 2021. "Domestic Violence and COVID-19 in Colombia." *Psychiatry Research* 300 (June): 113925–113925. https://doi.org/10.1016/j.psychres.2021.113925.

Otis, John. 2021. "Venezuelan Migrants Fall Prey to Sex Traffickers After Fleeing Their Collapsing Country." *Wall Street Journal*, December 26, 2021, sec. World. https://www.wsj.com/articles/venezuelan-migrants-fall-prey-to-sex-traffickers-after-fleeing-their-collapsing-country-11640514604.

Prem, Mounu, Santiago Saavedra, and Juan F. Vargas. 2020. "End-of-Conflict Deforestation: Evidence from Colombia's Peace Agreement." *World Development* 129 (May): 104852. https://doi.org/10.1016/j.worlddev.2019.104852.

Prem, Mounu, Juan F. Vargas, and Olga Namen. 2021. "The Human Capital Peace Dividend." *Journal of Human Resources*, May, 0320. https://doi.org/10.3368/jhr.59.1.0320-10805R2.

República de Colombia, Procuraduría General de la Nación. 2021. "Tercer Informe al Congreso Sobre El Estado de Avance de La Implementación Del Acuerdo De Paz." https://www.procuraduria.gov.co/portal/Paz.page.

Reuter, Peter. 1989. "An Economist Looks at the Carnage." *Washington Post*, March 26, 1989.

Reuters. 2022. "Forced Displacements Soared in Colombia in 2021, UN Agency Reports." *Reuters*, February 16, 2022, sec. Americas. https://www.reuters.com/

world/americas/forced-displacements-soared-colombia-2021-un-agency-reports-2022-02-16/.

Riley, K. 1998. "Homicide and Drugs: A Tale of Six Cities." *Homicide Studies* 2 (2): 176.

Rodríguez, Francisco. 2014. "The Peace Premium." *Bank of America y Merrill Lynch, Colombia Viewpoint* 2.

Rozo, Sandra V. 2018. "Is Murder Bad for Business? Evidence from Colombia." *The Review of Economics and Statistics* 100 (5): 769–82. https://doi.org/10.1162/rest_a_00735.

Rozo, Sandra V., and Juan F. Vargas. 2021. "Brothers or Invaders? How Crisis-Driven Migrants Shape Voting Behavior." *Journal of Development Economics* 150: 102636.

Rozo, Sandra V., and Hernan Winkler. 2019. "Is Informality Good for Business? The Impacts of IDP Inflows on Formal Firms." *Journal of Human Resources*, 1018-9794R2.

Santamaria, Julieth. 2019. "Venezuelan Exodus: The Effect of Mass Migration on Labor Market Outcomes." mimeo), University of Minnesota.

Sarmiento, Carlos, Alejandra Osejo, Paula Ungar, and Jessica Zapata. 2017. "Páramos habitados: desafíos para la gobernanza ambiental de la alta montaña en Colombia." *Biodiversidad en la Práctica* 2 (1): 122–45.

Strambo, Claudia, and Aaron Atteridge. 2018. *How Colombia Can Plan for a Future without Coal*. JSTOR.

"The Lloyd's Register Foundation World Risk Poll." 2020. The Lloyd's Register Foundation World Risk Poll. 2020. https://wrp.lrfoundation.org.uk/explore-the-poll/the-majority-of-people-around-the-world-are-concerned-about-climate-change/.

Tribín-Uribe, Ana María, Ana Maria Diaz, and Luz Magdalena Salas. 2020. "Hidden Benefits of Peace: The Case of Sexual Violence." *Borradores de Economía; No. 1124*.

Tribín-Uribe, Ana María, and Brian Knight. 2020. "Immigration and Violent Crime: Evidence from the Colombia-Venezuela Border." *Borradores de Economía; No. 1121*.

UNESCO. 2021. *Los Aprendizajes Fundamentales En América Latina y El Caribe: Evaluación de Logros de Los Estudiantes, Estudio Regional Comparativo y Explicativo (ERCE 2019)*. https://en.unesco.org/sites/default/files/resumen-ejecutivo-informe-regional-logros-factores-erce2019.pdf_0.pdf.

Unidad de Víctimas. Gobierno de Colombia. 2021. "Registro Único de Víctimas." https://www.unidadvictimas.gov.co/en/node/37394.

United Nations Secretary-general. 2021. "Conflict-Related Sexual Violence." Office of the Sexual Representative of the Secretary-General on Sexual Violence in Conflict. https://www.un.org/sexualviolenceinconflict/wp-content/uploads/2021/04/report/conflict-related-sexual-violence-report-of-the-united-nations-secretary-general/SG-Report-2020editedsmall.pdf.

University of Notre Dame. 2021. "ND-GAIN Country Index. Notre Dame Global Adaptation Initiative." 2021. https://gain.nd.edu/our-work/country-index/.

UNWTO. 2021. "Tourism Data." 2021. https://www.unwto.org/unwto-tourism-dashboard.

Werb, Dan, Greg Rowell, Gordon Guyatt, Thomas Kerr, Julio Montaner, and Evan Wood. 2011. "Effect of Drug Law Enforcement on Drug Market Violence: A Systematic Review." *International Journal of Drug Policy* 22 (2): 87–94. https://doi.org/10.1016/j.drugpo.2011.02.002.

WHO and CBD. 2015. *Connecting Global Priorities: Biodiversity and Human Health: A State of Knowledge Review*. Geneva: World Health Organization. https://apps.who.int/iris/handle/10665/174012.

WHO, and UNFCCC. 2015. "Climate and Health Country Profile." https://www.who.int/globalchange/resources/country-profiles/PHE-country-profile-Colombia.pdf?ua=1.

World Bank. 1950. "The Basis of a Development Program for Colombia." World Bank.

———. 2017a. "Enterprise Survey 2017." https://microdata.worldbank.org/index.php/catalog/3388

———. 2017b. "Colombia: Programmatic Forest Country Note. Deep Dive into Forest & Landscape-Smart Investments." https://documents1.worldbank.org/curated/en/892731545423859022/pdf/133160-REPL-PUBLIC-Forest-Country-Note-Compressed.pdf.

———. 2018. "Colombia Policy Note on Territorial Development." https://documents.worldbank.org/en/publication/documents-reports/documentdetail/451371544569098125/colombia-policy-notes.

———. 2019. "Colombia Gender Assessment."

———. 2021a. "Adaptation and Resilience: A Priority for Development and Poverty Reduction." https://thedocs.worldbank.org/en/doc/0bc5c8591feda68d-4c1750fece2948d3-0020012021/original/COP26-ClimateBrief-Adaptation Resilience-Final-2610.pdf.

———. 2021b. "Building an Equitable Society in Colombia." https://documents1.worldbank.org/curated/en/686821635218586591/pdf/Main-Report.pdf.

———. 2021c. "Climate Risk Country Profile: Colombia." 2021. https://climateknowledgeportal.worldbank.org/sites/default/files/2021-07/15520-WB_Colombia%20Country%20Profile-WEB%20%283%29.pdf.

———. 2021d. "Climate-Smart Agriculture." Text/HTML. World Bank. 2021. https://www.worldbank.org/en/topic/climate-smart-agriculture.

———. 2021e. "Colombia Jobs Diagnostic."

———. 2021f. "Gender Data Portal."

———. 2021g. "Private Participation in Infrastructure (PPI) Project Database."

———. 2021h. “The Gradual Rise and Rapid Decline of the Middle Class in Latin America and the Caribbean.” Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/35834.

———. 2022a. “Digital Diagnosis (Forthcoming).”

———. 2022b. “World Development Indicators.”

World Bank Group. 2022. “Colombia Country Private Sector Diagnostic (Forthcoming).”

World Bank and United Nations. 2018. “Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict.” The World Bank.

World Justice Project. 2021. “World Justice Project Rule of Law Index 2021.” https://worldjusticeproject.org/sites/default/files/documents/WJP-INDEX-21.pdf.

WORLD BANK GROUP