

Colombia

Toward a High-income Country with Social Mobility

Editors

Rafael de la Cruz
Leandro Gastón Andrián
Mario Loterszpil

Prologue

Luis Alberto Moreno



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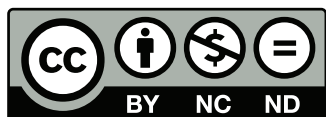
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Content

Prologue	11
I. Executive Summary	15
II. Country Context	19
Driving Factors for Growth in the Colombian Economy	22
The Current Scenario and Future Prospects	26
III. Colombia: Main Strategic Challenges	29
IV. The Strategic Vision: Colombia – Toward a High-Income Country with Social Mobility	35
V. The Strategic Proposal: Objectives and Policy Areas	39
VI. The Productivity Challenge	41
Stimulate Innovation	42
Financing for the private sector: increased access to credit and reduced costs of credit for the private sector, especially for small and medium-sized enterprises – SME; and innovative companies	47
Agricultural Development: Increasing Productivity and Expanding Agricultural Frontier	52
Provide Quality Education that Gives Priority to the Most Vulnerable Population Groups	57
Enhance the Quality of Infrastructure and Urban Development and Reduce the Transaction Costs in the Economy	62
VII. Effectiveness of Public Administration	73
Work out a Fiscal Pact to improve public revenues and the State's investment capacity	73

Increasing the Quality of Expenditures and the Capacity to Manage Public Investment at all Government Levels	80
Increase the Efficiency and Quality of the Justice System	88
VIII. Social Mobility and the Consolidation of the Middle Class	93
Continue Reducing Poverty and Eliminating Extreme Poverty	93
Reducing Informality in the Economy	98
Consolidating a Sustainable and Inclusive Pension and Healthcare System	104
Toward Sustainable and Inclusive Healthcare Improving Quality, Efficiency, and Equality in the Provision of Services	109
Further Increase Equal Access to Quality Basic Services	114
IX. Cost of the Proposals and Financing Sources	123
References	125
Abbreviations	149

Graphs

Graph 1.	GDP Annual Growth	20
Graph 2.	Colombia's – Growth, Savings and Investment – International Comparison	21
Graph 3.	Evolution of moderate and extreme poverty rate	21
Graph 4.	Nominal Exchange Rate (NER), Real Exchange Rate (RER), and oil prices	24
Graph 5.	Colombia – External Evolution	25
Graph 6.	Evolution of the Current Account and its Main Components	26
Graph 7.	Incidence of Added Value Growth	30
Graph 8.	Average Growth in Labor Productivity 1990-2011	31
Graph 9.	Contribution to Growth – Average 2000-2009 and 2010-2014	32
Graph 10.	Global Competitiveness Index 2014-2015: Public Institutions	33
Graph 11.	Vulnerabilities and the Evolution of the Middle Class	34
Graph 12.	Scenarios for GDP per capita Growth	38
Graph 13.	Innovation and Market Competition	43
Graph 14.	Spending on R&D per Source of Financing	44
Graph 15.	Projection for R&D Spending (% of the GDP)	46
Graph 16.	Productive Sector Financing	49
Graph 17.	Growth of TFP in Agriculture	53
Graph 18.	Distribution of Public Spending in Agriculture	54
Graph 19.	Public Spending and Educational Quality	59
Graph 20.	Average Cost of Internally Transporting a TEU (Twenty Foot Equivalent Unit) Container in Countries in the Region (USD)	63
Graph 21.	Colombia. Infrastructure Quality Indicators (Position among 144 Countries)	65
Graph 22.	Colombia – Investment in Transportation Infrastructure	65
Graph 23.	Labor Productivity and Size of the Population	67
Graph 24.	GDP per capita PPP vs. Taxes/GDP-2012	74
Graph 25.	VAT Productivity and Informality	75

Graph 26. Sub-national Tax Collection as a Percentage of the GDP (2012)	76
Graph 27. Evolution of Tax Revenues in Barranquilla	80
Graph 28. Government Efficiency Indicators	81
Graph 29. Infrastructure Quality Indicators (1=worst; 7=best)	82
Graph 30. Infrastructure Quality and Per Capita GDP (2013-14)	83
Graph 31. Governance Indexes – 2013	87
Graph 32. Evolution of Final Inventories for Cases in the Judicial Branch	90
Graph 33. Percentage of the Population in Extreme Poverty and Beneficiaries of Social Programs living in Rural Areas	95
Graph 34. Poverty by Geographic Zone and Ethnic Group	96
Graph 35. Business Informality in Colombia	99
Graph 36. Colombia – Labor Market Dynamics	100
Graph 37. Estimates for Average Non-Salary Costs in Latin America	101
Graph 38. Job Training	102
Graph 39. People Older than 65 without an Adequate Contributory Pension in 2050	105
Graph 40. Replacement Rates. International Comparisons	107
Graph 41. Commissions of Pension Fund Management Companies and Price of Social Security Insurance (2012)	107
Graph 42. Expenditures in Health, % of the GDP 2012	111
Graph 43. Healthcare Model Skewed toward High Cost	112
Graph 44. Evolution in Water and Sewage Coverage 2009-13	115
Graph 45. Water and Sanitation Coverage in Colombia by Regions	116

Charts

Chart 1.	Performance Indicators for the Colombian Economy	20
Chart 2.	Colombia's Lag in Transportation Infrastructure	64
Chart 3.	Colombia – Losses caused by the 2010-11 Rainy Season	69
Chart 4.	Proposal for a Comprehensive Tax Reform	77
Chart 5.	Participation of Subsidized Income Level Groups and Contributors – Water	117
Chart 6.	Financial Losses and Number of Impacts Recorded on Water and Sewage	118
Chart 7.	Average Public Investment in Gross Formation of Fixed Capital (% of the GDP)	124

Boxes

Box 1.	Fiscal Rule in Colombia	22
Box 2.	Toward a High-income Country in 20 Years	37
Box 3.	National Fiber Optic Network	44
Box 4.	The IDB's Private Sector Group supports enterprise needs	51
Box 5.	The Private Sector of the IDB in Agro, Social and Environmental Sectors	57
Box 6.	The Private Sector of the IDB in Transportation	71
Box 7.	The Private Sector of the IDB in Urban Development	72
Box 8.	Barranquilla's Own-Revenues	79
Box 9.	Impact of Prior Consultation on Infrastructure Projects	84
Box 10.	The Private Sector of the IDB in Health	114
Box 11.	The Private Sector of the IDB in Water	121

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The Editors.

Prologue

Luis Alberto Moreno
President Inter-American Development Bank

Rapid growth in Latin America over the last decade raised the status of most of the region's medium and large economies to middle-income countries, with per capita income increasing to an average between US\$10,000 and US\$15,500. As a result of this progress, over the last 10 years poverty in the region declined from 40% to less than 30%, and extreme poverty to less than 10%. The middle class has expanded, now exceeding 50% of the total population. Eighty percent of this vigorous social mobility has come from economic growth. Positive changes in employment and salaries as well as increased transfers to low-income groups have driven the promising changes in social dynamics. The private sector grew in size and importance, with investment increasing from 13% to 21% of GDP from 2000 to 2014, decidedly in the case of Colombia, where private investment increased from 8% to 26%, and in Peru, where it grew from 13% to 22%. These figures summarize the huge transformation in the region, which has also included less-developed countries. The deceleration of the global economy that began in 2014 and continued throughout 2015 as a result of the fall in commodity prices – a trend that will most likely continue for a few more years – will not reverse the long-term growth trend that will surely pick up again, especially in countries with prudent macroeconomic policies that encourage private investment and protect property rights.

The region, however, despite this significant trend toward transformation, has not yet reached its real potential for growth. Over the last 20 years, the productivity growth rate in middle-income countries of Latin America and the Caribbean was 2%, a poor performance compared to the more than 6% growth in the productivity of countries such as China. Growth in labor and capital essentially explains the region's economic progress, rather than increase in productivity and in ability to

compete. The reason for this gap between observed and potential growth is mainly inadequate levels of public investment in most countries and, in some of them, the low efficiency and effectiveness of their investments. On the other hand, even though there has been a marked expansion of the middle class, a still significant portion of it, around 30%, continues to live in vulnerable conditions. An accident, loss of a job, or other adverse circumstances can substantially deteriorate their incomes and push them back under the poverty line. Lastly, economic growth in the region, accelerated urbanization and the extractive-based energy model have increased adverse environmental effects, which, in combination with the negative impacts of climate change, might jeopardize the medium and long-term sustainability of this economic expansion.

With this panorama for the region, a decisive role must be assigned to public investment in infrastructure and public goods to accentuate economic growth and make it sustainable. Moving forward in this direction requires, in some countries, collecting more taxes, and in some other countries, redistributing resources through public expenditure. In all cases, more public revenues must be aimed at public investment. In addition, the private sector should play a leading role in redoubling efforts to increase productivity within an environmentally sustainable context. No less important, continued focus by these strategies on strengthening the middle class recognizes that the expansion of this social sector and the reduction of poverty will continue to be closely associated with economic growth and the development of a *safety net* supporting the middle class, especially its most vulnerable segment. This *safety net* includes effective pension systems, efficient and increasingly formal labor markets, unemployment insurance, better public utilities, healthcare and quality education.

These regional trends have also played out in Colombia. From the mid 90's to the year 2014, in constant dollars, per capita GDP grew from US\$6,000 to US\$12,000. In turn, thanks to prudent fiscal and monetary policies, the country was able to reduce inflation from 22% to 3% per year. Between 2000 and 2014, investment, mainly private investment, grew from 14% to 24% of the GDP and savings increased from 16% to 20%. Social indicators also showed very positive progress. Between 2002 and 2014, poverty dropped from 50% to 29% of the population and extreme poverty fell from 18% to 8%. Additionally, growth of the middle class was strong, increasing its size from 37% to 55% between 2003 and 2012. Colombia's

international prestige in the global economy also improved; a macroeconomic environment attractive to foreign investment increased Colombia's investment portfolio from US\$6,429M to US\$16,053M between 2010 and 2014. At the same time, in conjunction with the reduction of poverty and the growth of the middle class, public services have expanded significantly, especially those provided to low-income groups and less developed regions. In the early 90s, health services reached only 20% of the population; by 2014, over 90% had access to health services. From 2001 to 2009, life expectancy increased from 68 to 72 years while child mortality went down from 35 to 20 per 1,000 live births. In the last two decades, Colombian society has also made significant efforts to increase access to education. Currently, 80.5% of children between 4 and 5 years of age receive a preschool education; coverage for the first 6 years of basic education is 96.7% of all children, and the average years of schooling went from 6.7 in 2000 to 7.4 by 2012. Finally, with regard to public services, between 1993 and 2012 access to potable water grew from 78% to 92% and access to electricity increased from 75% to 94%.

All of this is good news while representing big challenges, such as the ones I analyzed in a previous work¹. And, as I also mentioned at that time, Latin America and the Caribbean have the potential and the opportunity to go further. Today, together with other countries in the region, Colombia is at a crucial crossroads for its future. On the one hand, the country could continue in its current growth trend, remaining at a middle income level while struggling to preserve the achievements made thus far. In following this trend, the country could reach a per capita income of US\$20,000 in two decades. This would be very significant progress, but it would be less than its real potential. On the other hand, Colombia could take a road toward accelerated and sustainable growth, overcoming obstacles still threatening its economy and taking the growth rate to 6% per year, instead of the structural 4% experienced in recent years. That is to say, it could experience a 50% increase in the growth rate. Colombia could thus go from a middle-income country to a high-income country in just one generation, with per capita income of US\$30,000, similar to the average income of southern European countries. The transition to a high-income country, with high social mobility, as expressed in the title of this book, would allow the country to keep expanding its middle class, without the current vulnerabilities, and reduce extreme poverty to levels below

1 *La década de América Latina y el Caribe: una oportunidad real (The Decade of Latin America and the Caribbean: A Real Opportunity)*, IDB, Washington, D.C., 2011.

3%. At the same time, the challenge of a more equal distribution must be met, using public policy and instruments that favor the individuals and people with the lowest incomes.

The road to this goal is not easy. It must be supported by a strategic vision and action lines that go beyond the term of one administration and are developed with perseverance. Above all, they require political, corporate and social leadership committed to this new vision of the country. A new social consensus must be created around these goals, such as the consensus that facilitated the Constitutional reform in 1991 and the laws and public policies that led to today's achievements and results. In summary, a Pact for Colombia is required under which wills and talents will join together in the shared national goal of building a developed country. This book that I am proud to present to Colombia and all the member countries of the IDB Group is about the road that should be taken to meet the objective of turning Colombia into a high-income country with social mobility.

I. Executive Summary

This book presents a vision of a **modern, high-income Colombia with social mobility** that can be achieved in one generation. In twenty years, Colombia could move out of the range of a middle-income country and become a country with per capita income of USD30,000, similar to the average income of southern European countries. To accomplish this, the economy would have to grow at a rate of 6% per year, comparable to the rate in Asian countries. These growth rates can be attained by increasing annual public investment from the current level of 3.5% to 7% of the GDP, for which purpose it is necessary to augment the country's fiscal resources.

The document addresses the main economic challenges faced by Colombia in the medium and long-term, and the obstacles that have kept the country from closing the gap between its productivity and that of the world's more advanced economies. Colombia's economic growth over the last decade allowed the country to reduce the number of people living in poverty and in extreme poverty and significantly expand the middle class. It is important, nevertheless, to analyze the imbalances and deficits still existing in and between different sectors of the economy and in the services received by the Colombian people, and, relative to this analysis, describe the challenges the country will face in the years to come, not only in maintaining the achievements made, but also in expanding those achievements, to thus lay the road toward accelerated and sustainable development.

Chapter 1 analyzes the recent evolution of the Colombian economy and its medium-term prospects. It first examines the good performance of the Colombian economy in recent years, a phenomenon explained in good measure by conservative management of monetary and fiscal policies. It shows how external conditions were also a significant factor in the country's growth. The chapter then describes results in social sectors, namely, the reduction of poverty and the growth of the middle-class. The coming years will be marked by a less favorable international environment and

this new scenario will undoubtedly have a negative impact on economic growth, current accounts, and public finances. Thus, the pace of economic expansion will temporarily slow down, while current accounts and fiscal deficits will increase.

Chapter 2 presents an overall vision of the challenges to Colombia's development. The economic growth of recent years can only be explained by the accumulation of capital and work, since growth in productivity has been very low. The economy therefore faces the challenge of increasing productivity in order to attain a sustainable trajectory for growth. The diagnosis of recent growth and the analysis of development gaps recognizes several critical factors. The most significant deficiencies are in the indicators for transportation and logistics, education, agriculture, institutions, innovation, work and social protection relative to what should be expected for a country with a per capita income such as Colombia's. These deficiencies were identified in specific sectors of the economy and in the services people receive based on a gap analysis between Colombia and international comparators, including middle-income countries in the region, emerging economies, and members of the OECD.

Chapter 3 presents the major themes of a **new strategic vision**, with emphasis on reactivating internal sources of growth by increasing the economy's productivity; developing institutional capacity and the rule of law; and reducing social exclusion and inequality, especially through the eradication of extreme poverty and the expansion and consolidation of the middle-class.

The following chapters provide a detailed analysis of the problems identified in chapter 2 and proposals for overcoming them within the framework of the strategy for accelerated growth. To that end, three policy areas are identified that sum up the main challenges to sustained and socially-inclusive growth: (i) **productivity for the economy**; (ii) **effectiveness in public administration**; and (iii) **social mobility and consolidation of the middle class**.

Each policy area contains and is deployed via various lines of action. **Productivity for the economy** deals with problems connected to innovation, access to credit, agriculture, education and infrastructure. **Effectiveness in public administration** covers taxation issues (insufficiency and inequality), public investment management, and justice. Lastly, **social mobility** speaks to poverty reduction,

informal markets, quality of pension and healthcare systems, and access to basic services. In addition to an analysis of the lines of action, public policies solutions are proposed for each topic.

The proposals for every single policy area have been developed for a time horizon of twenty years, with short, medium and long-term objectives and actions. The nature of the challenges and the proposals made to achieve growth objectives require developing and executing policies for a longer period of time than one normal term of government administration. The majority of the proposals require social consensus that must persist over time in order to achieve the growth objectives proposed in this strategic vision. An effort is also made to define the scope of the required investments, and to quantify the fiscal costs associated with the proposals for each policy area and the respective lines of action.

II. Country Context

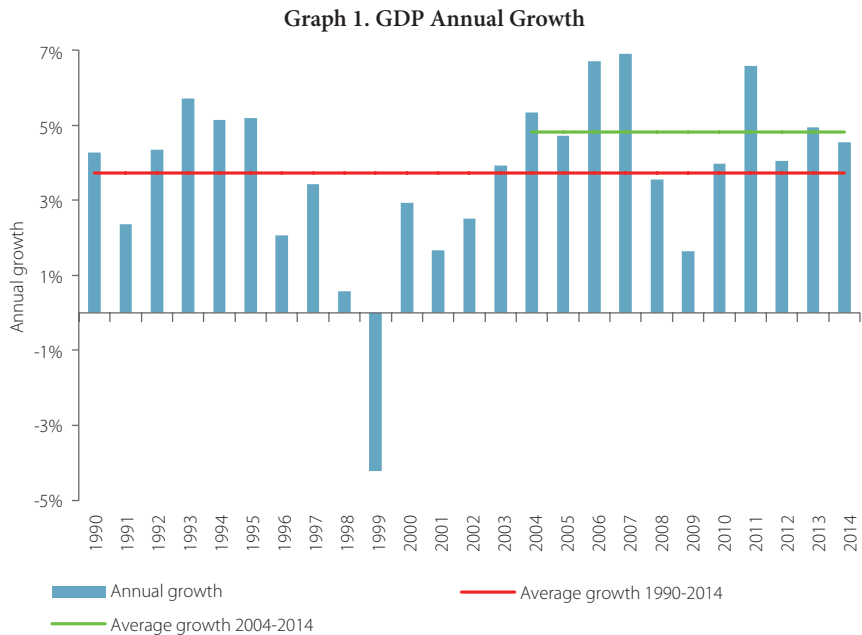
In the last 20 years, Colombia's macro-economic indicators have improved. In constant dollars, between 1990 and 2014 per capita GDP grew 55%², from US\$7,752 to US\$12,025. In real terms, per capita GDP growth averaged 2% per year over that period, with an average of 3.4% in the three years from 2010-2013. Compared to the nineties, Colombia added 2 percentage points to its growth rate, reaching 4.8% in 2010-12 (see Graph 1). This was better than LAC-5 and EME-6³ by around one percentage point (see Graph 2 – top panel). At the same time, it managed to reduce inflation from an annual rate of 22% to 3%. National debt and fiscal balance – 34% and -1.5% of GDP in 2014, respectively – had attained sustainable levels, comparable to EME-6 and LAC-5. Between 2000 and 2012, investment, most of it private, grew from 14% to 24% of the GDP and savings increased from 16% to 20% (DANE, 2012a) (see Chart 1). The gap between savings and investment, i.e. 3.6% of the GDP, was basically covered by foreign direct investment, showing the credibility achieved by Colombia on the foreign front while, at the same time, a certain vulnerability in the event of a slow-down in the flow of foreign resources, as occurred last year (see Graph 2 – bottom panel).

Social Indicators also showed very good performance. Between 2002 and 2014, unemployment went down from 16% to 9%. In said period, inequality, measured by the GINI coefficient, improved marginally from 0.57 to 0.54; poverty dropped substantially, from 50% to 29% of the population, and extreme poverty from 18% to 8%. (see Graph 3). Furthermore, between 2003 and 2012 (Castellani et al. (2013). the middle-class increased from 37% to 55% of the total population, showing strong growth and absorbing an important percentage of previously poor

2 PPP constant for 2011.

3 LAC-5 includes Brazil, Chile, Colombia, Mexico and Peru. EME-6 comprises South Africa, South Korea, Indonesia, Malaysia, Thailand and Turkey.

households. From 2002 to 2013, economic growth was responsible for between 70% and 80% of the reduction in extreme poverty and between 80% and 90% of the decline in moderate poverty. (Cruces and Gasparini (2013), World Bank (2014b), (Andrian, et al., 2015).

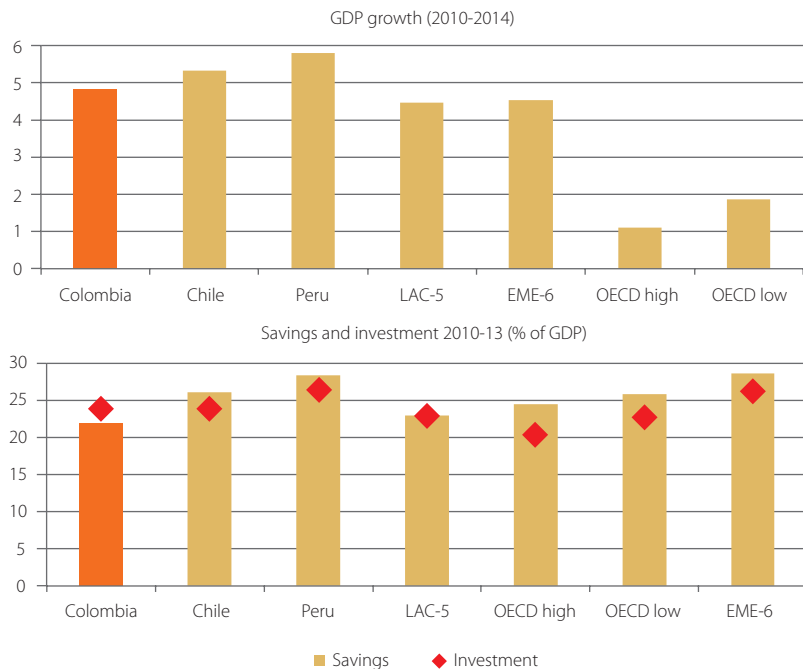


Source: IMF (2014a).

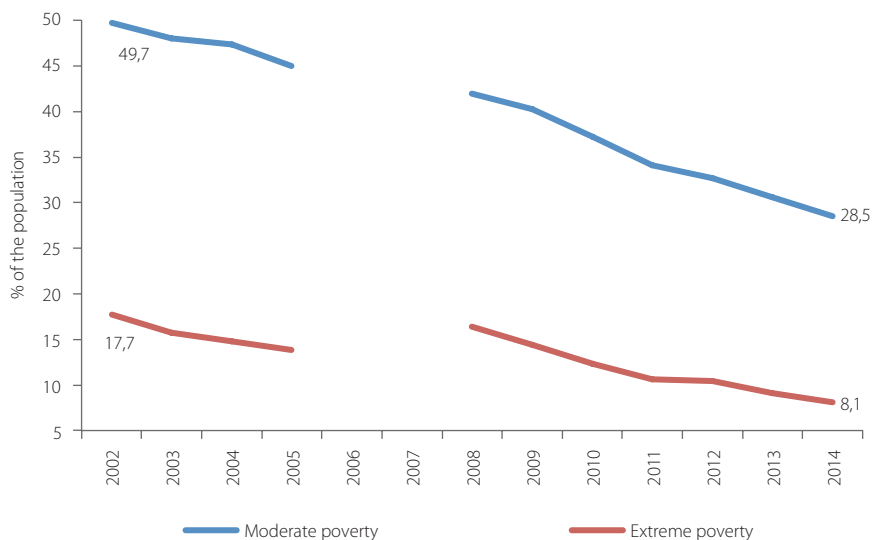
Chart 1. Performance Indicators for the Colombian Economy

Average	1990-99	2000-09	2010-14
Growth (%)	2.9	4.0	4.8
Investment (% GDP)	18.5	19.3	23.1
Savings (% GDP)	17.3	18.5	19.5
Annual inflation (%)	22.2	6.3	3.0
Unemployment (%)	12.8	12.8	8.8
Public debt (% GDP)	27.6	38.4	33.9
Fiscal deficit (% GDP)	-1.6	-1.8	-1.5

Source: DANE (2014a) and Ministry of Finance and Public Credit (MHCP) (2014).

Graph 2. Colombia's – Growth, Savings and Investment – International Comparison

Source: World Development Indicators, World Bank (2014a) and DANE (2014a).

Graph 3. Evolution of moderate and extreme poverty rate

Source: DANE (2015a).

Driving Factors for Growth in the Colombian Economy

Over the last decade, Colombia has improved its monetary and fiscal policy. Appropriate monetary and fiscal policies have created the necessary conditions for continuous growth⁴. Similarly, proper management of monetary and fiscal policy enabled Colombia to obtain investment grade as of 2011.

Colombia has consolidated a fiscal policy framework that prevents unsustainable spending, and also seeks to limit procyclicality in public spending (see Box 1). For the fourth consecutive year fiscal policy is tied to a fiscal rule that has been met the first three years since it entered into effect (2012, 2013 and 2014). Thus, the central government's fiscal deficit decreased from 3.9% of the GDP in 2010 to 2.4% in 2014, in line with the parameters established by the fiscal rule. Moreover, the goal of 1% of GDP for the primary structural deficit intended for 2022 restricts expansionary fiscal policies, particularly during upward economic cycles.

Box 1. Fiscal Rule in Colombia

In 2011 Colombia adopted a fiscal rule that defines a structural budget balance for the national government. With its implementation in 2012, the Government adopted the measures necessary to ensure structural spending does not exceed structural income, the latter defined as total spending and income less the respective cyclical components, in an amount that does not exceed the annual target for total structural deficit.

The rule defines the fiscal goals for a future horizon of 10 years and its objective is to ensure the long-term sustainability of public finances, mitigating the pro-cyclical bias in fiscal policy observed in the past and, therefore, protecting the economy from fluctuations in the prices of basic products and from the economic cycle. The quantitative target for the national government is a total structural deficit less than or equal to 1.0% of the GDP by 2022. Thus, according to the fiscal rule, the national government must follow a downward path each year for the deficit in the structural fiscal balance, allowing it to attain a structural deficit of 2.3% of the GDP in 2014,

4 For the macroeconomic environment indicator in the Global Competitive Index of 2014, Colombia ranks 29/144 with a score of 5.6 (maximum = 7).

1.9% of the GDP in 2018 and 1.0% of the GDP in 2022. Planning instruments must also be consistent with the fiscal rule⁵.

The fiscal rule in turn, provides the national government with instruments for macro-economic stabilization such as countercyclical spending programs and automatic stabilizers. The former are used if the output gap is negative and more than 2 percentage points, while the latter come into play when spending equals its structural level in a context of a growth cycle less than its potential, as is the case in 2014 and 2015.

The monetary system adopted by the central bank, Banco de la República, is based on explicit inflation targets. The main objective is low inflation and stable growth for domestic product around its long-term trend. Monetary policy decisions are made based on a monthly analysis of the current status and the outlook for the economy, as well as on an assessment of the forecast for inflation against the target. The inflation target is defined every year by the Board of the Banco de la República and it has been currently set in a range from 2% to 4% with an overall long-term target of 3%. Setting inflation goals has enabled Colombia to reduce the inflation rate from 8.8% per year in 2000 to 3.7% in 2014. Furthermore, for the last 5 years inflation has averaged 3% per year, equal to the long-term target.

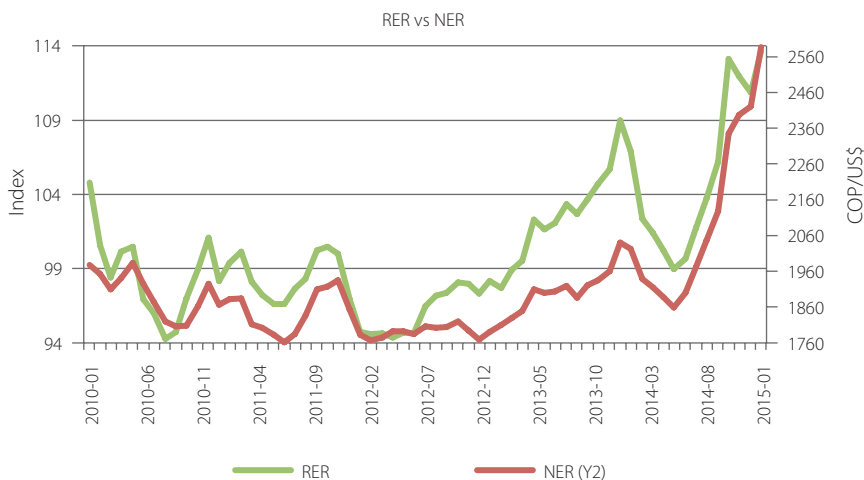
Under the regime adopted by the monetary authority, the exchange rate is flexible and acts as automatic stabilizer. The exchange rate has adjusted in response to external shocks, keeping the real exchange rate in line with its macro-economic fundamentals (see Graph 4 – top panel). For example, with the recent fall in crude oil prices, from June 2014 to April 2015 the nominal exchange rate depreciated 32% (see Graph 4, bottom panel), allowing the real exchange rate to devalue by 13.3% in said period.

External conditions favored Colombian economy's good performance. Terms of trade improved by 75% from the mid-90s to 2013, driven by the increased value of exports, especially from oil and mining (which represented 65% of the total). Capital flows also grew substantially, from US\$3.0 billion in the 90s to US\$20.0 billion on average between 2009 and 2013. Since mid-2014, however, the

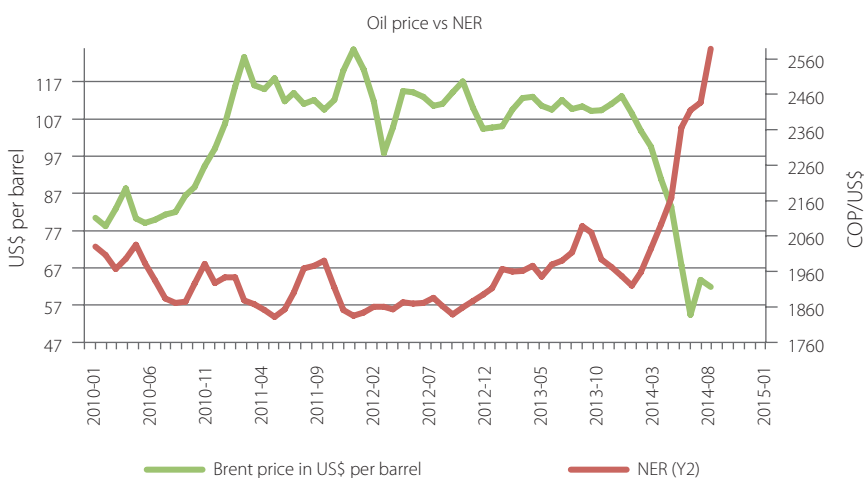
5 The Multi-year Investment Plan of the National Development Plan, the Medium-Term Fiscal Framework and the Nation's General Budget shall be consistent with the Fiscal Rule.

expansion cycle based on commodity prices has reached an end, as reflected in terms of trade that – stable during 2011 and 2012 – began to decrease in 2013 and 2014 (see Graph 5).

Graph 4. Nominal Exchange Rate (NER), Real Exchange Rate (RER), and oil prices



Source: Banco de la República.



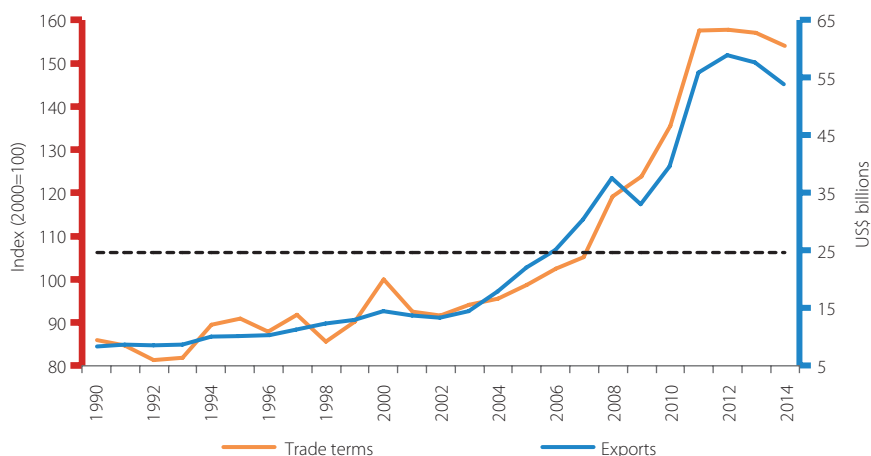
Source: Banco de la República and EIA.

Foreign direct investment (FDI) flows financed the current account deficit. In the 2010-2014 period, the current account deficit was on average 3.4% of the GDP (see Graph 6). The rising terms of trade directed the increment in FDI toward the oil and mining sectors, financing the current account deficit. At the same time,

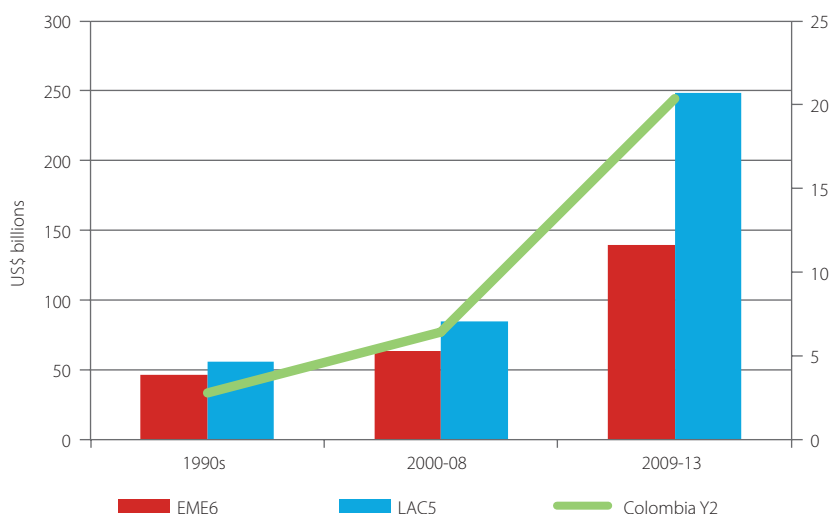
low international interest rates and the domestic macro-economic environment triggered an increase in portfolio investments as an additional source for financing the current account deficit, with the investment portfolio increasing from US\$6,429M (1.1% of the GDP) to US\$16,053M (4.9% of the GDP) between 2010 and 2014.

Graph 5. Colombia – External Evolution

Exports and terms of trade

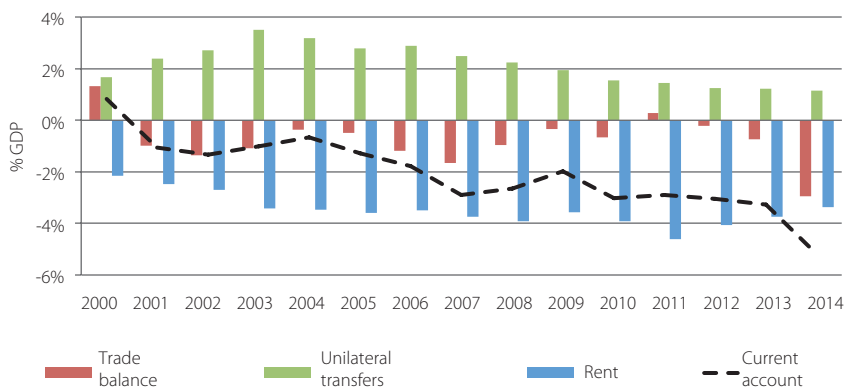


FDI+ Portfolio Investment



Source: DANE (2014b), Banco de la República (2014), FMI (2014a).

Graph 6. Evolution of the Current Account and its Main Components



Source: Own calculations based on Banco de la República.

The Current Scenario and Future Prospects

In the current situation, the behavior of oil prices represents a challenge to current and fiscal accounts. The sharp fall in oil prices since mid-2014 had a negative impact on the export value of oil and its derivatives, which represented 53% of total exports of goods in 2014. The fiscal balance could also be significantly affected. The 2015 budget initially forecasted an oil price of US\$98 per barrel. The government's new projection in December 2014 reduced the expected price to US\$48 per barrel, representing a 49% drop. Under these conditions, the fiscal deficit for 2015 was revised upwards, from 2.2% to 2.6% of GDP (MHCP, 2015). Given the results of exploration now under way (Ahumada, 2014), it could be difficult to maintain production stable at one million barrels per day. A 10% drop in production would represent an additional reduction of 0.2% in GDP that would bring the deficit up to 2.8% of GDP.

Colombia also faces commercial risks from reduced growth rates of its main partners in the region. According to IMF projections (IMF, 2014b), a 1% reduction in the growth rate of its main trading partners (except Venezuela) could produce a fall of 0.5 percentage points in GDP growth for 2015, which demonstrate the importance of Colombia's commercial relations with its neighbors. Furthermore, the decrease has been substantial in Venezuela's participation as a destination market for Colombian exports. In 2000, 10% of external sales were to that country, while in 2013 that figure dropped to 4% (United Nations, 2014).

Given declining oil revenues, and less favorable external conditions, Colombia needs to increase tax revenues. A comprehensive tax reform to increase the tax base is necessary to avoid further cuts in public spending. Without higher tax revenues, the Government will be forced to reduce spending levels in the short and medium term, which will further affect public spending, particularly in capital accounts. This is necessary not only to meet the fiscal rule, but also to cope with a scenario of increased borrowing costs and reduced capital flows. For 2015, public spending cuts were announced in the amount of 0.72% of the GDP. One advance in the direction of mitigating the fiscal adjustment, important to maintain the rhythm of public investment in infrastructure, is the execution of privately-funded 4G infrastructure works, softening the impact of the reduction in government expenditure.

III. Colombia: Main Strategic Challenges

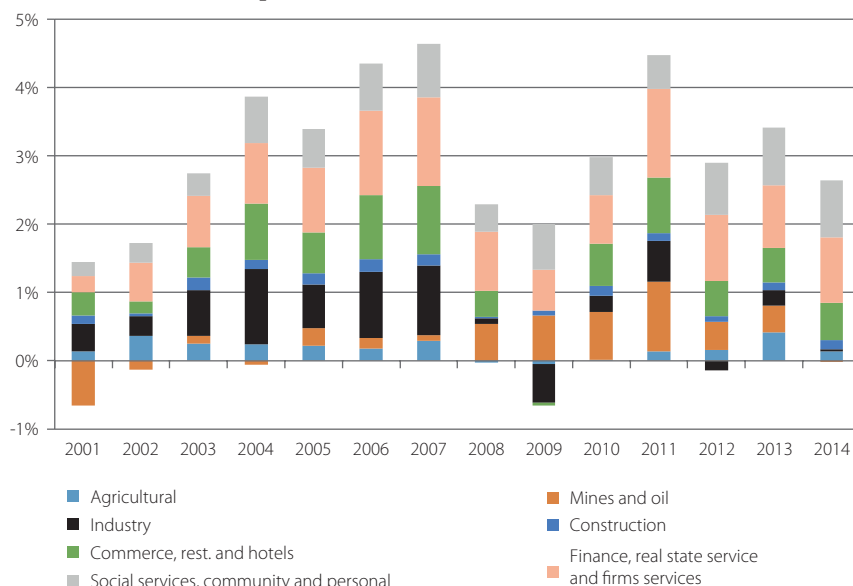
Despite economic progress, the gap between Colombia and developed countries is still significant. Although it has been growing at rates higher than 4% per year since 2000, this has not been sufficient to ensure reaching the income levels of developed countries. In 1990, per capita GDP in Colombia was 29% of the average for OECD countries. In 2000, it dropped to 20% after the economic crisis at the end of the 90s, to then recover only partially by 2011, reaching 24%. Current per capita income is 80% lower than that of a developed country like the United States. The gap analysis done for this book shows that the factors explaining this situation include: (i) low productivity for production factors; (ii) low effectiveness of public administration; and (iii) limited social mobility and fragility of the middle class. Consequently, improving Colombia's competitiveness and reducing its *country cost* requires overcoming economic, institutional and social vulnerabilities⁶.

The growth engine in the last 10 years has been the non-tradable sector. Between 2004 and 2014, on average more than 60% of the added value growth came from construction, trade and services, personal services and the financial and business sectors (see Graph 7). Manufacturing, agriculture and livestock, and extractive industries represented 18.6% of the added value growth, but have been losing market share since 2012. On the other hand, the low contribution of total factor productivity (TFP) to growth, even with high prices for the raw materials exported by Colombia, shows that there are bottlenecks for high and sustained growth, especially in those sectors that have relegated their contribution to the country's development⁷.

6 Among the most recent studies addressing the issue, see: IDB, Andrián et al. (2015), World Economic Forum (WEF) (2014) and OECD (2013 and 2015).

7 Total Factor Productivity: TFP is an indirect measurement of technological progress, calculated as the remainder that is the difference between the growth rate for one factor and for the product.

Graph 7. Incidence of Added Value Growth



Source: Own calculation based on the DANE.

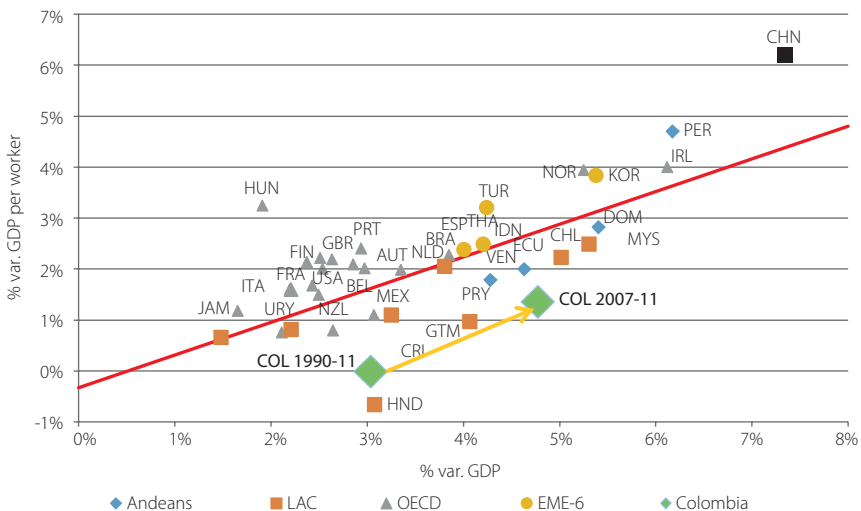
Productivity of the economy. There are significant productivity gaps in Colombia with respect to middle, and high-income countries. The average annual variation in the GDP per worker remained close to zero between 1990 and 2011. Similar countries in terms of income experienced a productivity increase between 1% and 3%. In comparison, Peru's productivity increased by more than 4% and China's exceeded 6% (IDB, Fernandez-Arias and Daude, 2014). Between 2007-2011 Colombia's⁸ grew barely over 1%, largely driven by the extractive industries (OECD, 2015) (see Graph 8).

Growth of the GDP in Colombia has been largely due to an accumulation of factors (work and capital). Between 1961 and 2011, the per capita GDP averaged growth of 2% per year as follows: total factor productivity (TFP) contributed 0.1 percentage points; the accumulation of physical capital 1.4 percentage points, and the combined effect of population growth, employment and accumulation of human capital contributed 0.5 percentage points (World Bank, 2014b) (see Graph 9). The limited productivity of the Colombian economy is explained, among other factors, by the low

8 Measured as GDP per worker.

rates of innovation as compared internationally. With a similar level of importance, the education system and job training have significant problems in terms of quality and relevance for generating advanced skills. There are major infrastructure gaps and those who enter the labor market with insufficient schooling are mostly employed in the informal sector. To modify this situation in a productive way, Colombia progressively must engage in: (i) stimulating innovation, business development and agricultural expansion ; (ii) fostering quality education and job training aimed at generating advanced competencies and skills; and (iii) improving the quality of and funding for infrastructure and urban development across its territory.

Graph 8. Average Growth in Labor Productivity 1990-2011



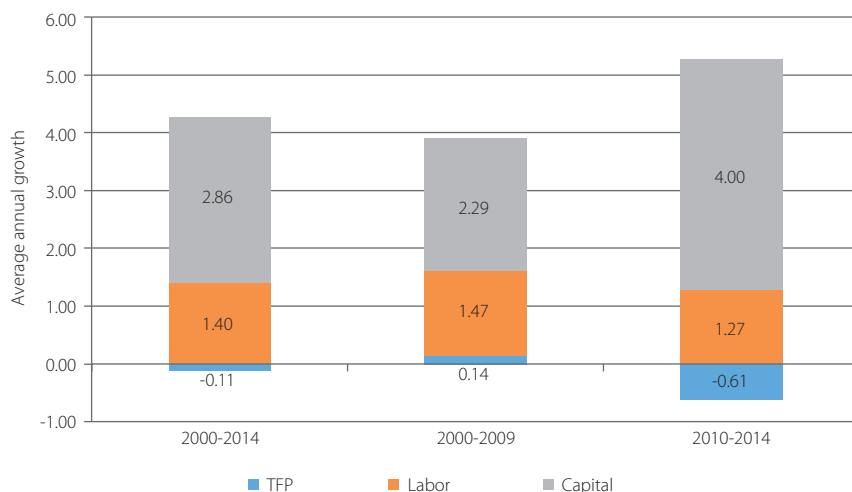
Source: Own calculations based on IDB, Fernandez-Arias and Daude (2014).

Effectiveness of Public Administration: Colombia's institutional performance is ranked at 123 out of 144 countries, below the average of LAC-5 and of EME-6 in areas such as government efficiency, transparency, and security (see Graph 10). According to a recent IDB study (IDB, Giménez et al, 2015)⁹, in the 1996-2011 period, efficiency in the use of the physical and human capital available in Colombia was 74% of the average efficiency of OECD countries and less than 50% of the efficiency of countries relatively more developed in this area. More than half of the efficiency gap

9 For these estimates, a frontier analysis methodology was used with production and consumption data from 133 countries. The average efficiency of Latin America was 45%, while Colombia was 48% and the average for OECD countries was 65%.

in the utilization of productive factors in Colombia is explained by inefficiency in public administration¹⁰. Among the priority issues that must be addressed to improve institutional productivity are: (i) increasing government revenue at the national and sub-national levels; (ii) improving the quality of expenditures and the capacity for managing public investment; and (iii) strengthening the efficiency and quality of the justice system.

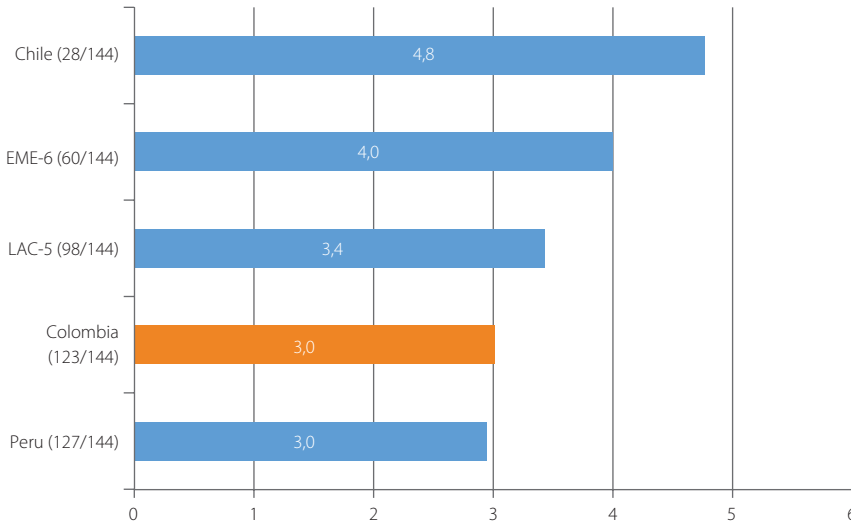
Graph 9. Contribution to Growth – Average 2000-2009 and 2010-2014



Source: Own calculations based on The Conference Board (2015).

Social mobility and consolidation of the middle class. Colombia has traditionally been a country with somewhat low social mobility. However, in the last decade we have seen a significant change where poverty has gone down and the middle class has grown significantly. Between 2002 and 2014, the moderate poverty rate fell by 21 percentage points and extreme poverty by 10 percentage points, dropping to less than half in that period (DANE, 2002 and 2012b). According to IDB estimates, the middle class expanded 18 percentage points between 2003 and 2012. (see Graph 11 right panel) This trend is explained by two factors: economic growth (70/80%) and redistribution policies (20/30%.) Positive changes in employment rates and income from labor as well as increased transfers to low-income sectors drove a favorable evolution in social dynamics, expressed in a significant increase in the middle-class and the reduction of poverty and extreme poverty.

¹⁰ Measured by the Worldwide Governance Indicators, World Bank (2014c).

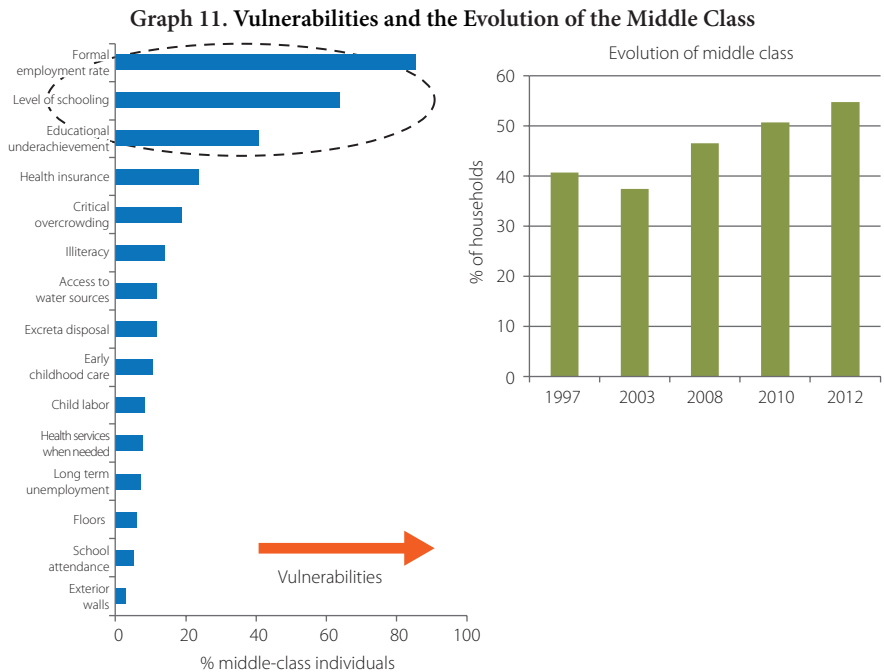
Graph 10. Global Competitiveness Index 2014-2015: Public Institutions

Source: WEF (2014).

Note: The index includes: protection of property rights (90/144), ethics and corruption (129/144), undue influence (110/144), government efficiency (92/144) and security (122/144).

The expansion of the middle class in Colombia has been driven by the growth of the last twenty years. However, this income group suffers deprivations in terms of access to high-quality services and economic informality. The pension system is characterized by low coverage and high costs. Even though the healthcare system has reached very high rates for coverage, the low capacity to provide primary care services generates a bias towards specialized care and thus a high cost for the services. A recent IDB study shows that Colombia has a gap in the provision of basic services (IDB, Andrián et al., 2015). For example, good quality drinking water reaches only 58% of the population (National Institute of Health, 2013). These limitations affect especially the one-third of the middle class nearest the poverty line (IDB, Castellani et al, 2014), making it vulnerable. In this context, improving social mobility and strengthening the growth of the middle class requires: (i) intensified poverty reduction, with an emphasis on extreme poverty; (ii) a reduction of informality in the labor market; (iii) strengthening of sustainable and inclusive pension and healthcare systems; and (iv) equitable access to quality basic services¹¹ (see Graph 11).

11 Quality education is among one of the most important shortcomings for the vulnerable middle class households. Due to the relevance of education to the economy's productivity, this topic is presented in the policy section.



Source: IDB, Castellani et al. (2014).

Note: Calculations based on a net income of US\$10-50 PPP per day of the families, adjusted by family composition and the equivalent adult – OECD scale.

IV. The Strategic Vision: Colombia – Toward a High- Income Country with Social Mobility

Colombia is no longer a low-income country, moving over the last 20 years into the category of a middle-income country. In the mid-90s per capita income was at US\$6,000 PPP; by 2014 per capita income had increased up to US\$12,000¹². This makes the country a member of the group of comparable economies in the region such as Brazil, Mexico, Peru and Costa Rica. The consolidation of a framework of appropriate macroeconomic policies, a receptive environment for private investment, and improvements in public security have contributed to this significant achievement. In this new scenario, the middle class now includes 55% of all Colombian households (IDB, Castellani et al., 2013)¹³.

Colombia has the potential to become a high-income country with a consolidated middle class of close to 70% of the population over the next 20 years. Colombia is one of the countries in Latin America and the Caribbean with the potential to reach a per capita income of US\$30,000 PPP and rank among developed nations, with a diversified and internationally competitive economy, a stable and transparent political system and greater opportunities for social mobility and equality. To achieve these goals, the economy would have to experience sustained growth of 6% per year, a rate higher than the 4% average of the last decade.

12 Constant prices of 2011.

13 Calculations based on a net income of US\$10-50 PPP per day of the families adjusted by the makeup of the family and equivalent adult – Organization for Economic Cooperation and Development (OECD) scale.

Public investment as the driver for growth. To ensure sustainable growth in the Colombian economy, public investment must be increased significantly. In recent years, public investment in infrastructure reached on average 3.6% of the GDP (DANE, 2012a). A 6% growth target for the economy will require **doubling this investment effort, with rates around 7% per year** (see box 2). A more secure environment in the country is generating favorable conditions for attaining this objective as public and private agents increase their access to more extensive areas of the national territory.

This agenda requires a pact on fiscal goals to increase tax revenues and materialize projected investment goals. Tax collections by the Central Government are 14-15% of the GDP. On top of that, sub-national governments collect another 2-3% of the GDP, placing the General Government's tax revenues at 16-18 points of GDP. These numbers are lower than the international standard for similar economies – which is close to 5 percentage points higher than Colombia – and lower than developed countries, with average revenues of 26% of GDP (IMF, 2013)¹⁴. The country must increase tax revenues to be able to double its public investment and achieve its development objectives. A comprehensive tax reform aimed at progressively increasing revenues will provide fiscal sustainability and the generation of public investment that will support economic growth. To that end, the country must make a fiscal pact to invest in accelerating economic growth, improving the people's quality of life, and achieving the status of a developed country in the time span of one generation.

The private sector – key to Colombia's development. Due to the magnitude of these challenges and based on the country's level of development, the private sector must play an important role in Colombia's transition from a middle-income country to a high-income country. Increases in productivity will depend on investments, business dynamics, and good corporate governance. Higher social mobility – expanding and consolidating the middle class – shall also depend partly on the capacity of the private sector to absorb the workforce, thus reducing marginalized population groups and providing the high-quality goods and services people require¹⁵. To support the objectives identified in the strategy, the private sector operations of the IDB Group will focus on: (i) offering funding to sectors where domestic capital sources do not

14 General Government includes all the levels of the government, and it excludes the social contributions and capital inflow.

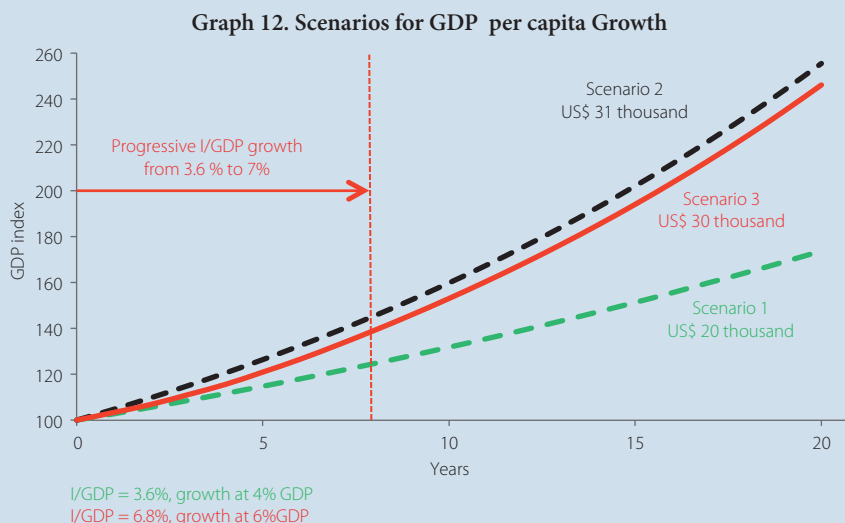
15 For a detailed presentation on the challenges and the potential of the private sector in Colombia and the role of the Bank in that sector, see: IDB (2015e).

satisfy demand; (ii) taking action in areas not adequately served by banks and the capital market such as green energy, innovation, education, healthcare and sectors that provide goods and services to marginalized groups i.e. low-income groups, women, and minorities; (iii) adding value through technical knowledge, fostering innovation, and developing funding formulas in local currency; (iv) applying best social and environmental practices to the projects; (v) facilitating the transfer of knowledge from the Bank in the region; and (vi) mobilizing third-party financial resources with the IDB quality seal. This document describes actions by the IDB group in terms of technical assistance and financing that promote and strengthen private sector participation in the region and could support Colombia's strategic policy proposals in each area.

Box 2. Toward a High-income Country in 20 Years

Increased public investment is the government's main instrument for accelerating economic growth (see the methodology used below in this box). Three scenarios for potential investment were examined. **Scenario 1** maintains a constant investment at 2012 levels, 3.6% of the GDP. The result at the end of 20 years is a per capita GDP of US\$20,000. This is certainly better than the current per capita income level of US\$12,000, but very much below the country's potential, and still within the range for middle-income countries. **Scenario 2** assumes an investment of 7% of the GDP sustained over 20 years as of year zero. In this case, the per capita income at the end of the period is US\$31,000, within the range of developed countries. However, this scenario is unlikely, given the current fiscal limitations that restrict funding for public investment. **Scenario 3** takes into account increased tax collection to provide additional investment resources to the State, acknowledging that a reform process and progressive increases in collections will take time. This realistic scenario takes into account the complex political economy of a structural fiscal reform such as the one required by Colombia. Thus, a period of seven years has been calculated for increasing collections and public investment, thus attaining national tax revenues of close to 20% of the GDP and sub-national revenues of 5% of the GDP (currently 15% and 3%, respectively), with public investment of 7% of the GDP. According to this scenario, once the planned investment level has been reached in year seven, it will remain constant for thirteen years. If these conditions are met, this scenario suggests that the country may reach a per capita income of US\$30,000. This scenario is more feasible than scenario

2, where an investment of 7% of the GDP is provided as of year zero, while the result is significantly similar in terms of per capita income. The exercise shows that it is possible to leave behind the middle-income trap (scenario 1); attain growth of 6% per year; and increase per capita income from the current US\$12,000 to US\$30,000. This would put the country in the range of high economic development in the course of 20 years (see Graph 12).



Source: Own calculation based on: Lozano and Rodríguez (2009), Ilzetzi et al. (2013), and Fedesarrollo (2014).

Comment on methodology: To calculate the effect of public investment on the growth of the GDP, we used the fiscal multiplier value estimated by Ilzetzi et al. (2013) for a set of developing countries. The authors estimate a SVAR between public investment, GDP, private investment and other control variables (interest rate, inflation, fiscal revenue), to take into account, for example, the effects of crowding out private investment by public investment and problems with fiscal sustainability. The fiscal multiplier is defined at moment $t=0$ as $m = \frac{\Delta Y_t}{\Delta I_t}$, where m , Y , I and Δ , represent the fiscal multiplier, the GDP, the public investment and the operator of differences, respectively.

We find, then, the effect on the growth rate ($\theta_t = \frac{Y_t}{Y_{t-1}} - 1$) of public investment

as a proportion of the GDP (i) is equal to $\theta_t = \frac{1 - m \times i_t}{1 - m \times i_{t-1}} - 1$.

V. The Strategic Proposal: Objectives and Policy Areas

The challenges Colombia faces limit its growth. Productivity has stagnated due to (i) limited investment in innovation (ii) insufficient funding for the productive sector; (iii) low agricultural productivity; (iv) low quality of education; and (v) quantitative and qualitative infrastructure gaps in transportation and urban development. **Institutions** represent another challenge to economic development. The most important bottlenecks are: (i) the need for a tax reform to increase collections and public investment; (ii) the efficiency and quality of public investment expenditures; and (iii) the efficiency and quality of the justice system. **Social Mobility** is a primary factor supporting economic development. The main social challenges are seen in: (i) the reduction of moderate poverty and the elimination of extreme poverty; (ii) high levels of informality in business and in the labor market; (iii) the need for a sustainable and inclusive pension and healthcare system; and (iv) better access to good quality basic services.

Goals. The strategy proposed in this Bank document has the goal of supporting policy areas that will contribute in the short and medium term to achieving the strategic vision of making Colombia a high-income country with social mobility within two decades. To that end, the country's vulnerabilities must be addressed in order to attain sustained growth, improve productivity levels, strengthen institutions and produce greater social mobility. What follows is a discussion of each policy area based on the observed gaps, and proposals for correcting said gaps and achieving development goals that are compatible with the Bank's strategic vision on a short, medium and long-term time horizon. The proposals are accompanied by a quantification of the fiscal costs in each policy area and lines of actions defined in this strategy.

Policy Areas. The restrictions limiting Colombia's growth are many, constituting what can be called the *country cost*. These bottlenecks, however, can be organized into three closely interconnected policy areas that were presented earlier on: (i) **productivity of the economy**; (ii) **effectiveness of public administration**; and (iii) **social mobility and consolidation of the middle-class**. To reduce the *country cost* and increase the possibilities for growth requires sustained effort over the course of the next twenty years.

VI. The Productivity Challenge

This policy area focuses on increasing the provision of public goods and progressively reducing subsidies in a more educated society. Low productivity is due to multiple factors. Some are related to certain conditions of the workforce, others with the level of development of the financial sector, others with informality, or even with the way production factors are combined. Additional reasons include social exclusion and inequality (which directly affect the development of quality human capital), infrastructure, climate change, institutional and regulatory frameworks and the insecurity facing some countries (ECLAC-IDB, 2005). Empirical data indicates that approximately half of the disparity in income levels and growth rates among countries is due to differences in total factor productivity (Hall and Jones, 1999).

On the other hand, it is important to continue with the policy of integration for the development of markets. Colombia has important preferential access to the countries in the Andean Community (CAN), and signed free trade agreements with the United States and with the European Union as of 2012 and 2013, respectively, its main destination markets. It has also implemented agreements of this type with Canada and the European Free Trade Association (EFTA), and signed others with Korea, Panama, Israel, Costa Rica, and the Pacific Alliance with Mexico, Peru and Chile.

This area includes policy proposals and lines of actions aimed at: (i) stimulating innovation and business and agricultural development; (ii) achieving quality education and giving priority to the most vulnerable groups; and (iii) increasing the quality of infrastructure in order to reduce transaction and transportation costs in the economy.

Stimulate Innovation

Investment in research and development as well as in innovation is a critical growth factor in the long-term, and not simply a result of that growth (IDB, 2010b). Data from OECD countries supports the fact that investment in R&D leads to productivity growth, rather than the inverse (Rouvinen, 2002). Previous studies have concluded that R&D can explain up to 75% of differences in growth rates of total factor productivity, once the externalities have been considered (Griliches, 1979).

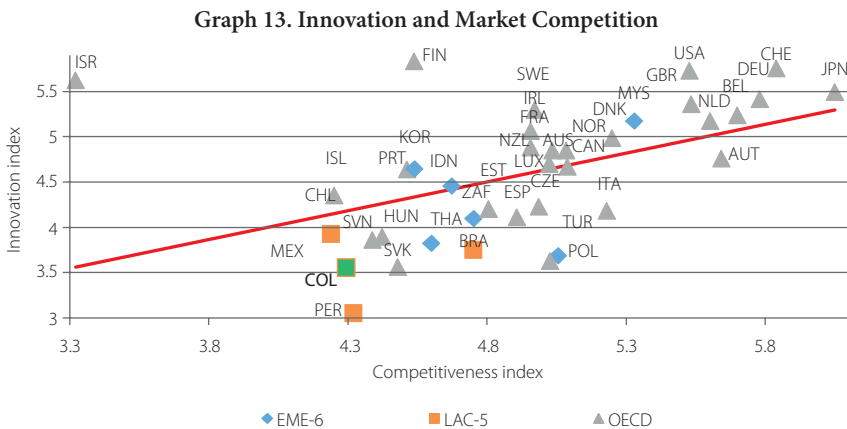
A competitive environment generates incentives for innovation. A competitive environment and open markets are extremely important incentives for innovation. Although not the only means, policies that promote growth and increases in productivity through research and development and the generation and adoption of new technologies are more effective in a market environment that stimulates competition (see Graph 13). According to international standards for innovation, Colombia ranks 128 among 144 countries, whereas in terms of the standards for a favorable environment for market competition, Colombia ranks 136 out of 144 countries¹⁶. The factors that explain this lag include (i) low investment in research and development, (ii) lack of skilled human capital and (iii) the institutional complexity of the national innovation system (IDB, 2014a)¹⁷.

Low investment in research and development (R&D) affects growth potential. Spending in R&D as a percentage of the GDP was 0.22% in 2013, far below the OECD average (2.36%) and below the average for other countries with similar per capita revenue in the Latin American region (Brazil: 1.21% and Chile: 0.42%) (see Graph 14). The main source of funding is the public budget, equivalent to 0.15% of the GDP. The participation of the private sector in R&D funding is nearly 30%, which is not sufficient compared to other more advanced countries positioned

16 Source: own calculation based on WEF (2014). The market competition index corresponds to the simple average of the values: Intensity of local competition and Extent of market dominance. The innovation index corresponds to the simple average of: Capacity for innovation, Quality of scientific research institutions, Company spending on R&D, University-industry collaboration in R&D and Availability of scientists and engineers.

17 Return rates on R&D follow an inverted U-shaped curve, increasing with the distance from the technological frontier, until they reach a point where they begin to fall, becoming negative for the poorest countries – a phenomenon attributed to the lack of a critical mass of supplementary input for innovation, such as adequate human capital, scientific infrastructure, development and modernization of the private sector and, in general, complexity and coordination of the innovation system – (Goñi and Maloney, 2014).

on the frontier of knowledge, in which the participation of the private sector exceeds 60% (e.g. Finland, Korea, and Israel). This limited private initiative in financing R&D is related to the size of companies, most of which are small and medium-sized, which tends to be less than the optimal level, preventing them from exploiting economies of scale (there is a high correlation between larger corporations and higher volume of investment in R&D). The size of the companies also affects their capacity to orient efforts towards R&D due to constraints on access to funding (IDB, 2014a)¹⁸.



Source: Own calculations based on WEF (2014).

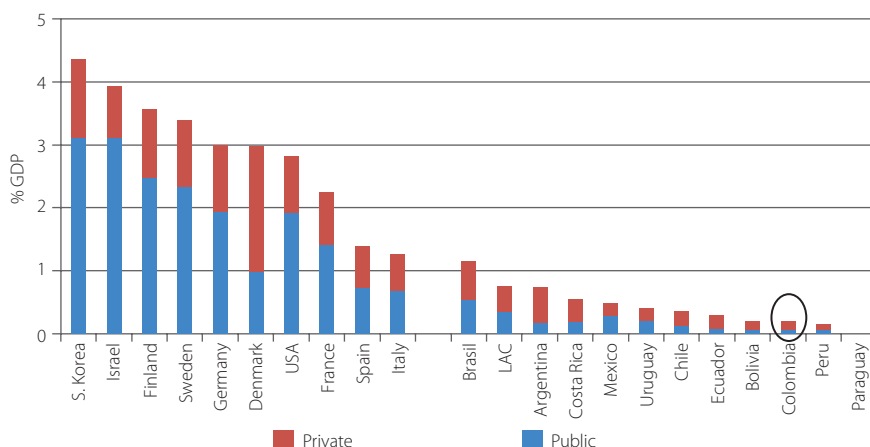
The availability of skilled human capital is limited for the innovation system. Colombia has 346 researchers per one million people, in comparison with 4,712 in Spain, 1,514 in Argentina, and 872 in Brazil (RICYT, 2014). The number of researchers, i.e. 0.3 per every 1,000 workers, is lower than the regional average of 1.1. Companies systematically favor innovation strategies that focus on acquiring existing technology rather than promoting the endogenous generation of new ideas, thus neglecting the importance of developing research capacities in order to absorb technology.

The institutions in the innovation system are complex and fragmented, with many players and insufficient coordination among them. This can be seen in the excessive

18 Haltiwanger et al (2010); Kane et al (2010); Acs et al (1989); Audretsch et al (2003), indicate that the existence of a dynamic entrepreneurial sector generates innovations, facilitates the diffusion of knowledge, creates employment and leads to greater economic growth.

dispersion of public support programs (OECD, 2014a). Moreover, there is no clear separation between the strategic functions of designing policies and executing them. In other words the political decision-making and supervising levels coexist with the execution responsibilities within the same institutions (i.e. Colciencias, MinComercio). The result is a limited capacity for checks and balances and low effectiveness in developing and coordinating policies, as well as in implementing them. (IDB, 2014a). Box 3 and footnote 22 below highlight innovative initiatives with public and private sector participation that could support research and development as well as implement new technologies in private and public sectors.

Graph 14. Spending on R&D per Source of Financing



Source: IDB (2013a).

Box 3. National Fiber Optic Network

The Ministry of Information and Communications Technology has promoted the expansion through a National Project of the country's existing fiber optic infrastructure, connecting towns, public institutions and citizens.

In 2011, only 325 of the country's municipalities had fiber optic coverage (29% of the total). The plan sets a target to reach 753 municipalities by 2014. Said objective was met and largely surpassed in 2014, reaching 1,078 municipalities, equivalent to 96% of the total. During the execution of the project, more than 15,000 km of fiber optic cable were installed, providing the country with a high-speed transportation network for telecommunications services. This

investment increases: (i) broadband penetration, (ii) the use and appropriation of ICTs; and (iii) generation of content and applications. Once the fiber optic node is installed, free of charge broadband will be provided during five years at 2,000 public institutions in the education, healthcare, defense and cultural sectors located in the beneficiary municipalities.

This project is not only an example of investment in infrastructure and innovation, but also of cooperation among the public and the private sectors. The national government contributed one third of the necessary investment, while the private operators funded the remaining portion; the latter were then held responsible for expansion, coverage and marketing of the telecommunications services (broadband, television, telephony, and others) in each one of the beneficiary municipalities. Similarly, in order to obtain a commitment on the part of the municipalities in order to materialize the plan, the project's local authorities were empowered, becoming active participants in the plan in their municipality.

Source: Ministry of Information and Communication Technologies (2014).

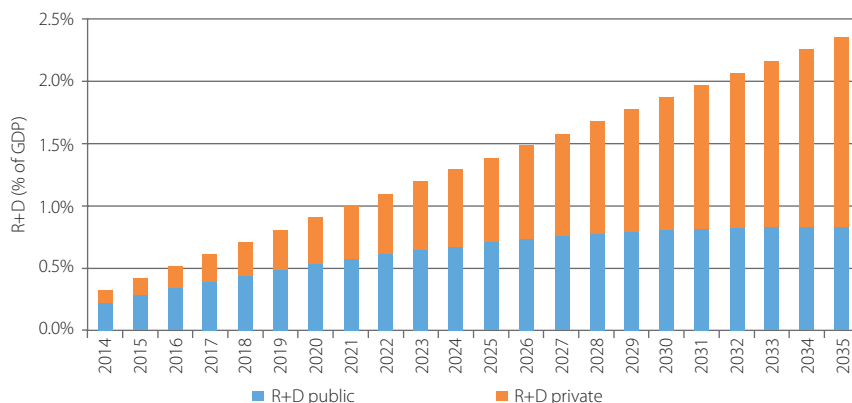
Proposals. Many of the proposals for the different areas of this strategy recommend developing more competitive markets. The following are policy actions suggested specifically to stimulate innovation: (i) progressively increase investment in the sector; (ii) expand private sector participation using new financial instruments (iii) develop human capital on a large scale; and (iv) reorganize the institutional infrastructure differentiating between the functions of strategy, policy formulation, and execution.

Progressively increase investment in the sector. Total investment should be increased over 20 years to reach levels close to 2.3% of the GDP (see Graph 15). Colombia would thus equal the average for OECD and emerging countries that are more dynamic in terms of generating and transferring technology. An allocation among public and private resources comparable to countries in the knowledge frontier (Finland, Korea, Israel) would be one-third (0.8% of the GDP) public resources and two-thirds (1.5% of the GDP) private resources.

Increase private sector participation using new financial instruments. International experience includes successful models of incentives and financial instruments appropriate for financing innovation and sharing risks between the public and

private sector. There are experiences in the region with funding and risk capital to support innovative businesses and activities¹⁹. Moreover, high-risk investment institutions and funds can be created exclusively dedicated to supporting innovation (Phelps and Tilman 2010), (Mazzucato, 2013), and (Rodrik, 2015), and guarantee mechanisms can be developed to encourage private financial institutions to augment risk capital. Although there is an incipient ecosystem for innovation, the availability of such financial products, particularly in the capital and complementary non-financial services market, is limited due to a lack of experience with such instruments, a limited legal and institutional framework for their development and application, and a business culture that is in general adverse to risks²⁰.

Graph 15. Projection for R&D Spending (% of the GDP)



Source: Own calculation.

Develop human capital on a large scale. Among the priorities for the allocation of public resources to accelerate growth in research and development capacities is the large-scale education of professionals and researchers. One of the appropriate instruments to that

19 The closest examples are found in Brazil (BNDES) and Chile (CORFO). Colombia has initiated a series of successful public-private experiments and has begun to test a financing method through Innpulsa, a program funded by Bancoldex, for companies with above average performance. Bancoldex in turn, is defining a support strategy to assist high-growth companies, as the basis for a financing line that the institution expects to implement progressively.

20 Colombia has successful innovation cases, among others: (i) **Ruta N** (Antioquia): partnership between the public and private sector and the academia to finance the development of innovative businesses in the city of Medellín. (ii) **Tecnova** (Antioquia): whose objective is to promote partnerships, exchange of information and generation of synergies between the universities and research centers with the businesses of the region. (iii) **Connect** (Bogotá): created by businesses and universities of the region, and with the support of the public sector to multiply innovation and entrepreneurship in Bogotá and Cundinamarca (Gomez and Mitchell, 2014).

end, with a successful record in the region, is the establishment of a fund for college scholarships, including postgraduate studies at high-performance universities abroad. Additionally, there is a need to strengthen domestic academic institutions. The objective would be to produce a similar quality of researchers and technologists as in advanced countries. One of the precedents for these programs was the large-scale scholarship plan at Fundación Gran Mariscal de Ayacucho in Venezuela, which graduated thousands of students from prestigious universities in the 70s and 80s. Similar programs have been developed in Brazil, which, through the Science without Borders program as of 2012 and over a 5-year period, expects to send 100,000 science students to centers of excellence abroad. In 2008 Chile announced the program called “Chile Scholarships” which has been sending scholarship winners to postgraduate studies abroad and whose end target is 30,000 students (IDB, Navarro, 2014). In Colombia, the Bicentennial Generation program was a significant effort in that direction, with a target of 9,000 PhDs by 2019. The domestic private sector, with public sector support, contributes to this effort through Colfuturo, which has financed 9,060 scholarships for masters and PhD studies from 1992 to 2014 in 775 different universities. In order to reach, in 10 years, a target number of researchers per one million inhabitants close to the number in Argentina, somewhat above that of Brazil, approximately 4,000 new researchers must be trained each year, at an annual cost of US\$350 million, equivalent to approximately 0.1 of the GDP²¹.

Reorganize the institutional structure, differentiating between the functions of strategy, policy formulation, and execution. Separation of the strategy and policy formulation functions from execution responsibilities will allow monitoring implementation more effectively, leaving aside potential conflicts of interest in the self-assessment process of the agencies that fulfill these functions (IDB, 2014a).

Financing for the private sector: increased access to credit and reduced costs of credit for the private sector, especially for small and medium-sized enterprises – SME; and innovative companies

The relevance of access to financing and the development of financial systems as decisive factors for making productivity more dynamic has been widely

21 Average cost per scholarship holder estimated, based on the costs of scholarship programs financed by the IDB.

documented. Literature provides empirical evidence on the positive impact of developing financial systems on the following aspects: (i) economic growth (Beck et al., 2000; Rajan and Zingales, 1998), with this being one of the most important variables for economic convergence (Aghion et al., 2005); (ii) allocation of the capital factor toward projects with higher returns (Galindo et al., 2007); and (iii) total factor productivity, encouraging innovation and research and development (Aghion et al., 2010), facilitating access to markets and segments with greater value added (Manova and Yu, 2010), and mitigating the impact of macroeconomic volatility and shocks (Cavallo et al., 2013; Aghion et al., 2005); (iv) lower intermediation margins when there is lower market concentration (Asli et al., 1998).

Access to business credit is limited. In Colombia, while micro, small and medium-sized enterprise (SMEs) represent 99% of the business sector, 80% of private employment, and 35% of the GDP, these companies receive only 14% of commercial loans. At the end of 2013, 186,218 commercial companies received a commercial loan and 6,858 companies were able to access a micro loan. Lack of access to financing is an obstacle for development, in particular for small companies (OECD, 2013) (see Graph 16). Among the most important causes of this limitation are a shortage of eligible collateral and weak compliance with contracts²² that increases risk aversion on the part of banks, reducing credit supply²³. In that sense public banks could play a significant role in promoting access to credit²⁴.

Credit cost is high in Colombia compared to other emerging economies. According to the World Development Indicators, interest rate margins (the difference between average active and passive rates) exceeds 6% in Colombia. This indicator is around 4% in Chile and is very close to 3% in other similar emerging economies. This situation is caused partly by: (i) the distortions generated by costs associated with forced investments (such as agricultural development bonds –TDA in Spanish) and

22 Colombia ranks 85 out of 144 in the legal rights index for the financial market, according to the WEF. Chile ranks 63 and Korea 29.

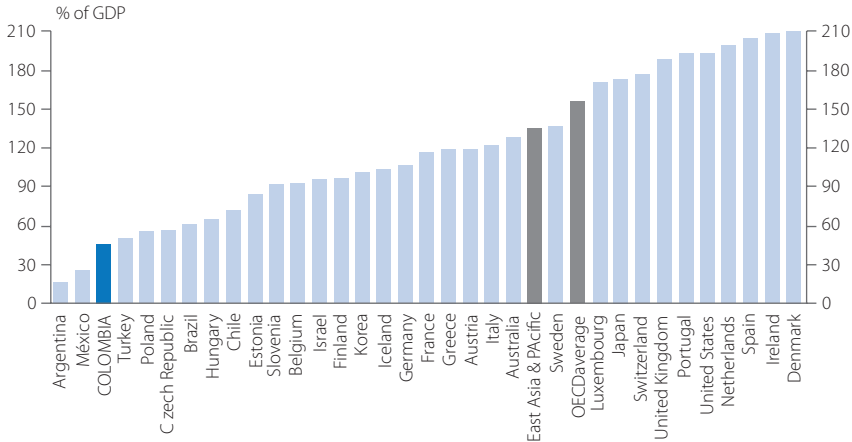
23 Eslava and Meléndez (2009). Galindo and Micco (2007) find that weak protection for creditors leads credit markets to overreact to external shocks.

24 One hypothesis for future study would be to analyze if there are entry barriers for the financial system that may limit access to financing due to the resulting reduced credit supply.

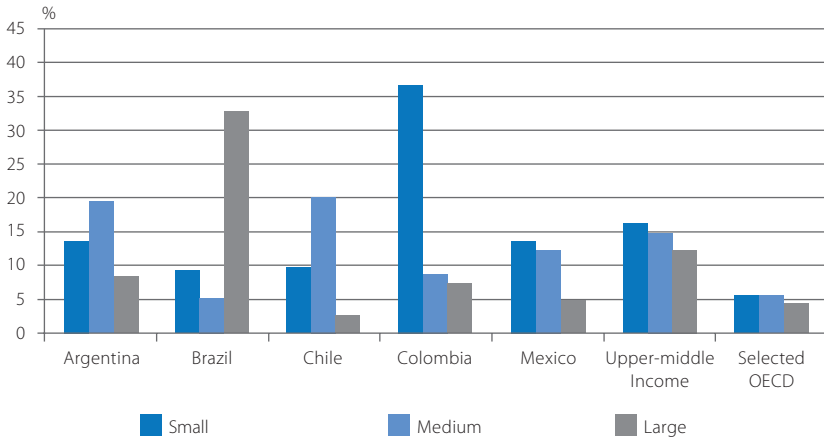
the tax on financial transactions²⁵; (ii) the lack of adequate financial instruments for mitigating risks²⁶; and (iii) the high degree of concentration in Colombia's financial institutions, where 67% of assets is concentrated in three main groups.

Graph 16. Productive Sector Financing

Credits for the productive sector (% of the GDP)



Companies that state that access to financing is their biggest obstacle (2010)



Source: OECD (2013).

25 For example, the agricultural portfolio of commercial banking, which represents 7.7% of the total portfolio, and 5% of the bank deposits, had a negative remuneration in 2014 of nearly 2.5%. Additionally, the opportunity cost of this portfolio represented 11.6% of total banking profits in that year (own estimates based on data from Finagro). Galindo and Majnoni (2006), in turn, calculate that forced investments and the tax on financial transactions accounts for 3.5 points of the intermediation margin.

26 There is lack of secondary markets, except the mortgage portfolio.

Financial institutions must play a key role in financing productive development²⁷.

The empirical evidence for Colombia indicates that public banks must play a fundamental role in improving access to finance, not only by offering resources for productive investments, but also by improving the conditions that create incentives for and make private investment viable (for example, through public guarantee funds and public-private association financing arrangements). (Eslava et al., 2011) finds that the credit of Bancoldex, acting as a second tier institution, improves access in terms of lower interest rates, higher loan amounts and better payment terms, and it increases the number of intermediaries with which the companies have credit relationships. There are also opportunities for private financial institutions to increase the loans they offer in under-served markets and new segments, in the form of green projects. In addition to initiatives that increase funding, it is important to promote improvements in the demand for credit, for example, through technical assistance to enhance the business skills of SMEs (Lopez and Tan, 2011).

Proposals. The following are the suggested policy actions: (i) develop active policies that favor better access to finance; (ii) improve regulations and laws to stimulate a reduction in intermediation margins and (iii) increase the use of development banks and other financial institutions through second-tier funding mechanisms.

Develop active policies that favor better access to finance. Guarantee systems are a suitable mechanism in terms of an active policy that can create incentives for access to financing and reduce its costs. Public guarantees reduce the lender's risk, although they do not necessarily increase the willingness of the borrowers to pay. Mutual guarantee systems, which combine sponsoring members who offer guarantees with participating members who offer and receive guarantees, have begun to spread in the region and may be adopted in Colombia, including tax breaks for sponsors. These systems have been adopted in Argentina and Chile in various ways. In Chile, financial incentives are used, such as CORFO long-term loans, to encourage good coverage and the horizontal development of the mutual guarantee systems (Crespi et al., 2014). In the case of a breach of contract, creditors' rights must be enforced through greater effectiveness of judicial actions.

27 Several Bancoldex programs have increased investment and the productivity of SMEs. Eslava et al. (2012), Meléndez and Perry (2010).

Improve regulations and laws to stimulate the reduction of intermediation margins.

The cost of bank loans can be reduced by pushing active policies that reduce the cost of forced investments and eliminating the tax on financial transactions. Secondary market development should also be promoted to produce new instruments for mitigating credit risk and create incentives for offering financial services that will increase competition in the sector.

Increase access to credit through mechanisms that stimulate supply of and demand for credit.

The role of development banks, through second-tier operations, and of financial institutions in the reduction of bank funding costs are effective when they target funding projects with positive externalities, in order to place these investments at the right scale with a lower capital cost²⁸. On the whole, it is important to promote non-financial services geared toward improving the business skills of under-served sectors such as the SMEs in order to improve their access to loans. Box 4 below describes instruments and actions implemented by the Private Sector of the IDB Group to facilitate access to credit and different forms of technical assistance and consulting used to support their growth.

Box 4. The IDB's Private Sector Group supports enterprise needs

The private sector of IDB has instruments in place to respond to the needs of companies of various sizes and levels of sophistication. The financial needs of the companies vary depending on their development level, activity, risk profile and sophistication. The IDB provides products that support everything from young companies to large and established corporations. New companies require financing that involves more risk, while large companies often require high amount credits that entail less credit risks. Therefore, the IDB Group is able to accompany the growth of a company offering various types of consulting in line with their development phase. In terms of investment, the private sector of the IDB Group may act by offering risk capital as an angel investor (seed capital and start-up); or contributing venture capital. In more mature business

28 The interventions of Bancoldex direct the credit to productive projects which already have a successful record and that require to scale their investments and increase their presence and participation in the market.

phases, it offers debt financing in the form of loans, guarantees, equity and support for public tenders. Furthermore, funding is provided to infrastructure projects (project finance) and credit lines to banks to channel credit to strategic sectors that are insufficiently served. It also supports the development of capital markets as sources of credit and the mobilization of domestic savings resources such as pension funds. Lastly, the private sector of the IDB Group is committed to channeling credit to strategic areas to develop incipient markets and to attract additional private investment.

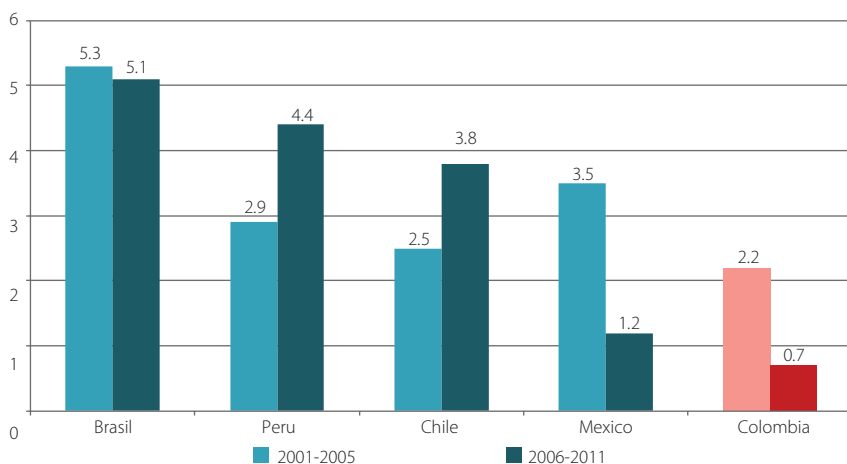
Agricultural Development: Increasing Productivity and Expanding Agricultural Frontier

Agriculture has multiple functions related to development, and in Colombia it has a key impact on the growth strategy. Those functions are related to economic growth, environmental sustainability, poverty and hunger reduction, and higher levels of equality and food security (IDB, 2013b; Perfetti et al., 2013; Foster et al., 2010 and Dewbre et al., 2011). Colombia's rural sector covers 22 million hectares of arable land, of which only 5.3 are farmed. In addition, 38.8 million hectares are currently used for grazing and free range ranching, and 477,575 hectares are forest (IGAC, 2012). In addition to its contribution to the GDP, the agricultural sector is labor-intensive and key to Colombia's rural development strategy.

Despite its potential, the agricultural sector has stagnated. Share of agriculture and cattle farming in the total GDP went from 9% in 2000 to 6.2% in 2014 (DANE, 2014). While the economy has been growing over the last fifteen years at an average rate of 4.4% per year, the agriculture and livestock sector has grown at a rate of just 2.5% per year. Upon comparing the growth of TFP in agriculture in different countries of the region, Colombia has performed the worst (IFPRI, 2014). The growth of agricultural TFP in Chile and Peru improved in the 2006-2011 period over the 2001-2005 period, and is six to seven times higher than Colombia's (see Graph 17). At the global level, there was an upward trend of 1.5% per year in the value of agricultural products per unit of land between 1990 and 2009. For Latin America that figure was 1.9% (3% for Brazil, 3.2% for Chile and 4.5% for Peru), while for Colombia this rate was 0.2%. There was a similar trend

in terms of agriculture value added per worker. At the world level, the product of work increased at an annual average rate of 1.6% between 1990 and 2010, in Latin America that figure was 2.6% (in Brazil 4.8%, Chile 3.1% and Peru 2.9%), and in Colombia it went down at an average rate of 0.4% (DNP, 2014a). Between 1990 and 2011 the value of agricultural production grew 1.3 times compared to the doubling and tripling in Brazil and Peru respectively.

Graph 17. Growth of TFP in Agriculture



Source: International Food Policy Research Institute 2013.

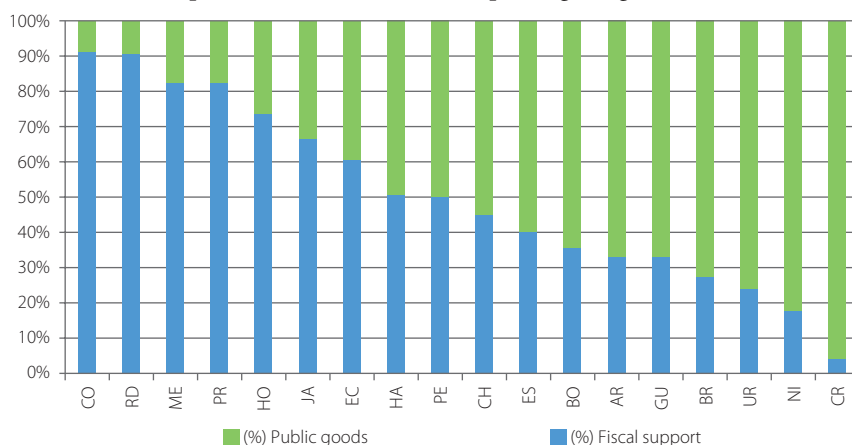
Subsidies are prevalent in sector budgets instead of public goods. Budget allocations to the sector in 2013 totaled 6% of sector's GDP. There was a change in the last decade in the makeup of spending, characterized by an increment in direct subsidies at the expense of investments in rural development. Thus, 90% of the sector's total public spending is concentrated in subsidies, instead of sector public goods, to which only 10% of the budget is allocated²⁹ (see Graph 18). In other countries in the region, an average of 50% of the budget is invested in public goods that support production. At the same time, the quality of the public goods is low (Salazar et al., 2015)³⁰. By way of example, the average score in Colombia for animal health services is 40% lower than that of Chile and 31% lower than Brazil's

29 Public goods refer mainly to rural infrastructure, animal and plant health services, and technical assistance.

30 The assessments of Criar, a program that provides vouchers for access to the adoption of technology, demonstrates the significant impact of providing this public good on the productivity of small farmers.

(De Salvo, 2014)³¹. Moreover, while in Brazil and Chile public spending on agriculture research is close to 1.5% of the sector's GDP, in Colombia only 0.6% of the sector's GDP is spent³².

Graph 18. Distribution of Public Spending in Agriculture



Source: IDB (2013b).

Legal uncertainty regarding property rights inhibits investment. Legal uncertainty regarding land ownership hinders transactions and investment in agriculture, cattle farming and logging. Not only is there a great discrepancy between the vocation and the use of land, but there is also a high level of concentration in ownership (GINI of 0.84 for land owners (IGAC, 2012)) due to historical dynamics, rigidities in land markets, incentives for accumulating unproductive land, and the armed conflict. On top of all of this is the informal nature of land ownership. In Colombia, the illegal appropriation of vast areas of land and the existence of undocumented and informal rights have been going on for a long time. These processes are further activated by forced displacement of the rural population. Uncertainty about ownership rights discourages long-term investments, which are generally connected to land improvement and

31 Index of the World Organization for Animal Health based on national statistics and interaction with producers and public officials.

32 Colombia has the fourth lowest percentage of agricultural researchers affiliated with state institutions and the lowest percentage of researchers affiliated with higher education institutions. Similarly, the percentage of agricultural researchers with a PhD is one of the lowest in the region. Lastly, the research intensity ratio (spending in research as proportion of GDP from agriculture) in Colombia in 2006 is comparable to that of Honduras and lower than the set of 15 Latin America countries considered in the comparison of these indicators. Source: DNP (2014a).

development. Uncertainty about ownership rights also restricts access to other services, such as insurance (FAO, 2012)³³.

Access to financial services is limited. The credit market usually excludes small-scale farmers due to high transaction costs for financial services in rural areas. The lack of formal access to credit and high costs in the informal credit market are factors that limit farm investments (FAO, 2012). Although the majority of producers are small-scale (Perfetti et al., 2013), their credit portfolio represents merely 31% of the total portfolio and is mainly owned by the Banco Agrario. Credit for the agriculture sector is barely 32% of the sector's GDP, eighteen points below the already lagging general private sector credit (IDB, 2014d). Thirty-eight percent of the agriculture and livestock sector have access to credit (Estrada, 2014), while only 33% of the micro, small and medium-sized producers in this sector access micro-loans, and the average amount of those loans does not exceed US\$2,000³⁴. The credit market tends to exclude small producers due to the transaction costs related to the provision of financial services in rural areas. Precarious infrastructure, adverse selection problems, and the scarcity of incentives to receive the land of a small farmer as loan collateral reflect some of the current difficulties.

Proposals. Increased productivity in the agriculture and livestock sector is indispensable for economic growth. The proposals for achieving these objectives are: (i) turning budgetary spending toward public goods; (ii) formalizing ownership titles and stimulating the land market; and (iii) expanding the credit supply and private financing.

Increase investment in the sector and steer spending toward public goods. A growth policy based on the development of the primary sector and the productive inclusion of the small-scale peasant economy requires the progressive elimination

33 Gáfaró et al., 2012. In Colombia, correlations were found between access to land, structure of landholding and the well-being of rural households, as well as consumption and formal ownership. There was also a correlation between the type of holding and production decisions and, indirectly, given access to loans and investment, with productivity.

34 According to data from Finagro, at the end of 2013, the flow of credits from this institution amounted to \$6.9 trillion (using TDA resources) and it represented only 17.6% of the GDP from the agriculture sector that year. Despite the low funding cost obtained by Finagro with the TDA that allows them to rediscount at subsidized rates of DTF - 3.5 for small producers and of DTF + 1 for all the others, access to credit continues to be restricted.

of subsidies and a complete change in the allocation of resources toward public goods linked to the objective of increasing productivity (road infrastructure, collection centers, agricultural extension services, and information networks on markets and prices) that will lead to an expansion of the area used by agriculture and ranching³⁵. Relative to tertiary road infrastructure, the Bank's estimates conclude that only 25% of the tertiary network is in a good condition³⁶. Establishing new irrigation districts in 30% of new areas of arable land over a period of 20 years has an estimated cost of US\$15 billion (40% public resources). The incorporation of these new areas of agricultural development will require public investment in services related to technical assistance, rural water systems, housing, rural electricity, education and healthcare. The annual investment for these new areas (during the next 20 years) is calculated on the order of 100 million dollars per year, that is to say a total of US\$2.0 billion for the entire period. Box 5 describes lines of action and the exemplary projects that have been implemented with support from the Private Group of the IDB, aimed at increasing and modernizing production processes in processing industries and improving the efficiency of the value chains for producing and marketing products, consistent with the proposal mentioned above.

Formalize ownership titles and stimulate the land market. The following should be done to make the best use of the productive potential: (i) formalize land ownership rights; (ii) stimulate the land market by updating the rural land cadastre and collecting property taxes, including a penalty for unproductive land; and (iii) promote regional zoning processes to avoid potential conflicts between agriculture, mining and environmental conservation.

Expand credit and private financing. To increase credit and private investment and the incorporation of risk capital in the agriculture and livestock sector, one fundamental factor is the existence of clearly defined ownership rights applied equally to all the economic agents. Institutional support is required to strengthen the judicial institutions dedicated to guaranteeing the fulfillment of contracts and creditors' rights. Moreover, special guarantee mechanisms can be developed

35 Fan and Chang-Kang (2005) find that investment in rural roads has a multiplying effect of 1.57 on the productivity gains.

36 The investment estimate for tertiary roads is included later in the infrastructure development section.

such as the strengthening the Agricultural and Cattle Farming Guarantee Fund (Fondo Agropecuario de Garantías) so that it can attain economies of scale in the management of risks, for example through the design and implementation of credit ratings and other techniques to assess credit risk.

Box 5. The Private Sector of the IDB in Agro, Social and Environmental Sectors

	Opportunities	Examples of Projects
Support to the Social and Environmental Sector	The SGS operations offer technical assistance to their clients to improve their relationships with local communities. This benefits the client and the local people, especially in traditionally marginalized population segments. The participation of the SGS operations implies the use of the IDB's social safeguards, which generate trust among the relevant stakeholders. Often, agricultural projects are carried out in sensitive ecosystems. The IDB's practices mitigate environmental risks by improving the project's sustainability.	<i>Klabín (BR-L1404)</i> . The IDB funded (\$150 million) the building and operation of a new pulp mill in accordance with environmental safeguards. The company worked with local communities to provide employment, infrastructure, and social services.
Value Chains	Investments in strategic phases of agriculture value chains have the potential to benefit many small and medium-sized producers. The IDB brings its international experience to create efficient and high-impact chains.	<i>Mango Producers (HA-M1034)</i> . The MIF granted \$3 million to improve the efficiency of the value chain for mango producers in Haiti. The project expects to benefit 15,000 mango farmers and their families.

Provide Quality Education that Gives Priority to the Most Vulnerable Population Groups

Education has a direct impact on the productivity and income of individuals and consequently on a country's economic growth. The literature that links

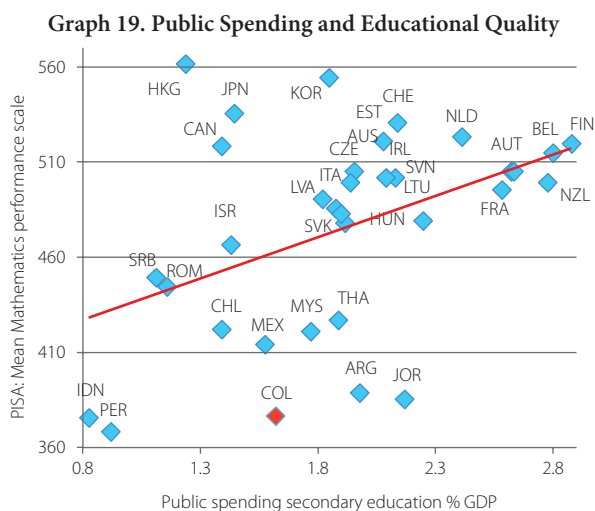
schooling (number of years or levels completed) with higher levels of productivity and individual and community income has a long history (Becker, 1964; Mincer, 1974; Hill et al., 2005; Dogarawa, 2011). Recent international evidence indicates that the quality of education – measured by international test results – is one of the factors that best explains the positive relationship between education and country development (Pritchett, 2001; Hanushek and Woessman, 2009). Moreover, both basic and high-level skills are related to economic growth (Hanushek & Woessmann, 2009)³⁷. The OECD, in turn, identifies that in Colombia the poor quality of education is slowing down the accumulation of human capital and the country's growth (OECD, 2013).

In recent decades, Colombian society has made a significant effort to increase schooling. More than eighty percent of all children who are 4 and 5 years old attend school. The coverage for the first 6 years of basic education is 96.7% and average amount of schooling went from 6.7 years in 2000 to 7.4 in 2012 (for individuals from 25 to 64 years of age). Between 2005 and 2013, the net coverage for urban secondary education went from 82% to 84%, while rural coverage increased from 36% to 52%. In urban areas, 76% of those officially registered attend schools with two shifts, while in the rural areas said percentage is 23%.

Spending on education, although it has increased, is lower than what is needed. Between 2000 and 2013, public spending on pre-school, basic and middle education as a percentage of the GDP went from 2.8% to 3.4%. This trend has continued during recent years, and in 2015 the budget for education was higher than the budget allocated to defense (3.8%). However, in pre-school education, spending per student in PPP dollars is nearly one-third of that of the OECD, and only 20% for primary and secondary education (OECD, 2014b). Twenty-three percent of teachers do not use or do not have classroom materials. In terms of GDP, Colombia makes an effort similar to LAC-5 and somewhat less than 80% of OECD spending. The standardized tests of the Program for International Student Assessment (PISA) produce results well below those of the countries that allocate similar resources in terms of education spending relative to their GDP. The efficiency gap relative to this group of countries is 23%, and in terms of its position, Colombia ranks 63 out of 65 countries (see Graph 19).

37 The basic skills refer to mathematic skills. The high-level skills are related with the cognitive skills such as reading, mathematics or science and social-emotional skills related with the personality traits.

There are also deficiencies in the quality of education, especially in rural areas. Despite the progress made in coverage, the quality is not sufficient, with low levels for learning basic skills. The national standardized assessments (SABER³⁸) show that 52% and 58% of third and fifth grade children, respectively, do not acquire the minimum language skills required for their levels. This pattern continues throughout their schooling until the ninth grade, when 58% of students do not achieve said skills. Youth in rural areas obtain scores lower than youth in urban centers at the different socio-economic levels. The difference between rural students and those in the top quartile of the national distribution of averages was 74 points in mathematics (417 vs. 343), which represents practically two additional years of schooling. On average, one out of every ten students in urban areas (9%) fail first grade and one out of every eight (13%) in rural areas. If we add dropouts to non-passing students, attrition in the first grade (failure + dropout) is around 14% in cities and 19% in rural areas. These results are reflected in an inadequate labor supply (OECD, 2013)³⁹. Insufficient quality of teaching, the scarcity of schools with a single shift, and the low investment explain these gaps (Hanushek and Rivkin, 2012; Hanushek, 2011; Rivkin, Hanushek, and Kain, 2005 and IDB, 2013).



The quality of the teachers is deficient and their social and regional assignments are inequitable. High school students who choose a major in teaching at college tend to have lower levels for basic skills in mathematics and language. Nearly 20% of the students who study education sciences are in the lowest 30% of the distribution of the SABER 11 results (García S, Maldonado, D, and Rodríguez, C., 2014). This is for at least two reasons: (i) low remuneration for teachers⁴⁰; and (ii) most Faculties of Education have an insufficient academic level (García S., Maldonado C., Perry Rubio G., Rodríguez J., Saavedra Calvo E). The first factor discourages the best students from education because they expect a higher income. The second factor facilitates entry into this major for students who have academic performance issues. In addition to deficiencies in the initial training for teachers, there is also inequitable assignment and administration of teacher resources. Vacancies are filled based on entry test scores at the start of studies, and this process allows those with better scores to choose the schools where they want to work. Because of this, the educational level of teachers varies among the country's different regions with marked differences in the level of professionalism (Piñeros, 2010). In addition, the current compensation and incentive systems lack effective mechanisms for recognizing knowledge, classroom performance, and improvements in student learning. Nor do they effectively recognize the risks and particular conditions under which the teacher works, such as the assigned grade, the rurality, violence in the region, or the diversity and vulnerability of the student population served (Fundación Compartir, 2014).

Implementation of a full school day schedule is limited. Barrera et al. (2012) and Bonilla (2011) highlight the current inequalities in the school day for students in Colombia. Although the General Education Law of 1994 in its article 85 establishes that public education must be offered in a single shift, most government schools work with double or even triple shifts in a single day: only 12% of primary schools and 11% of secondary and middle schools offer a full day. International and national evidence shows that a longer school day improves rates for educational efficiency and it has an additional positive impact on aspects such as teen pregnancy and juvenile crime (Barrera, 2012; García S, Maldonado, D, and Rodríguez, C., 2014). Among the main causes of this situation is insufficient public resources for expanding school infrastructure.

40 The evidence shows that the Colombian teachers are paid less than their peers in other similar professions. The disadvantage is close to 20% on average and in the case of male teachers they earn nearly 30% less than the salary of professionals in similar professions (9% for females). See García S, Maldonado, D, and Rodríguez, C. (2014).

Proposals. The proposals relative to these challenges are: (i) increase investment in education and guarantee efficient and equitable use of those investments; (ii) promote teacher development; and (iii) progressively establish single-shift school day schedules.

Increase investment in education and guarantee the efficient and equitable use of those investments. It is estimated that the resources necessary to achieve a minimum quality education as measured by international tests would be 1.3% per year of the GDP⁴¹, represented in new infrastructure and associated recurrent expenditures. This implies starting by providing a basic and minimal structure for the schools and teachers with the lowest performance. The investments in a longer school day and the implementation of incentives to improve teacher assignment, giving priority to the rural areas and departments with higher rates of poverty, such as the Caribbean and the Pacific, are fundamental pieces of this structure.

Promote teacher development. Interventions must target the implementation of a policy to attract, develop and retain the best teachers. This proposal is aimed at improving existing teacher licensing programs and creating ongoing education programs for professionals who have not graduated when they join the teaching force. In order to make teaching an attractive profession, teachers' salaries must be raised progressively so that they are comparable to other competitive professions. Scholarships would be given to the students with the best scores on the SABER 11 tests, prior to declaring an education major, who would then be admitted to quality certified teacher licensing programs. The program would include a subsidy for low-income students (contingent upon completion of the program and permanence in the teaching force). The incentives while teaching can be distributed using an indicator for results based on standardized assessments of students, and part of those incentives can be delivered to the schools. In addition, to correct the regional and socio-economic distribution of teachers, direct incentives can be established for the best teachers. International experience has demonstrated the benefits of such incentives⁴².

41 In the scenario of increasing funding for education, the trend should be to increase the spending to improve quality from the current 8.5% in the General Participations System to 20%; limiting the payroll to a ceiling of 80%. The improvement in quality may include free of charge books for low-income students and additional resources to create incentives for the schools to show significant improvements in their performance.

42 Steele et al. (2010) analyzed the effects of an incentive of US\$20,000 destined to new teachers with academic strengths who agreed to teach in low-performance schools and remained there at least four years. The compensation increased the probability of teaching at a low-performance school by 28%. See also the cases of Mexico and the United States, Springer et al. (2010), and Behrman et al. (2015).

Progressively establish single-shift school day schedules. A longer school day is key to improving student learning, and reducing grade failures and school dropout rates. The Colombian government has developed a plan to extend the single-shift school day as part of its interest in making school more available to least favored sectors of its people. Given the magnitude of the investment, however, and the fact that the impact of a longer school day is greater in rural populations with low socio-economic levels, the proposal is for a phased implementation, where the most vulnerable population groups at risk of school dropout would be addressed first. The proposal requires investments in infrastructure, school nutrition and teaching staff, as well as books, materials and educational resources for the students⁴³.

Enhance the Quality of Infrastructure and Urban Development and Reduce the Transaction Costs in the Economy

The literature recognizes the important positive relationship between investment in transportation infrastructure, productivity, and economic growth (Agénor, 2013; World Economic Forum, 2013; Calderón and Servén, 2003, 2010).

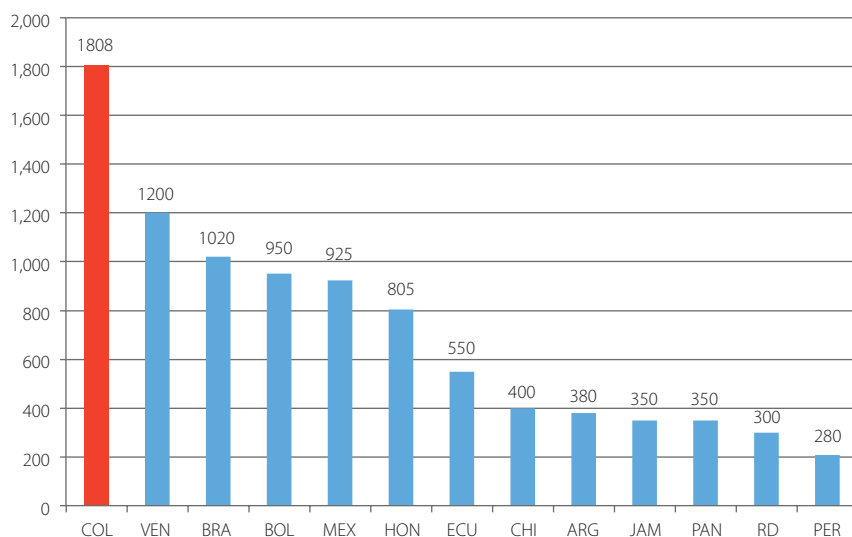
In Colombia transportation costs are a key obstacle for the economy's productivity. The average internal cost of a container is more than US\$1,800, in contrast to the average for Latin America, which is US\$700 (Graph 20). The average export cost of a container is more than US\$2,300, compared to the average for Latin America, which is US\$1,300 and for the OECD US\$1,080 (World Bank, 2015). An Inter-American Development Bank study revealed that a reduction of 1% in internal ad valorem costs could increase the country's exports by approximately 7% (IDB, 2013d). The main explanation for this lag is found in (i) insufficient transportation infrastructure, especially roads; (ii) the low quality of existing infrastructure; (iii) its vulnerability to climate change (Yepes et al., 2013); and (iv) inefficiencies in the provision of public services⁴⁴.

43 Bellei (2009) finds positive effects in a high numbers for class days and full school days in standardized knowledge assessments and rates of repetition and dropout of students. For Colombia, Garcia et al. (2011) find that a full school day reduces school dropout and significantly improves the results of standardized assessments when compared to half days.

44 IDB (2014) Presentation to President Juan Manuel Santos on Colombia's development challenges and the National Development Plan, page 147 (DNP, 2014b).

Insufficient transportation infrastructure⁴⁵. Road density is 6% lower in Colombia than the average for the region and for middle-income countries. Compared to Asian countries, the gap is 23% (Yepes et al., 2013). Colombia currently has 1,300 km of railways in operation, which move 25% of total freight⁴⁶. It also has an extensive network of rivers where effective navigability is highly restricted, moving just 1% of all freight. The road density for paved roads in Colombia is low, with 530 km per one million inhabitants, less than countries like Brazil (1,066 km) and Mexico (1,188 km)⁴⁷ (Chart 2). The quality of this network is crucial for the mobility of and access to services by the rural population and for the coordination of agricultural production centers with large-scale storage and distribution centers⁴⁸.

Graph 20. Average Cost of Internally Transporting a TEU (Twenty Foot Equivalent Unit) Container in Countries in the Region (USD)



Source: Yepes et al. (2013).

45 The literature recognizes the important positive relationship between investment in transportation infrastructure, productivity and economic growth (Agénor, 2013; World Economic Forum, 2014; Calderón and Servén, 2003, 2010).

46 Private Council of Competitiveness (2012) www.compite.com.co/site/wp-content/uploads/2012/10/6-Infraestructura-Transporte-y-Logistica.pdf.

47 Own calculations based on the World Bank (2014a).

48 The Government's main investment program in transportation infrastructure is the Fourth Generation of Road Concessions (4G). This program will make a total investment between US\$20.0 and US\$25.0 billion, equivalent to 0.7% of the annual GDP over 10 years.

Low quality of existing infrastructure. In Colombia, only 25,000 km of the 213,000 km of roads are paved⁴⁹ and the condition of highways is among those of the lowest quality in the region. According to the World Economic Forum, the index for road quality it is at 50% of the OECD and Chile, and is 25% below the average for Latin America. This indicator is especially important given that 72% of all freight is moved by ground, compared to 50% in Brazil and just over 40% in Canada. The quality of railroad and port transportation is also limited (102 and 90 among 144 countries). In air transportation, Colombia has a better ranking (78) (Graph 21).

Chart 2. Colombia's Lag in Transportation Infrastructure

	Non paved roads	Paved roads	Total Roads	Railways	Ports	Airports
Structures	Km/100 km ² of area	Km/100 km ² of area	Km/100 km ² of area	Km/100 km ² of area	TEU per 100 habitants	Billions tons/km per capita
Colombia	10.50	1.17	11.67	0.11	5.28	3.40
Latin America	11.50	2.49	17.58	0.54	5.28	0.43
Middle & High income	6.75	8.38	18.83	0.91	8.45	0.26
East Asia & The Pacific	16.88	50.33	35.24	0.69	23.77	6.58

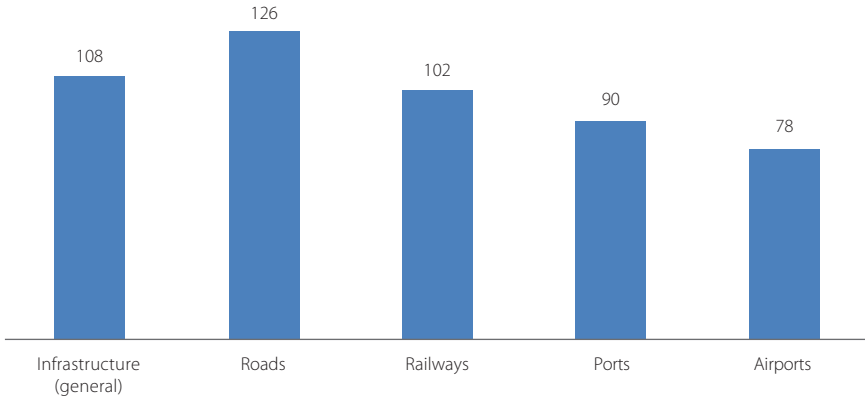
Deviations from the Structure's Density	%	%	%	%	%	%
Latin America	-9	-53	-34	-79	0	700
Middle & High income	56	-86	-38	-88	-38	1,207
East Asia & The Pacific	-38	-98	-67	-84	-78	-48

Colombia's Gap	km	km	km	km	TEU	Billions tons
Latin America	11,633	14,611	65,602	4,725	0	0
Middle & High income	0	80,003	79,470	8,922	1,486,749	0
East Asia & The Pacific	70,759	545,410	261,536	6,398	8,679,194	1,490,569

Source: Yepes et al. (2013).

⁴⁹ 200,000 km corresponds to public roads. The difference comes from private connecting roads.

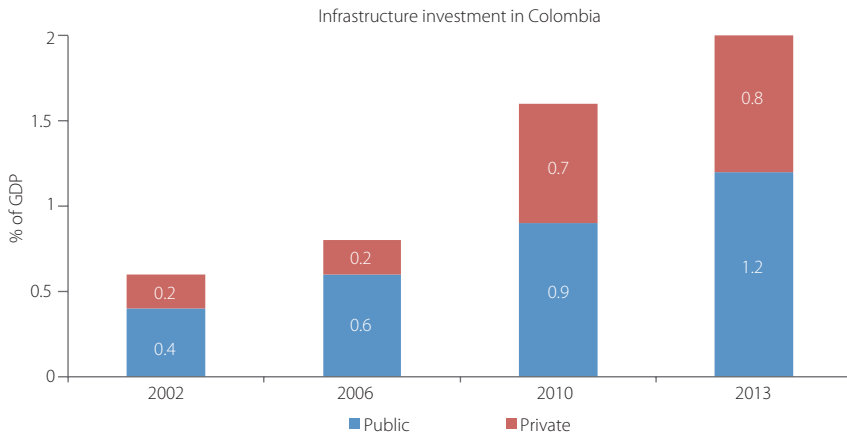
Graph 21. Colombia. Infrastructure Quality Indicators (Position among 144 Countries)



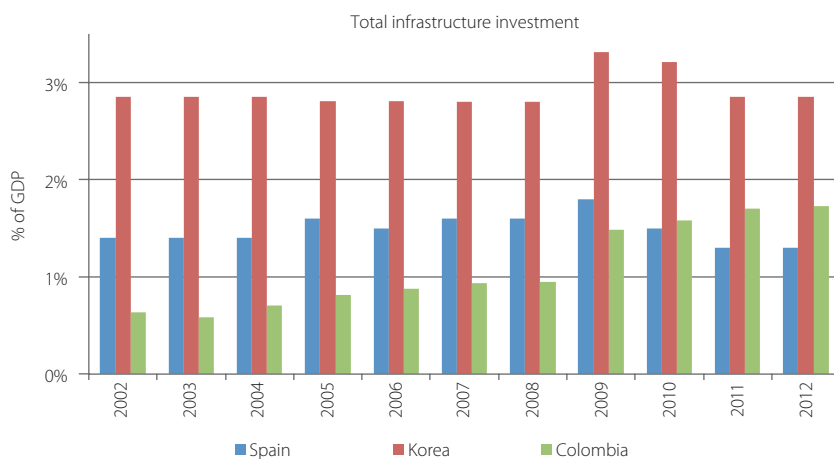
Source: World Economic Forum (2014).

Investment in transportation infrastructure has historically been low. The country's average investment was less than 1% of the GDP between 2002 and 2008, and 1.5% to 2% between 2009 and 2013. In comparative terms, total investment in infrastructure has been less than in developed countries (like Korea and Spain, Graph 22). The resources allocated to maintain the network are variable and scattered. Sub-national governments are responsible for 85% of the 180,000 kilometers of regional and rural roads network, of which only 11% of the secondary network and 25% of the tertiary network are in good condition (Yepes et al., 2013 and Ministry of Transportation, 2014).

Graph 22. Colombia – Investment in Transportation Infrastructure



Source: Yepes et al. (2013).



Source: Own calculations based on OECD and DNP.

The economy's productivity is affected by poor connectivity among cities. The lack of infrastructure and the high transportation costs in the country have contributed to poor connection between regions and cities. In consequence, regional economies have developed patterns of self-sufficiency that have not facilitated specialization or economies of scale. For example, the Cities Mission estimates that “the structure of the manufacturing industry in the main cities is not very specialized, with Herfindhal-Hirshman indexes of 1.192 in Antioquia, 1.201 in Bogotá, 2.052 in Atlántico, 2.191 in Cundinamarca, 2.255 in Caldas, 2.327 in Risaralda, and 2.442 in Cauca” (DNP, Barco, 2013). In fact, the composition of the manufacturing industry is very similar in all the main cities, resulting in reduced flows of commercial exchange and low competitiveness⁵⁰.

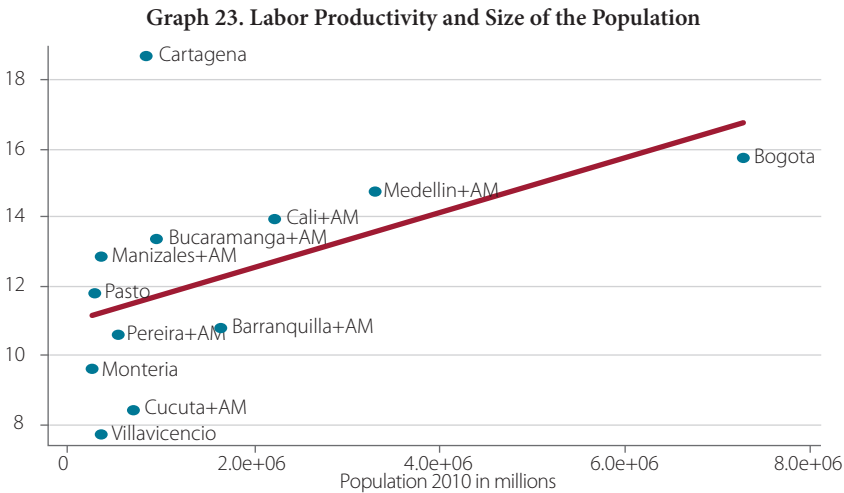
The economy's gains from trade are also affected by the lack of connectivity between regions and the main customs offices in the country. In Colombia, half of the country's exports are concentrated in four Departments and cities⁵¹. In addition, 11 of the 16 departments with a share in exports of less than 1% are located in the southwestern region. These departments are not only located far from the country's main customs centers, but to reach them, transportation services have to cross over mountainous areas, making transportation more expensive than in any other type of topography. The possibility of these zones profiting from gains from

50 According to the DANE's Annual Manufacturing Survey, Bogotá, Cali and Medellín have similar structures. For example, the main sector: food and beverages has a participation of 26% in Bogotá and Medellín and 41% in Cali.

51 Antioquia, Bogotá, Cundinamarca and Valle del Cauca.

trade and therefore increases in productivity, is limited. For example, if the internal transportation costs were similar to those of the Department of Magdalena, exports from the southwestern region would increase from 10% to 45% (IDB, 2013d).

Cities are important to the Colombian economy. Nearly 75% of all Colombians currently live in cities (DNP, Barco. 2013). Cities are a strong engine for growth and competitiveness, while improving the quality of life of their residents. According to the DNP, 73% of all skilled labor is concentrated in four cities or regions (Bogotá, Medellín, the Caribbean, and Cali), at the same time there are economies of agglomeration seen in a positive correlation between productivity and the size of the city (see Graph 23). Similarly, nearly 85% of the GDP is generated in cities. For example, the GDP produced in 2012 by the three main departments was 47.1% of the total, with Bogotá producing one-fourth (24.7%).



Source: Ramírez et al. (2014).

Lack of mobility inside cities imposes a high cost on productivity and growth. In the main cities, urban mobility is complex, leading to higher transportation times that significantly affect the cities' competitiveness and the quality of life of their inhabitants⁵². The Cities Mission (DNP, Barco, 2013 and CONPES, 2014a) highlighted city traffic congestion as a true bottleneck for cargo and passenger transportation,

52 It is estimated that in cities of Latin America and the Caribbean, the social value of time dedicated to transportation is equivalent to 3% of the GDP (ECLAC, 2002) and that on average citizens spend the equivalent to 10 work weeks of the year in transportation (IDB (2014f)).

leading to travel times in excess of two hours to travel a few kilometers. In the last decade, public-transportation users' intention has gone down from 73% to 51% from 2002 to 2012 (DNP, 2014b). Consequently, the use of private vehicles increased from 18% to 29% in the same period⁵³, with a sharp increase in the motorization rate⁵⁴. As a result, urban mobility has been affected by high traffic levels, pollution, and other associated externalities⁵⁵. Colombia also has one of the highest accident rates in the region, with the highest rates for traffic morbidity and mortality occurring in the cities, with 70% of all deaths (mainly motorcyclists, pedestrians and cyclists) and 85% of all injuries⁵⁶. Road safety is therefore a serious public health problem with an impact on the economy, estimated at 2-3% of the annual GDP⁵⁷.

There are inefficiencies in freight transportation services. For example, in 2011, the average distance traveled by trucks each year in the United States was approximately 106,000 km; this contrasts with the average of 56,000 km in Colombia (Federal Highway Administration, 2012). One of the causes is the poor condition of the roads. There are also problems with the organization of the freight transportation industry, especially in terms of: (i) an aging fleet⁵⁸: nearly 40% of trucks (not including dump trucks) has been in operation more than 15 years, which leads to high operating costs, low returns and negative externalities; (ii) informality: 90% of the freight fleet is owned by individuals or by small associations (CONPES, 2013), which tend to be less efficient and offer less safety; (iii) reliability is low for the services provided: traceability and meeting dispatch times are ranked at position 111 and 108 among 160 countries (World Bank, 2014f), respectively; and (iv) freight transportation prices are regulated at the level of the less efficient companies, increasing average transportation costs⁵⁹.

Climate change affects the country's infrastructure. The climate conditions generate high costs for building infrastructure and greater depreciation of the existing capital.

53 Data for Cali, Bogotá, Cartagena, Medellín, Barranquilla, Ibagué, Bucaramanga, Valledupar, Pereira and Manizales: DNP (2014b).

54 Between 2000 and 2012 the motorization rate increased by 62.9%. The motorcycle market has grown by 40% in the past 4 years. In 2011 alone, there were 5,792 fatalities (12.6 for every 100,000 inhabitants) – Ministry of Transportation (2014).

55 This situation is reflected mainly in Bogotá, where motorization has increased up to 10% per year and where the average speed is 23 km per hour.

56 In 2011 alone, 5,792 fatalities were recorded (12.6 per 100,000 inhabitants). Ministry of Transportation (2013).

57 Measured in terms of years of life lost or not productive due to injuries (Bhalla, 2012).

58 Figures from the Registro Único Nacional de Tránsito (RUNT): www.runt.com.co.

59 IDB (2014) Presentation to President Juan Manuel Santos on Colombia's development challenges.

It is estimated that the heavy rains produced by La Niña weather cycle in 2010 and 2011 produced losses in the transportation sector in the amount of \$3.4 trillion pesos (30% of all damages). This was equivalent to 0.62% of the GDP of 2010, nearly half of the investment in infrastructure that year. Six percent of the losses were on highways (Chart 3) (IDB/ECLAC, 2012). Infrastructure Committee).

Chart 3. Colombia – Losses caused by the 2010-11 Rainy Season

Mode	Assessing losses (in millions of pesos)	Participation (%)	% of GDP
Primary roads	1,379,637	40.7	0.254
Secondary and tertiary roads	1,856,981	54.8	0.342
Railways	68,133	2.0	0.013
Airports	60,410	1.8	0.011
Riverine ports	23,120	0.7	0.004
Sea ports	2,873	0.1	0.001
Total	3,391,154		0.62

Source: IDB and ECLAC (2012).

Proposals. The following actions are suggested: (i) increase investment in transportation infrastructure for expansion and maintenance; (ii) develop infrastructure in urban areas; (iii) reform the regulations for the freight transportation sector; and (iv) develop a resilient infrastructure in order to reduce the impact and the cost of climate change.

Increase public investment in transportation to 3.5% of the annual GDP. The projection for investment in the sector includes paving the entire primary and secondary network, including execution of the 4G Road Concessions Program, which would mean going from 25,000 km to 60,000 km of paved roads. It also includes the expansion of the national primary network with the construction of 45,000 additional kilometers of paved road (Yepes et al., 2013). This is a 20% increase in the total road network and a 320% increase in the paved road network⁶⁰. The proposal also includes improving the total tertiary network (140,000 km), an investment of nearly US\$20 billion in rehabilitation alone. Similarly, and in response to needs for expansion to develop the country's agricultural sector, the strategy includes an increase of 10% in the tertiary road infrastructure, equivalent to an investment of US\$7 billion.

60 It is important to point out that the proposal considers investment in routine and periodic maintenance of the entire road network for 20 years.

Develop urban infrastructure. A recent study (Yepes, 2014) estimated that Colombia would have to invest 1% of the GDP per year over a period of 20 years to close the current gap and meet the future demand for urban infrastructure in the 151 municipalities belonging to the Cities System. This investment includes three sectors: housing⁶¹, transportation⁶² and facilities. Other infrastructure inherent to cities, such as that associated with water and sanitation, storm drains, solid waste, healthcare and education are considered in other sections of this document. In light of the various needs and challenges faced by the structures in the Cities System, investment needs vary. On average, the cities with a single node require an annual investment on the order of US\$160 per capita. This value is higher than the majority of the urban agglomerations, except in cases such as Duitama, Tunja and Villavicencio, which require annual per capita investments of up to US\$190.

Reform regulations in the freight transportation sector. The modernization of the fleet for transporting cargo is key to improving efficiency and reducing the transaction costs of the economy. The establishment of the Transportation Infrastructure Regulatory Commission, as a robust and independent technical institution, is crucial to moving ahead with the sector's regulatory agenda, which includes: (i) implementing a limit on useful life and unfreezing the vehicle fleet in order to promote the entry of new and efficient vehicles that will reduce transportation costs, with transition mechanisms and incentives for removing older vehicles; (ii) formalizing transportation companies and recognizing carriers as sole proprietorship companies to promote the provision of the service through legally incorporated companies that operate under optimal corporate standards; (iii) implementing intensive training and stimulating the empowerment of small carriers; (iv) distributing risks across the goods: transportation companies must have a civil liability policy for the transported goods and the freight shippers must have transportation insurance for the goods; (v) free prices: total deregulation of transportation costs will enable more competition in the market and reduce

61 To close the gap in the current quantitative housing deficit and the future demand, the estimated required investment is COP\$3.51 billion per year, equivalent to 0.51% of the GDP. This calculation only estimates the quantitative deficit; as for the qualitative deficit, although important, there are no recent estimates.

62 Includes investments in the road network. These estimates do not include the investment needs for the SITM and the SETP, nor for the large public transportation projects in the main cities, i.e. the Metro of Bogotá.

transportation costs⁶³; and (vi) update the current Transportation Code, moving toward a single and simplified regulatory framework.

Develop resilient infrastructure to reduce the impact and cost of climate change.

To guarantee adequate quality for the infrastructure that will support the country's growth, public and private investment processes must incorporate adaptations to climate change. Examples of resilient infrastructure include: (i) designs adapted to the changing conditions of land, watercourses and climate; (ii) redundant infrastructure systems, and, (iii) increased safety and capacity to respond to natural disasters.

Boxes 6 and 7 below describe opportunities and actions in transportation and urban development infrastructure that the Private Sector of the IDB Group has identified in Colombia, and the projects that serve as example in other countries in the region.

Box 6. The Private Sector of the IDB in Transportation

	Opportunities	Examples of Projects
Financial support to the overland transportation sector	The fourth generation concession plan (4G) presented by the government of Colombia to improve roads requires an investment of 26 billion dollars to build more than 8,000 km of new roads, including 1,370 km of double lanes and 159 tunnels.	<i>Transjamaican Highway (JA-L1022)</i> : The private sector of the bank funded an expansion of 17 Km west of the existing concession, in addition to refinancing the debt to a shorter term, which the company used to fund the initial phase of the construction works.
Financial support to other investments in the transportation sector	The Colombian government has announced an ambitious project to expand the port of Buenaventura, located on the Pacific coast, as well as seven minor ports in the Atlantic and three in the Pacific region. The government expects the private sector will present projects to expand the railway network to move more freight. Further works are expected in an amount of more than US\$500 million at the Cali airport, the improvement and construction of an airport in Ipiales and in Barranquilla, and improvements to 23 local airports.	<i>Juan Santamaria Airport (CR-L1037)</i> : The private sector of the Bank funded the expansion and restoration of the international airport in Costa Rica to double its capacity. The expectation is that in the next ten years the airport will generate an average of US\$45 million per year that the government of Costa Rica can use to fund the construction and maintenance of other national airports and to support the operations of CETAC and other related institutions.

63 Among the international experiences that may be considered, it is worth pointing out the cases of Argentina, Brazil, Mexico and Chile, which have eliminated price controls and restrictions on the size of the vehicle fleet, and have imposed a maximum age for the vehicles.

	Opportunities	Examples of Projects
Urban Transportation	It is expected that the government will consider various projects following the Transmilenio model, as well as a metro line and a network of suburban light trains in the areas surrounding Bogotá.	<i>Lines 2 and 4 of the Lima Metro (PE-L1147)</i> : The private sector of the bank approved in December 2014 a funding package for US\$750 million including loans and collateral to build lines 2 and 4 of the metro system in Lima, Peru. The system will have 35 stations and serve at least 660,000 passengers on a daily basis.

Box 7. The Private Sector of the IDB in Urban Development

	Opportunities	Examples of Projects
Support to mortgage brokers	More credit must be directed toward this sector to respond to the expected demand. Loans can supplement recent government actions to stimulate the acquisition of housing by low-income households.	<i>La Hipotecaria (RG-L1032)</i> . Partial credit collateral for the institution expanding the sector in Colombia, Panamá, and El Salvador.
Support to the development of the secondary mortgage market	The allocation of mortgage titles is not a common practice in Colombia. Non-Sovereign Guaranteed (NSG) operations can support activities that encourage the development of a secondary market for mortgage securitization.	<i>A Facility for Mortgage Securitization (BR-L1281)</i> . The bank provided a credit collateral to facilitate the secondary mortgage market in Brazil.
Introduce innovative arrangements for funding housing for vulnerable population groups	There are various mechanisms to fund housing for low-income households. The NSG operations can provide resources to implement these mechanisms.	<i>COMFAMA (CO-L1106)</i> . The IDB granted a loan of \$6 million for a project in Antioquia that introduced a rental contract with a purchase option for low-income families.

VII. Effectiveness of Public Administration

Institutions determine the volume, quality, timeliness and accessibility of services provided to people. They can also reduce obstacles to productivity and corporate growth and are a factor for certainty in transactions and in conflict resolution (IDB, 2015d). This policy area focuses on public revenues, the efficacy of public investment, and government administration. The action lines are: (i) working out a **tax agreement** to improve central and subnational governments revenues; (ii) increasing the **quality of expenditures** and the **capacity to manage public investment** at all levels of the government; and (iii) improving the **quality of the justice system**.

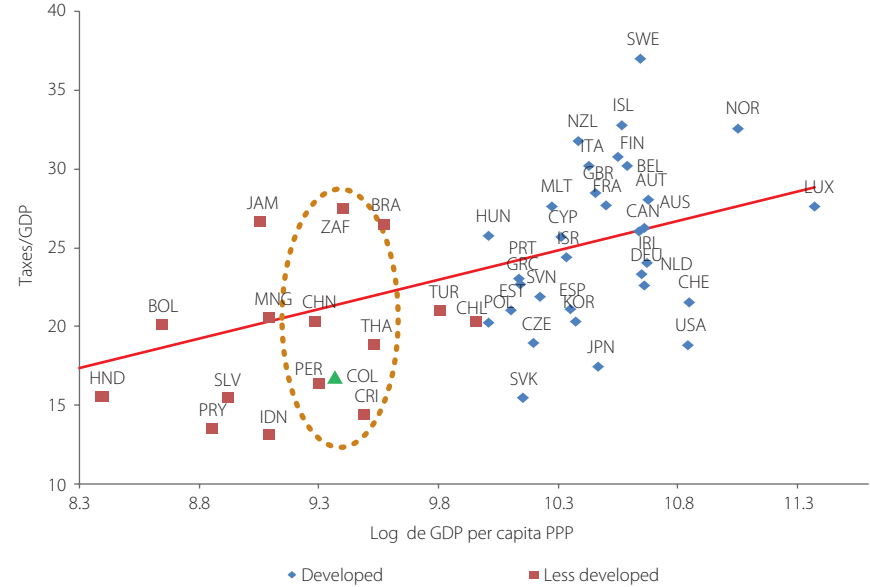
Work out a Fiscal Pact to improve public revenues and the State's investment capacity

Colombia needs greater tax muscle. Tax revenues are low. From 1990 to 2012 there were more than 20 modifications to the tax system in Colombia (Acosta et al., 2012) aimed to increasing public revenues, achieving greater economic stability, and making investments associated with government programs. Revenues for the Central Government and regional administrations, however, have not exceeded 18% of the GDP (Graph 24). This level of tax pressure is low compared to the OECD average (26% of the GDP), and also compared to some countries in South America such as Argentina (29%) and Brazil (26%)⁶⁴. Limited tax collection is primarily determined by three factors: (i) a tax structure with incentives and exemptions that permeate the tax base; (ii) poor tax administration; and (iii) the informality of the economy⁶⁵.

64 As per a study by the IMF (Fenochietto and Pessinio (2013)), following a frontier analysis for 113 countries, the potential collection of Colombia, including social security, is 33.4% of the GDP.

65 First report of the Experts Commission for Equity and Tax Competitiveness – Diagnosis of the problems that affect the Colombian tax system (2015); Steiner, R. and Medellín, J., (2014), Corbacho et al (2013); Jorrat (2010).

Graph 24. GDP per capita PPP vs. Taxes/GDP-2012



Source: FMI (2013).

Note: Ordinary tax income of the General Government. Excluding social contributions and capital income.

Tax exemptions are one of the main problems in the tax structure. Tax expenditure is estimated in Colombia at 4.5% of the GDP, divided between 2.4% from income tax and 2.1% from VAT, due to the more than 200 exemptions that represent approximately 30% of tax collection⁶⁶. A recent study shows that homes from the wealthiest decile spent 31% of their total expenditures on exempted goods and 62% of their expenditures on goods taxed at the lowest rate, which suggests that the current tax exemption system does not favor the principle of fairness (Steiner and Cañas, 2013).

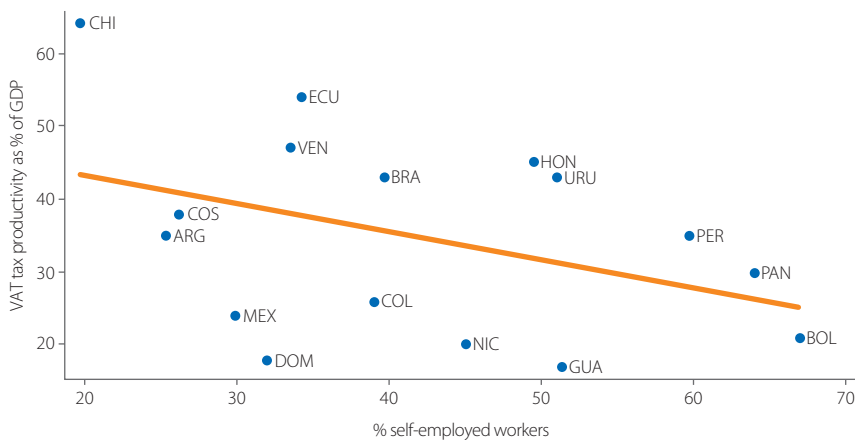
Auditing is a challenge. Poor auditing reinforces evasion and low productivity of tax collection. The DIAN has offices in only 43 of the country’s 1,121 municipalities; the tax officer to inhabitant ratio is 1 to 10,000, half the regional average; and only 0.1% of active taxpayers are audited, a figure that is substantially lower than the regional average. With regard to audits, while there were 8,676 in Colombia in 2010, that year

66 In the case of VAT, goods and services with exemptions or differential rates include beer, games of chance, chocolate, cleaning services, guard services, temporary employment, and tourist services provided to residents abroad that are used in Colombia. Source: IDB, Jorrat (2010).

the number of inspections was 57,820 in Mexico, 74,500 in Argentina, 102,193 in Peru and 565,373 in Chile (Corbacho et al., 2013).

The high informality of the economy increases tax evasion. High informality contributes to evasion. In the case of income tax and VAT, it is estimated that evasion is 4% of the GDP⁶⁷ (Graph 25). The tax burden and labor costs discourage formalization. In addition, the fact that informal businesses do not pay taxes imposes additional and inequitable costs on taxpayers.

Graph 25. VAT Productivity and Informality

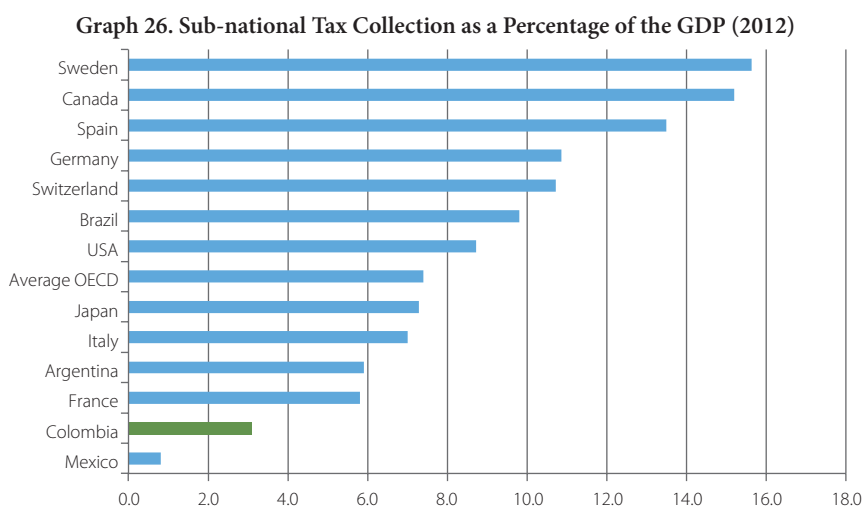


Source: Perry et al. (2007).

There is room for improving sub-national tax collection. The Departments and municipalities currently collect approximately 3.1% of the GDP, which contributes 18% to the country's tax collection. These amounts are well below OECD countries, which (IDB, Corbacho et al., 2012) collect an average of 7.4% and 33%, respectively (OECD, 2014). Even compared to Latin American countries where sub-national collection is quite modest, Colombia has a collection level well below Brazil's and lower than Argentina's, countries with a similar level of decentralization to that of Colombia, collecting 9.8% and 5.9% of the GDP, respectively. Graph 26 shows the sub-national collection for a set of OECD countries and Latin America

⁶⁷ In accordance with Corbacho et al. (2013), in the case of VAT, some authors calculate evasion at 36% of the potential collection, equal to approximately 3% of the GDP. Steiner and Medellín (2014) estimate that, retaining the 16% rate for VAT, if evasion is reduced to the levels in Uruguay and Chile, VAT collection could increase by 1.4% of the GDP.

with high levels of tax decentralization. The following are some of the reasons for the behavior of sub-national finances in Colombia: (i) outdated tax bases; (ii) poor capacity for tax management and control; and (iii) low taxes on property and economic activities in comparison to their potential level. The current mean efficiency for property taxes is estimated at 46% of its potential collection and the efficiency of the Industry and Commerce Tax (ICA) is estimated at 30% (IDB, España et al., 2011). The following are some of the primary failures in property tax: (i) the lack of updating for the real estate registry (cadastre); (ii) exemptions that cover 10% of the properties in the country; (iii) poor auditing; and (iv) low effective rates⁶⁸. In turn, the effectiveness of the industry and commerce tax is affected by: (i) the high rate of informality; and (ii) failures in auditing by the regional administrations. In addition, conditional transfers by the National Government are infrequently linked to the collection performance of regional administrations, and the limited autonomy of those institutions in levying and collecting their taxes does not create the right incentives for improving collection by the municipalities. In the case of departments, in addition to their limits with regard to autonomy, they have a limited tax base that depends on taxes such as cigarettes, liquor, beer, registrations, and vehicles. In 2012, these taxes generated incomes equivalent to 0.8% of the GDP.



Source: OECD. For Argentina and Brazil, Corbacho et al. (2013).

68 Although the municipalities are authorized to charge a rate in a range from 0.3% and 1.6%, the average rate is 0.5%.

Proposals. To progressively increase tax collections, under a National Fiscal Pact, the following should be done: (i) approve a comprehensive tax reform to increase collection to at least 6% of the GDP within a period of seven years; (ii) increase the number of taxpayers and prevent more pressure on those who are already paying; and (iii) take the sub-national collection to the levels of OECD countries

Approve a comprehensive tax reform to increase collection to at least 6% of the GDP within a period of seven years. To achieve the goals for growth through public investment that are proposed in this document, the tax policy and tax administration must be reformed to gradually raise collections at both government levels by at least 6 percentage points of the GDP over 7 years. An additional 3.5% of the GDP could thus be devoted to public investment and 2.5% to current expenditures associated with the increase in investment. An analysis of the Colombian tax structure in comparison to tax productivity in the international experience, especially Argentina, Brazil, Chile and Uruguay, shows that the potential for the main national and sub-national taxes in Colombia (VAT, income tax, property and ICA) could reach 13.1% of the GDP, in addition to current collections. A conservative estimate of the actual increase of taxes in Colombia that would be produced by a comprehensive tax reform such as the one adopted in this document, could lead the country to collect between 6.1% and 8.6% of the GDP (see Chart 4). This level of collection could be reached progressively, starting by increasing the tax base and reducing exemptions, reducing tax evasion, updating appraisal values, and then adjusting the rates.

Chart 4. Proposal for a Comprehensive Tax Reform

<i>National Collection</i>			
Tax	Concept	Potential	Goal Range
VAT	Evasion	2	0.8-1.2
	Tax expenditure	2.5	1.3-1.7
	Rate change (from 16 to 18%)	1	0.7-0.9
Income tax	Evasion	2	0.8-1.2
	Tax expenditure	2	0.8-1.2
<i>Subtotal</i>		9.5	4.4-6.2
<i>Sub-National Collection</i>			
Property tax	Rate change plus appraisal	1.6	0.8-1.2
ICA	Evasion	2	0.8-1.2
<i>Subtotal</i>		3.6	1.6-2.4
Total		13.1	6.0-8.6

Increase the number of taxpayers to avoid greater pressure on those already paying.

The concept of this reform starts by extending the tax base instead of increasing the pressure on the relatively few current taxpayers. In 2010, 17.3% of the country's population were registered taxpayers, an amount lower than the average for Latin American countries (23%) and lower than the mean for OECD countries (59%) (IDB, CIAT, CAPTAC-DR. 2013). In terms of tax policy, the first step would be to reduce the number of VAT and income tax exemptions to increase collection by an average of 2.2% of the GDP⁶⁹. Another priority is to increase the number of audits, especially of VAT and income tax, to reduce evasion in an amount equal to an additional 2% of the GDP. Increasing auditing may also help identify informal companies and register them as taxpayers. Finally, in a subsequent phase within the seven-year period for this reform, the VAT rate may be adjusted by 2 additional points to take it up to 18%, closer to the international standard. This adjustment could add 1% of the GDP to tax collections. On average, this sequence of policy actions could increase central government collection by approximately 5.2% of the GDP. In the case of direct taxes for firms and corporations, the effective tax burden is excessively high compared to the region's countries and the OECD average. In Colombia, the combination of income tax, CREE⁷⁰ and the wealth tax can reach a rate of 51% (CIAT, 2013), compared to the average for the countries of the region and OECD countries at 32% and 27%⁷¹, respectively. The productivity of income taxes in Chile, with a 20% tax rate, and with collection at an amount of 5% of the GDP, suggests that in Colombia high tax pressure is exerted on a small base of taxpayers, generating 5.6% of the GDP. With regard to the income tax paid by individuals, extending the tax base would require: (i) lowering the current exempted minimum equivalent to 2.8 times the GDP per capita to the Latin America average, 1.4 times, using a moderate tax rate; and (ii) taxing dividends as part as corporate's income tax. Lastly, as collection increases over the target of 6% of the additional GDP, the tax burden on companies should be reduced, especially eliminating the wealth tax, as well as the tax on financial transactions (GMF).

Take sub-national collections to international levels. Even though Colombia's sub-national collection levels are higher than the regional mean, there are significant gaps in collection. The effective rates for property taxes are in the lowest range authorized

69 International practice shows that in the case of VAT, for reasons of social equity, exemptions should be applied only to basic need commodities.

70 Income tax for equity.

71 Own calculations based on OECD (2014). Corporate income tax rate database, Paris.

by law. In addition, property appraisals are significantly lower than market value and property registration is outdated, especially in rural areas. A recent IDB study shows that, on average, properties are undervalued by 40%-50%, and 25%-39% of property registrations are outdated. If the effective rates remain at their current levels, it is estimated that just by updating property registrations, there is potential for increasing collection by 0.8% of the GDP (España and Sanchez, 2014). In addition there is the potential increase in the effective rate for property taxes, which could go from 0.5% to 1%, closer to the international standard, raising collection another 0.8% of the GDP. In the case of the business tax (ICA), it is possible to increase the number of registered taxpayers by improving audit and collection systems. Thus, it is estimated that an average increase of 2% of the GDP could be collected for the two taxes. Such an effort is not impossible in Colombia. A number of municipalities have started improving collection, as shown in the case of Barranquilla (see Box 8). In turn, with regard to the country's departments, measures must be taken to increase their revenues, potentially including a higher collection responsibility based on: (i) a tax surcharge on semi-mobile goods such as gasoline; and (ii) proceeds for participating in auditing national and municipal taxes. Finally, within the framework of this effort to update sub-national finances, the following measures should be studied: (i) reform of the General Participations System (SGP), that could be tied to local collections and contribute additional resources to those sub-national governments that make significant efforts in that direction; and (ii) a direct financing mechanism to regional and local institutions using sovereign guarantees, based on a rating for fiscal responsibility and indebtedness capacity. This mode of financing should be limited to public investment to support the national effort toward rapid economic growth.

Box 8. Barranquilla's Own-Revenues

Until the first half of 2008 tax revenue management in the District of Barranquilla was outsourced. Institutional structure was weak and there was a lack of leadership. In order to increase tax collections and secure the resources necessary to execute the city's Development Plan, a strategy was designed to increase own-income based on five pillars: (i) substantive procedural review of district taxes and revision of the Tax Code to make paying taxes simple and clear for taxpayers; (ii) updating of the property appraisals for around 320,000 properties in the city; (iii) technological modernization of the tax administration to make sure taxpayers are registered and fulfill their

duties, and to guarantee actions by the administration; (iv) restructuring of the tax administration, adapting processes to the new Tax Code and strengthening the administration's human resources, and (v) implementation of tax obligation fulfillment programs through audits and the collection of delinquent debts. The results have been successful (see Graph 27). Tax income increased 1.8 times in real terms in the period between 2007 and 2014. This can be explained by: (i) improved payment of all local taxes, especially the unified property tax and the ICA tax, which together represent 75% of all tax revenue: (collection of both taxes increased 1.7 times between 2007 and 2014); (ii) collection of delinquent debts, equal to 9% of the total collection between 2008 and 2014; and (iii) control of tax evasion equal to 2.5% of collections in 2014.

Graph 27. Evolution of Tax Revenues in Barranquilla



Source: Barranquilla Major's Office: Secretary of Finances.

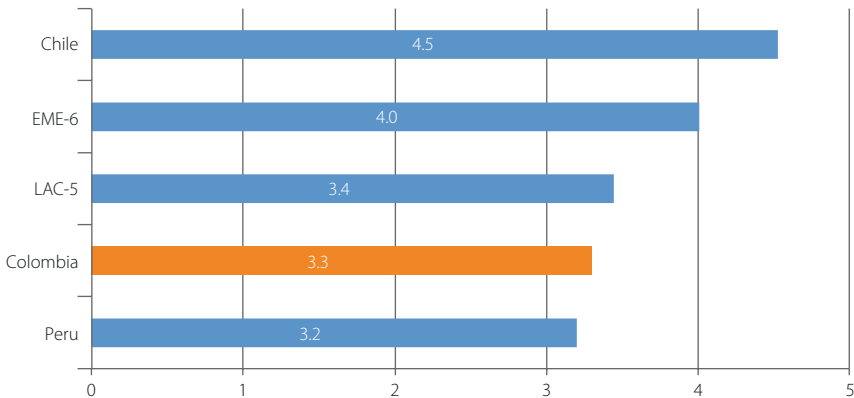
Increasing the Quality of Expenditures and the Capacity to Manage Public Investment at all Government Levels

Compared to the international experience, Colombia has low efficiency in government and in the management of public investment. Colombia has a low capacity for executing public expenditures, and a deficit in quality in investments and public utilities, in civil service and policy implementation. In the WEF government efficiency index, Colombia is below average for LAC-5, EME-6 and

Chile⁷² (see Graph 28, top panel). The efficiency index for the implementation of public investment, calculated by the IMF, places Colombia in the lower part of the international distribution, with a score of 2.1 against 2.7 for Peru, and 3.3 for Brazil and Thailand (see Graph 28, bottom panel). At the beginning of this document, an IDB study was quoted stating that efficiency in public investment in Colombia is 74% of the average efficiency of OECD countries and less than 50% of the efficiency of countries with a higher relative development in this area. More than half of Colombia's inefficiency in the use of factors is explained by problems with public administration (IDB, Giménez et al., 2015).

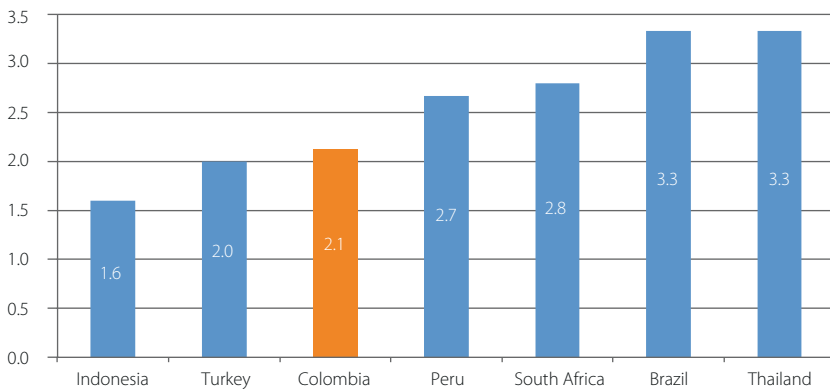
Graph 28. Government Efficiency Indicators

The Global Competitiveness Index 2014-2015: Government efficiency



Source: WEF (2014).

Public investment efficiency - Implementation

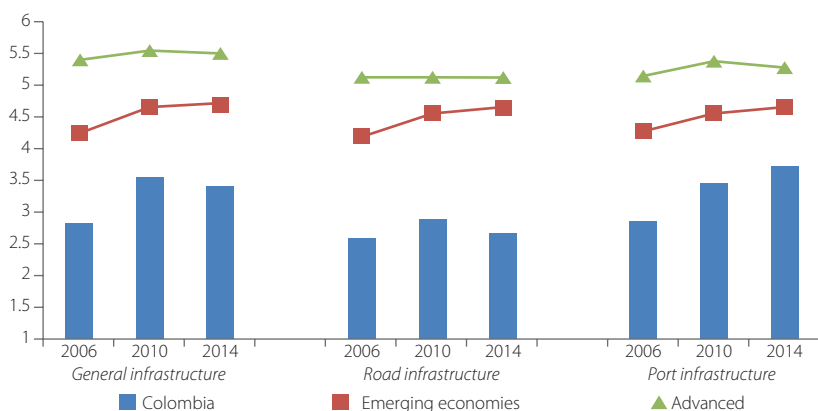


Source: FMI. Dabla-Norris et al. (2011).

72 WEF (2014). Government Efficiency Index.

Colombia can increase the efficiency of its investments, with the same level of public resources it currently uses. Despite the fact that Colombia's public investment expenditures increased by more than one percent of the GDP between 2006 and 2012 (from 2.4% to 3.6% of the GDP), the low quality of the infrastructure is still a constant, in contrast with the evolution of comparable countries, and is far from reaching the standards of OECD member countries (see Graph 29). The results of the efficiency analysis carried out by the IDB showed that Colombia could increase the efficiency of its infrastructure investment by 49% with the same level of investment⁷³. These estimates suggest that there is significant room for improving the quality and efficiency of investment expenditures in Colombia. In terms of quality, the relationship between the quality of infrastructure and per capita GDP indicators (see Graph 30) shows that along with its peers in the region, and given its income level, Colombia is not taking advantage of the potential for its level of investment. Relative to sub-national public investment, since the creation of the General Royalties System (SGR)⁷⁴, projects have been approved for 50% of the 2012-2014 multiannual budget. But by the end of 2014, works had been concluded for only 2.5% of this budget. Projects approved and under execution averaged 32% across the country. In zones of extreme poverty, such as in areas of the Pacific and the Caribbean, execution levels are diverse. In the two departments with the highest levels for extreme poverty, Choco and Cauca, execution is at 16%, while in Guajira and Córdoba it is at 46% and 49% (IDB, Giménez et al., 2015).

Graph 29. Infrastructure Quality Indicators (1=worst; 7=best)

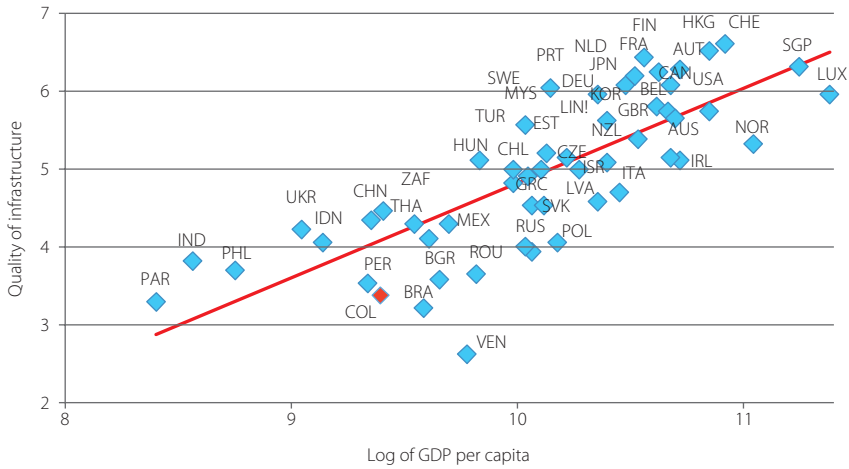


Source: Own calculation based on WEF (2014).

73 IDB, own calculations.

74 Transfers to sub-national governments of resources from mining and hydrocarbons production, on the order of US\$11,000 million in the period from 2012 to 2014.

Graph 30. Infrastructure Quality and Per Capita GDP (2013-14)



Source: Own calculation based on World Bank (2014a) and WEF (2014).

Institutional shortfalls are the main obstacle to the execution of public investment.

According to the IDB study (IDB, Giménez et al., 2015) mentioned above, within the period from 1996 to 2011, more than 50% of the inefficiency in the use of physical and human capital affecting public investment could be explained by deficiencies in public management⁷⁵. There are many institutional obstacles that generate inefficiencies in the execution of the expenditure, including the following: (i) a proliferation of rules and licenses to be processed for each investment process, both in the central government and in departmental and local instances; (ii) controls and decisions that multiply and overlap, without appropriate coordination; and (iii) citizens consultation processes that, though commendable, take excessive time and quite often impose changes on the original schedules. The main consequences of these factors are delays, cost increases over those initially foreseen and budgeted, designs and works with no appropriate quality control, deficiencies in supervisory systems and construction defects, lack of public information about investments, and complaints from citizens. The excessive transaction costs of the current regulations (environmental licenses, prior consultation, and land acquisition) explain the situation in part. For example, see Box 9 on the impact of prior consultation on the cost of infrastructure projects. It is estimated that the average delay caused by prior consultation processes for infrastructure projects is approximately 64 months. This may generate cost overruns

75 Measured by the Government Efficacy Index of the World Bank (2014c).

in the approximate amount of US\$9.1 million per year for a typical project, including direct and indirect costs, regardless of the nature of the project. This is in contrast to the time recorded by the Prior Consultation Directorate (DCP) at the Ministry of the Interior as the average for regular cases, which is 6 months (IDB, Giménez et al., 2015). Lastly, infrastructure projects operating as a concession are characterized by higher cost overruns, and greater delays and conflicts than those seen in, for example, Chile or Peru. For the period between 1994 and 2010, the increase in the fiscal cost of renegotiating the initial cost of the contract was 279% in Colombia, versus 20% in Chile and 27% in Peru (Yepes et al., 2013).

Box 9. Impact of Prior Consultation on Infrastructure Projects

A study by ANIF (2014b) on the impact of prior consultation on 5 cases of infrastructure projects of strategic interest (PINES) yielded the following results:

Case	Indicator		
		Delay in execution (in months)	Cost (% contract value)
1	Total	36	7.5%
	Government	34	6.7%
	Communities	2	0.8%
2	Total	71	98.8%
	Government	49	68.2%
	Communities	22	30.6%
3	Total	50	0.3%
	Government	24	0.14%
	Communities	2	0.2%
	Company	24	0.14%
4	Total	83	N/A
	Government	11	N/A
	Communities	12	N/A
	Company	60	N/A

Note that for case 5, the prior consultation process was very short compared to the other cases studied. It may be deduced that the factor that allowed the process to flow more quickly was the high value for compensation and contracting advisors from the communities. The average delay caused by a prior consultation process for infrastructure projects, based on the cases analyzed, is estimated at approximately 64 months. This may generate costs overruns to a project of approximately US\$750,000, including implicit and explicit costs, regardless of the type or nature of the project.

Source: ANIF (2014b).

Civil service shortcomings. In 2013 the current administration adopted the National Policy for Administrative Efficiency at the Service of Citizens, focused on improving the effectiveness, cooperation and efficiency of institutions in the national executive branch. It also introduced new tools that would reform the civil service through performance evaluation and the identification of job competencies. The guidelines of the Integrated Planning and Management Model were also established, along with its evaluation through the Form on Advances in the Work. Even considering this progress and other advances, relative to budget management “it has given greater priority to the logic of sources over the logic of uses, disregarding the fact that for common citizens what is relevant are the goods and services delivered” (DNP, 2014b). In addition, even when there is a follow up and assessment system in place (DNP, 2014c), it is insufficient for guiding decisions on public investment. In accordance with a recent study performed by the Universidad de Los Andes, as of July 2014, only 271 entities out of approximately 6,300 had reported their information on personnel contracts to the Information and Management System on Public Employment, which has information on 165,024 public jobs (14% of the total). The report also demonstrates that the public employment system has an excess of classifications and grades that make for a rigid salary system that is difficult to manage, and there is no record of using job function lists to develop a functions manual. Profiles are not defined by competencies, nor are the roles of executives and directors defined; therefore, manuals do not fulfill their purposes. A need can also be seen for strengthening information and follow-up systems. As indicated in the Bases of the National Development Plan 2014-2018 “public information systems for institutional management also pose challenges with regard to obsolescence and lags compared to the systems used by the private sector. There are difficulties related to interoperability, information exchange and information quality that limit

management and decision-making processes within the State. These challenges are present in all branches of public power where appropriate information management models, communications infrastructure, document management, and security and information media are required to support administrative management.” Finally, the same DNP document recognizes the difficulty of coordinating sector guidelines with regional needs and competencies and the restriction on consolidating a management framework focused on results and goals.

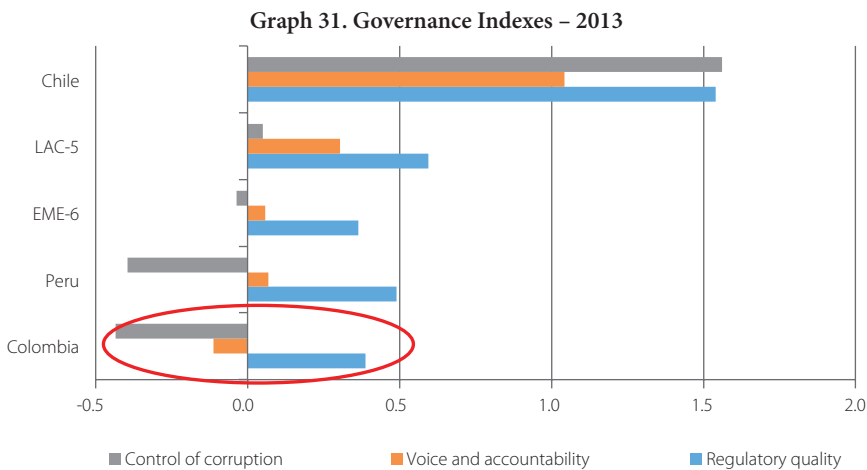
Information systems for State accountability and transparency are weak. A series of reforms by the government have sought to improve public information management mechanisms, including the creation of a series of portals with key information on strategic sectors, as well as the portal *Urna de Cristal* (Cristal Box) for communication between citizens and the government. Relative to transparency, the government adopted initiatives for strengthening State information transparency and accountability, such as *Mapa Regalías* (Royalties Map), with support from the IDB for monitoring investments with royalties resources. There is also a new law on Access to Information that includes provisions on transparency in the management of public utilities, among others. The indicators for regulatory quality, voice and accountability and corruption control, however, are also lower than LAC-5, EME-6 and Chile (World Bank, 2014c), (see Graph 31). Colombia faces challenges with regards to information management due to: (i) scattered systems, lack of standardization and difficult access; (ii) weakness in the integration and systematization of information; and (iii) deficient technological support infrastructure for generating information⁷⁶.

Proposals. Institutional difficulties hindering proper execution of expenditures can be overcome at the same time resources are increased for the investments proposed earlier on in this document. With the purpose of achieving this goal, policy should focus on: (i) lowering the transaction costs derived from rules regarding licenses and consultation; (ii) adapting the civil service to methodologies that allow greater and better results from public investment; and (iii) strengthening the role of the institutions in the Center of Government.

76 Economía Urbana, Evaluación al Programa para el Fortalecimiento de la Información Pública, Seguimiento and Evaluación para la Gestión por Resultados en Colombia. (Urban Economy, Evaluation of the Program for the Strengthening of Public Information, Follow up and Evaluation for Results-based Management), May 2012.

Lowering the transaction costs derived from regulations, licenses, and consultation.

Costs of current regulations, licenses and citizen consultation processes for investment projects are quite significant and contribute to the poor results for managing government investments. Without doubting that these types of safeguards should be protected and preserved in the execution of investment projects, it is essential to ensure that the regulations on these matters are applied with appropriate balance, where licenses are issued more quickly and citizen consultation processes are expedited, avoiding abuses of the regulations.



Source: World Bank (2014c).

Note: Scale between -2.5 (worst score) and 2.5 (best score).

Adapting civil service to methodologies that allow more and better results for public investment. Government efforts can be complemented with the introduction of reforms that incorporate a results-oriented culture similar to those once adopted by countries such as New Zealand or Australia (Lodge et al., 2013). This model gives decision-makers more autonomy and balances the goals of government authorities with those of public organizations, making more flexible even human resources management through the adoption of practices that promote professionalization of staff and a more appropriate relationship between the skills required and the competencies of human resources, focusing on meeting organizational goals (Schick, 2003). In these results-focused management models, policy functions are separated from functions related to delivering services and products to citizens. Results indicators are “negotiated” between those responsible for the policies and the

administrators of public institutions, and these indicators measure the performance and efficiency of these organizations. The goals and results of tax management can also be controlled in this manner. Countries that have begun using these practices have also strengthened their regulatory and auditing systems, orienting their public reports toward measuring the efficiency and performance of their public organizations, including, as in the case of the United Kingdom, the management of the teams closest to the government's highest authorities⁷⁷.

Strengthening the role of the institutions at the Center of Government. The reforms suggested for increasing State accountability and transparency require strengthening the Center of Government in four key functions: (i) strategic management; (ii) coordination and management of public policies; (iii) monitoring and improving performance; (iv) communicating results and accountability. In addition, in terms of monitoring the quality of planning and following up the work, gender indicators should be introduced to permit emphasis on policies targeting women's development, as in the experience developed in Chile under the Management Improvement Program⁷⁸.

Increase the Efficiency and Quality of the Justice System

The institutional framework of the justice system. The Constitution of 1991 created the Constitutional Court, the Attorney General's Office (*Fiscalía General de la Nación*), the Superior Council of the Adjudicature, and the Writ of Amparo (*Tutela*). In 1996, additional progress was made, simplifying and making the judicial processes more transparent, with the creation of oral trials that were implemented progressively in subsequent years. In 2014, the government introduced a bill to reform the judicial system, including the following measures: (i) replacing the Superior Council of Adjudicature with a National Government and Judicial Administration System to professionalize the management of the system; (ii) creating a disciplinary jurisdiction for judges and lawyers; and (iii) creating a Court for Officers with Immunity (*Tribunal de Aforados*) in charge of investigating and judging high court magistrates, the Procurator General (*Procurador*), the Comptroller, and the Attorney General (*Fiscal General*) to replace the jurisdiction of the Accusation Committee of the Legislative

77 See National Audit Office of the United Kingdom. Available in www.nao.org.uk/.

78 www.dipres.gob.cl/594/articles-114720_doc_pdf.pdf.

Branch. Resources assigned to the judicial power in 2014 were equal to 0.37% of the GDP, similar to the average for countries such as Argentina, Chile, Mexico, Peru and Uruguay; lower than Costa Rica and Brazil, which are 1% of the GDP⁷⁹ and higher than the average for OECD countries, which assign up to 0.21% of the GDP. This amount is comparable only to countries that have experienced armed conflicts such as Bosnia-Herzegovina with 0.60%, Macedonia with 0.40%, and Croatia with 0.36%⁸⁰.

Citizens have a negative perception of the judicial system. The last opinion survey conducted by Ipsos⁸¹ pointed to an increasing lack of confidence in these institutions. According to this survey, 77% of those surveyed believe that the justice system is not doing things correctly for the country to be able to move ahead. Seventy-three percent of Colombians said that they do not trust the high courts and their role. Sixty percent of Colombians have a negative perception of the Supreme Court of Justice, while the Constitutional Court, which a few years ago was one of the most respected institutions by Colombian people, is now negatively perceived by 57%. Among the factors that explain this perception are: (i) low efficiency of the judicial power; and (ii) corruption.

Procedural times and costs have improved, but there are still deficiencies. Enacting new laws has increased the workload of the Judicial Branch⁸². In 1993, 748,049 procedures were filed with this branch, while in 2013 there were 3,021,046 filed, that is to say, an upward variation of more than 300%. In addition, in 1993 there were 566,827 rulings handed down, while there were 3,272,608 rulings issued in 2013, corresponding to an increase of 477% during the period. Although the volume of cases filed with the Judicial Branch has increased significantly, the inventory of pending cases has been reduced as a consequence of the decongestion plans that incorporated 801 temporary judges dedicated to expediting proceedings and issuing rulings. The most significant indicators demonstrating these advancements are: (i) between 2008 and 2014 the procedural inventory went down 46.6%, going from 3,181,703 to 1,698,233; (ii) the response capacity has improved from 566,000 proceedings in 1993 to 3,137,876 in 2014, representing a 454% growth; (iii) in 2008, 76% of proceedings filed were resolved

79 Calculation based on the budget of the Judicial Branch. Latin America data: ANIF (2011).

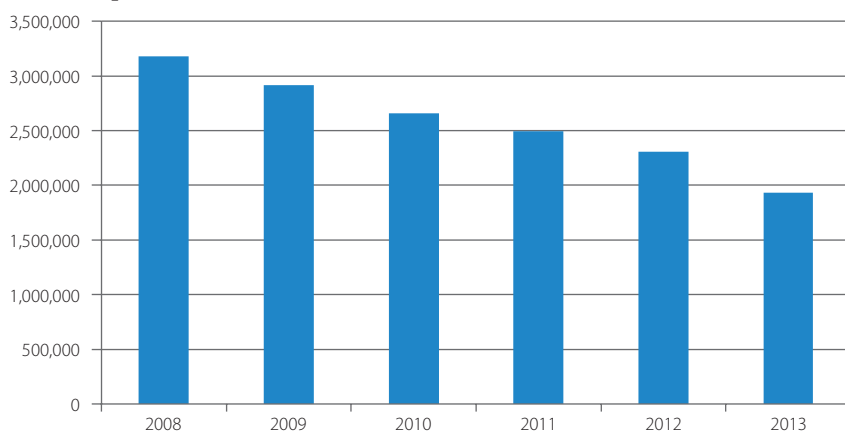
80 European Commission for the Efficiency of Justice (2014).

81 www.ipsos.com.co/?q=es/.

82 Between 2000 and 2011, 47 new crimes were typified. In addition, some laws have been enacted introducing new substantive competencies and new procedural arrangements. In the last 10 years, the country adopted new procedures for the criminal, contentious-administrative, and civil-labor and family jurisdictions. Source: Advisory Commission on Criminal Policy (2012).

while in 2014, ninety-two percent were solved; (iv) proceedings under the oral system went down by 73% in the criminal jurisdiction; in labor processes they diminished by 68%; and in commercial disputes, they decreased 6% (Superior Judiciary Council. 2014a) ; (v) the unit cost per proceeding decreased from US\$136,000 in 2007 to US\$46,000 in 2013, a 64% reduction⁸³. Despite this progress, citizens do not believe that cases will be resolved quickly or in a timely manner, based on the deficient performance of past years that has not yet been fully overcome (Sanchez et al., 2013).

Graph 32. Evolution of Final Inventories for Cases in the Judicial Branch



Source: Superior Judiciary Council (2014b).

Effectiveness is low for criminal investigations. The effectiveness index in Colombia is 0.2, similar to the LAC-5 average, except for Chile at 0.42. In contrast, the high income countries of the OECD have an index value of 0.62, with Austria being outstanding, for example at 0.84, Finland at 0.74, Canada at 0.73 and the United States at 0.65⁸⁴. This situation is due, among other things, to the lack of unified and interconnected information systems that can be updated in real time to allow inter-jurisdictional access and share databases.

There is evidence of corruption in the judicial system. According to surveys of users of the justice system in 95 countries, in Colombia, 19% of the respondents answered that they had paid a bribe. This is slightly lower than the average for Latin

⁸³ Own calculations based on information from the Superior Judiciary Council (2013).

⁸⁴ World Justice Project data (2014), Effective investigations on criminal justice index, values from 0 to 1.

America and the Caribbean at 23%. At one extreme, we have Mexico with 55%, and on the other extreme, Chile with 6% and Uruguay with 1%. The average for OECD countries is 5%, with it being 0% in some countries such as Korea, Japan and Finland⁸⁵. This causes citizens to continue to question the independence of the justice system. The credibility of the Judicial Power resides primarily in its independence. In the case of Colombia, the judicial independence index is 2.9, while the OECD average is 5.2, together with Chile; Costa Rica is 5.5, Canada 6.2, and the index in Denmark is 6.5, on a scale with a maximum score of 7 (WEF, 2014).

There is a high level of impunity for gender violence. Even though Colombia is one of the countries with the highest number of laws that punish gender violence, these types of crimes are still significant. As per official figures, in 2014 there were 37,881 cases of women beaten by their partners, 41,944 were victims of interpersonal violence, and 16,088 with the victims of sexual crimes (13,606 under the age of 18). To this must be added 1,007 murders of women, many of whom were the victims of abuse by their partners. The level of impunity is estimated to be higher than 90%⁸⁶. In this context, physical and sexual violence by a husband or partner affects 40% of all Colombian women between the ages of 15 and 49 at some time in their lives. This places the country in second place for abuse among the 12 countries in Latin America for which comparable information exists (Bott et al., 2014).

Proposals. To advance toward better performance of the justice administration in Colombia, the following actions are proposed: (i) consolidate the decongestion policy for the judicial system; (ii) update technological information and the infrastructure and support services for criminal investigation; (iii) promote public trust in the justice system, increasing information and transparency while combating corruption; and (iv) give priority attention to those at the greatest risk and who are most vulnerable.

Consolidate the decongestion policy of the judicial system. Colombia has made progress reducing procedural times by implementing oral proceedings and decongestion measures. The work of court offices could improve noticeably by

85 Transparency International (2013). Survey of 114,000 users of the justice system. The percentage indicates the number of persons who had used the judicial system and said they had paid a bribe. Available in: www.transparency.org/gcb2013/in_detail.

86 El Tiempo (2015): Based on estimates by the National Legal Medicine and Forensic Sciences Institute.

reducing failures in administrative work (such as assigning procedures, calendars, serving notice, auxiliary services for hearings, and protection of evidence). The main measure that accelerated judicial decisions was incorporating temporary judges to help with backlogged cases. These judges represent 14.3% of all magistrates. It is important to maintain this contingent, and gradually incorporate them into the judicial career on the basis of competitions.

Update the technological information infrastructure and support services for criminal investigation. Some of the advancements that can improve the performance of criminal investigation are: (i) implementing a technological platform to unify information from all of the justice services provided by the State; (ii) unique identification numbers for all cases heard by the authorities exercising jurisdictional functions; and (iii) an efficient mechanism for following up on compliance with jurisdictional decisions. In criminal investigation proceedings, the burden of the testimonial evidence should be appropriately complemented with the implementation of advanced technologies for expert services such as those recently implemented in Mexico.

Promote public trust in the judicial system by increasing information and transparency and combating corruption. The path toward a new paradigm for citizen communication and trust is based on producing true, timely and transparent information that is readily available to common citizens, using mass electronic and written communication media, as well as Internet-based social networks. The impact of corruption on public perception requires a recognition of the importance of imposing decisive penalties, beginning at the highest level of public responsibilities.

Give priority attention to those at the greatest risk and who are most vulnerable. Public policy on justice in the area of gender should include: (i) strengthening actions for attention to and prevention, punishment, and eradication of violence against women and help reconciling family and work life; (ii) harmonizing the application of civil and criminal legislation, giving attention to the regulation of the classification of crimes related to sexual freedom, sexual and reproductive rights, family integrity, free development of the personality, and fiscal and bodily integrity, and (iii) ensuring legal and *de facto* access to appropriate and effective legal resources for women, including *one-stop* integrated services, with access to counseling on sexual and reproductive health, and prevention of and attention to violence against women, in conjunction with services that support training for financial independence.

VIII. Social Mobility and the Consolidation of the Middle Class

Recent bibliography (IDB, 2014b) regarding Colombia's advancements in the social sector (poverty reduction, increase in size of the middle class and social mobility) finds that advancements measured by income are not fully reflected in better conditions in life, such as access to education, formal work, healthcare, pensions, water and sanitation. This section describes challenges in these areas with the following objectives: (i) to continue reducing poverty and eliminating extreme poverty, (ii) reducing the informality of the economy; (iii) consolidating a sustainable and inclusive pension and healthcare system; and (iv) increasing equal access to quality basic services.

Continue Reducing Poverty and Eliminating Extreme Poverty

Characterization of poverty. Poverty is a multidimensional phenomenon, measured by insufficient levels of income or expenditures (monetary poverty) and/or by the existence of unsatisfied basic needs. In the IDB Social Protection and Poverty Sector Framework document (2014b) social protection of poor and vulnerable population groups focuses on redistributive programs that support minimum consumption levels for the extremely poor. It also describes social inclusion programs to promote autonomy and accumulation of human capital by poor and vulnerable persons and to offer special protection to those with specific care needs due to their situation of dependence. A study published in 2012 by the IDB (Stampini and Tornarolli, 2012) shows that poverty in Latin America and the Caribbean would be an average of 13% higher if conditional transfer programs had not been implemented.

Even though Colombia has made progress in reducing poverty and extreme poverty, indicators for extreme poverty continue high among the rural population. In 2013, the rate for extreme poverty was 9% for the nation. Nineteen percent of people living in extreme poverty lived in the 13 metropolitan areas; 32% in non-metropolitan areas (“other urban”), and 49% in rural areas. While only 3% of the inhabitants of the 13 metropolitan areas were living in extreme poverty, this percentage was 11% in the “other urban” category and 19% in rural zones⁸⁷. The gap between urban and rural areas is even wider when other life quality indicators are included. In 2013, only 44% of extremely poor people in rural zones had residential water connections, in contrast to 92% of extremely poor people in other urban zones. Sanitation services connected to a network or septic tank were in place for only 53% of extremely poor rural people, in contrast to 91% of the extremely poor people in the other urban category. The extreme poverty rate is particularly high for minors under 5 years old. Twenty-six percent of children under 5 are living in extreme poverty in rural areas relative to 10% in urban areas (IDB, 2015f).

Coverage by social protection. This document focuses on three key programs that constitute the core of social protection for poor and vulnerable people in Colombia. The Conditional Monetary Transfer Program, i.e. *Más Familias en Acción* (MFA), targeting all poor people, assists about three million families. The social inclusion program, *Red Unidos*, targeting extremely poor people and focused on ensuring they can access the public services available to them, reaches almost 1.5 million families⁸⁸. Lastly, the Early Childhood Development services (DIT) of the Colombian Family Welfare Institute (ICBF) benefit 1.5 million children. Despite the fact that 49% of extremely poor people live in rural areas, as mentioned, the percentage of rural beneficiaries is only 44% for MFA, 40% for the *Red Unidos* and 28% for the ICBF (see Graph 33). It is estimated that 68.6% of extremely poor people in rural areas living in families with children are beneficiaries of the MFA. This situation is explained, at least in part, by the focus of the MFA and *Red Unidos* and by a failure to give priority to poor people in the allocation of Early Childhood Development services (IDB, 2015f). For example, there is a gap between the official definition of extreme poverty and the focusing mechanism the SISBEN⁸⁹ uses to assign the services provided by MFA and *Red Unidos*. While the measure of extreme poverty used in Colombia is based on household income, services

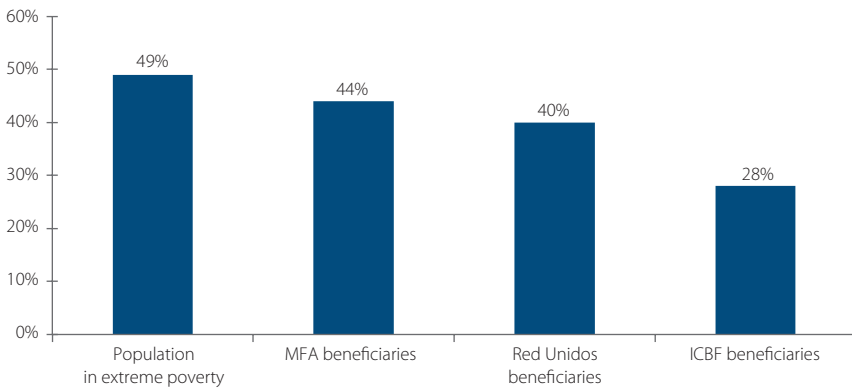
87 Own calculations based on the Social Prosperity Department (2015); DANE (2013a) and (2013b).

88 National Agency for Overcoming Extreme Poverty (2015).

89 System for Identifying Potential Beneficiaries of Social Programs.

are focused using a multidimensional poverty index and measuring the vulnerability of households. Even though it is extremely important to follow up on multidimensional poverty and vulnerabilities in the country, the existence of households without enough resources to satisfy their minimum caloric needs justifies the adoption of a specific system for focusing services on extremely poor people, based on income. In addition, both MFA and *Red Unidos* are designed to serve the poorest families in the country, but the ICBF programs do not give priority to people living in extreme poverty.

Graph 33. Percentage of the Population in Extreme Poverty and Beneficiaries of Social Programs living in Rural Areas

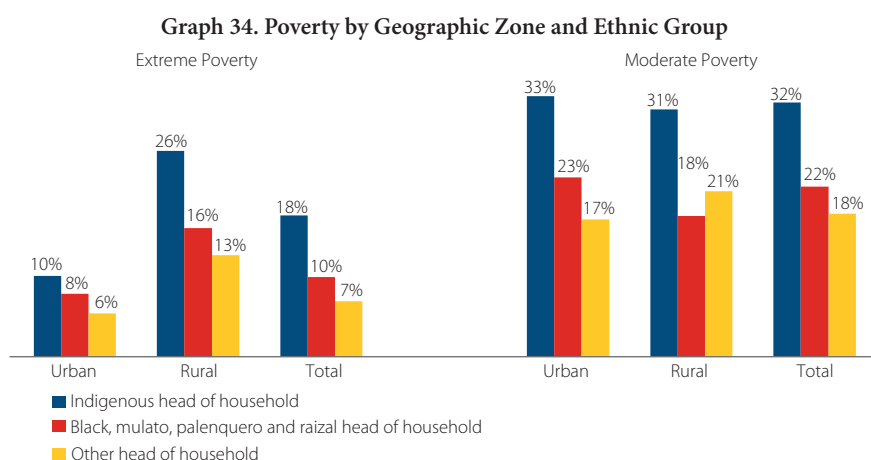


Source: Own calculations based on DANE (2013b), ANSPE.

Amount of transfers. In addition, there is a problem with insufficient amounts for money transfers. It is estimated that the gap between the income of households living in extreme poverty in rural areas and the poverty line is approximately COP\$100,000 (per family, per month). Therefore, an increase in conditional money transfers from *Más Familias en Acción* in the amount of COP\$100,000 per month for households living in extreme poverty in rural areas would lead to a substantial reduction in extreme poverty in the sector of the country suffering the most from this problem. The intervention would be scaled in terms of the amount of the transfer (higher for extremely poor people than for moderately poor people), in line with the experience of the *Bolsa Family* program in Brazil, recognizing a greater need to support the income of beneficiaries living in extreme poverty.

High rate of poverty for families with ethnic minority heads of household. Afro-descendant communities and indigenous peoples represent, respectively, 11% and

3% of the country's population. It is estimated that one in every ten homes with heads of household who do not identify themselves as an ethnic minority lives in extreme poverty and two out of every ten live in moderate poverty. These proportions are higher in the case of afro-descendant, "palenquera" (descendants of runaway slaves), "raizal" (Afro-Caribbean) communities, and indigenous groups, where these proportions increase to two out of every ten homes living in extreme poverty and to three out of every ten living in moderate poverty (see Graph 34). Indigenous population groups are equally distributed between rural and urban areas. Indigenous peoples are mostly settled in the departments of Guainia (62% indigenous), Vaupés (57%), Guajira (41%), Vichada (40.3%) and Amazonas (39%). Afro-descendants, on the other hand, tend to be mostly urban. The highest percentages of this population group live in the departments of Chocó (74%), Bolívar (27%), Valle del Cauca (26%), Cauca (21%), and Nariño (18%). In turn, the Caribbean zone (Cauca, La Guajira and Córdoba) with 8% of the national population has an average extreme poverty of 24%, with an Afro-descendant population of 17% and 26% indigenous. For these population groups, there are barriers to accessing formal labor markets and secondary and higher education. For example, 30% of the indigenous population did not have any education at all, while in the case of Afro-descendant populations, 15% receive no education, and for the general population, that figure was less than 10% (DANE, 2005; ICETEX 2013). Lastly, these communities have been disproportionately impacted by the armed conflict due to their geographic location⁹⁰.



Source: Own calculations based on the DANE (2013b).

90 IDB. Own calculations based on the DANE (2013b).

Proposals. Continue reducing poverty and social exclusion (particularly in rural areas) by taking the following actions: (i) expand the coverage of transfer programs and focus assistance on extremely poor people, particularly in rural areas; (ii) increase the MFA assistance for extremely poor people, particularly in rural areas, to push them closer to the moderate poverty line; (iii) improve the system for focusing the assistance and increase its coverage and quality for *Cero a Siempre* programs, and coordinate them with *Más Familias en Acción* and *Red Unidos*; and (iv) give special focus to ethnic minorities for transfers.

Extend the coverage of the transfer programs and focus assistance on extremely poor people, particularly in rural areas. Given that there is still a significant number of families living in extreme poverty that are not covered by distributive programs, a commensurate effort should be made to include these families, particularly in rural areas. In these areas, the intensity of the poverty caused by a relative lack of public services requires special attention. Part of the resources necessary could be generated through processes to recertify current beneficiaries no longer in a situation of poverty. Such a measure would make room for families living in extreme poverty. The specific mechanism for focusing assistance on extremely poor people would guarantee that families with a greater need for economic support would benefit from the programs.

Increase MFA's family subsidy for extremely poor people, particularly in rural areas, to push them closer to the moderate poverty line. According to the Bank's calculations, incorporating 47,000 new families in the program, with a COP\$100,000 increase in the amount of the transfer for 183,000 families living in greater poverty, could reduce the rate of rural extreme poverty from 15.7% to 14.3%. As poverty decreases, these types of subsidies could be phased out. It is calculated that with the foreseen rhythm of economic growth and the support of distributive programs, extreme poverty could drop to lower than 3% in 18 years (IDB, 2014b).

Improve the system for focusing the Cero a Siempre program assistance and increase its coverage and quality while coordinating it with Más Familias en Acción and Red Unidos. Given that investments in childhood development are more cost-effective for reducing structural poverty in the medium run, expanding access to early childhood development services through appropriate measures is a priority (for example, through parent support). At the same time, improving the quality of the services provided must be a priority where large gaps are found. Rural areas

need significant investments in this sector, due to the large gaps in the quantity and quality of the services and the higher rate of extreme poverty. At the same time, the *De Cero a Siempre* services should be coordinated with the assistance provided by *Más Familias en Acción* and *Red Unidos*, with the purpose of enhancing the impact of these programs on children under the age of 5.

Give special focus to ethnic minorities for transfers. The high levels of extreme poverty in indigenous peoples justify special attention, including a regional effort in the municipalities where this population group constitutes a majority. In this case, the indigenous population census by the Ministry of the Interior should be used to ensure total coverage of these ethnic groups. The design of this subsidy should incorporate the cultural practices of these sectors. For example, the monetary benefit can be replaced by a contribution in kind. The same type of geographic focus is recommended for Afro-descendant populations.

Reducing Informality in the Economy

Informality in Colombia is high. Only 35% of all workers are formal workers, while 18% are informal workers earning a salary, and around 47% are self-employed, a category that also includes a strong component of informality. In the 2009-2012 period, the rate for informality for women was 65% while the rate for men was 60%. These rates are higher than the regional average of 55%. The rates for formality are lower for the Afro population (25.4%) and indigenous population (11.5%) than the national total (DANE, 2007). In addition to affecting productivity, informality results in low pension contributions and may cause pressure on non-contributory pension arrangements that deepen tax distortions. Lastly, an informal labor market limits poverty reduction and the consolidation of the middle class. Contributing factors are: (i) high rotation between the formal and informal economies; (ii) high labor costs and (iii) the skills gap due to weaknesses in the job training system^{91, 92}.

91 IDB (2010a), IDB (2013c), IDB (2014) Presentation to President Juan Manuel Santos.

92 Evidence regarding the impact of job training programs on youth in Latin America is relatively scarce though increasing over the last fifteen years. Ibararán et al (2009) find that training has a positive impact on job creation and a significant impact on job quality, measured in terms of access to formal jobs, contracts, and insurance benefits. Castillo et al (2014), in a quasi-experimental impact assessment of training courses and job possibilities for people in Argentina, found that professional training increases the probability of accessing a formal job. Biavaschi et al (2012), in an analysis of international experiences, shows the relevance of job training systems in terms of jobs for young people.

Informality is a factor that affects productivity and horizontal equity. In 2010, 61% of companies in Colombia did not keep accounting records and 43% did not register their business (Bustamente et al., 2013), (see Graph 35). The total factor productivity of formal companies is 10% higher than that of informal companies (Ydrovo, 2010) and two-thirds of investment and innovation occurs in formal companies (Santa María, 2008). Most informal companies are in the commercial and services sectors, with low productivity and jobs of low quality and low remuneration. From the point of view of fiscal impacts, informality reduces the potential revenues of the government and generates free-riders that benefit from public investment. On the other hand, informal entrepreneurs may not be motivated to register their companies based on deficiencies in public services and few benefits of paying taxes in an environment with little tax culture.

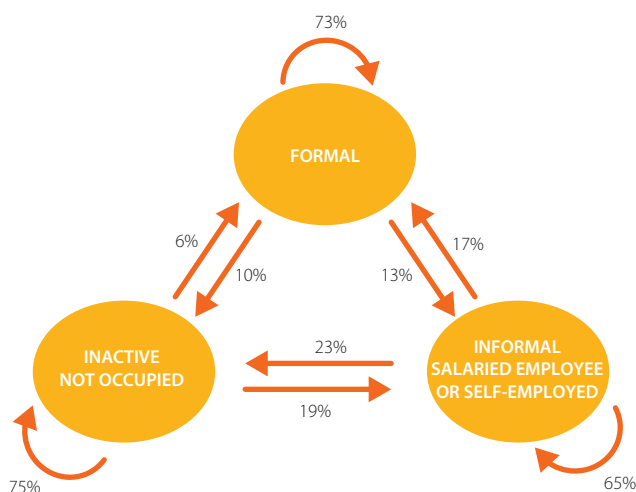
Graph 35. Business Informality in Colombia



Source: Bustamente and Bayter, (2013).

Movement between the formal and informal economies is high, and there is a high percentage of temporary work. One-third of salaried employees in the formal market hold temporary jobs, which causes high rotation between the two labor modes. It has been calculated that the transition of formal workers to informal or self-employed work is 17%, while only 13% move in the opposite direction (see Graph 36). In 2013 between 55% and 70% of all hiring (depending on the sector) took place under temporary employment contracts.

Graph 36. Colombia – Labor Market Dynamics



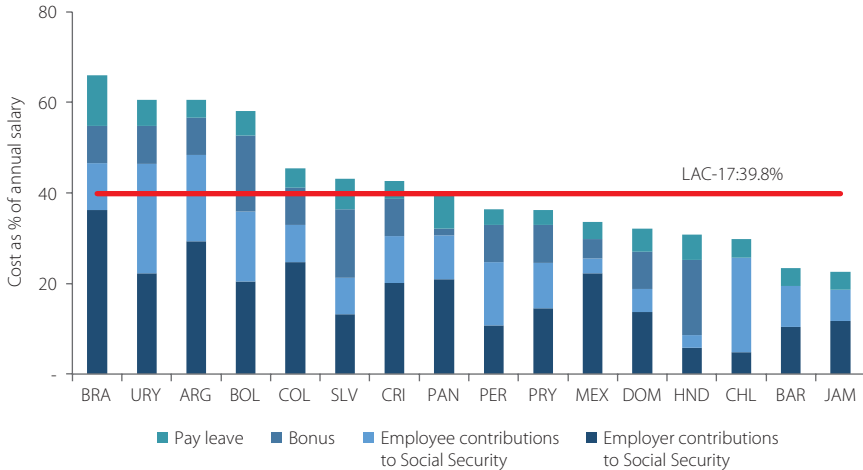
Source: IDB. Labor Market and Social Security Information System (SIMS) based on Household Survey in Latin America, harmonized. November 2014.

Labor costs have gone down, but they are still high and promote informality. The minimum salary in Colombia represents 72% of the average salary. This denotes a disadvantage compared to countries such as Brazil, Chile, Mexico and Uruguay that have a range from 32% to 40%, and whose economies have higher formality rates. The landscape is completed by non-salary labor costs that must be paid by employers to keep a worker. Despite the recent tax reform (Law 1607/2012) that reduced non-salary costs, they are still among the highest in the region⁹³ (see Graph 37). High non-salary costs, in conjunction with firing costs and a high minimum salary, promote informality, especially in the lower part of the income distribution. As per a recent survey of 600 companies in Colombia, the main reasons it is hard

93 IDB (2015b). Based on harmonized households survey in Latin America.

to hire formal workers under open-ended contracts include: (i) severance payments (40%); (ii) high non-salary costs (35%); and (iii) the amount of the minimum salary (18%) (IDB 2015a).

Graph 37. Estimates for Average Non-Salary Costs in Latin America

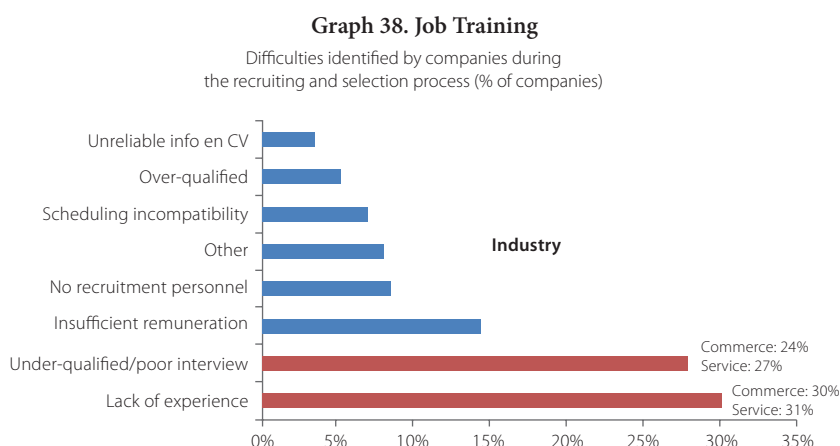


Source: Bosch et al. (2015).

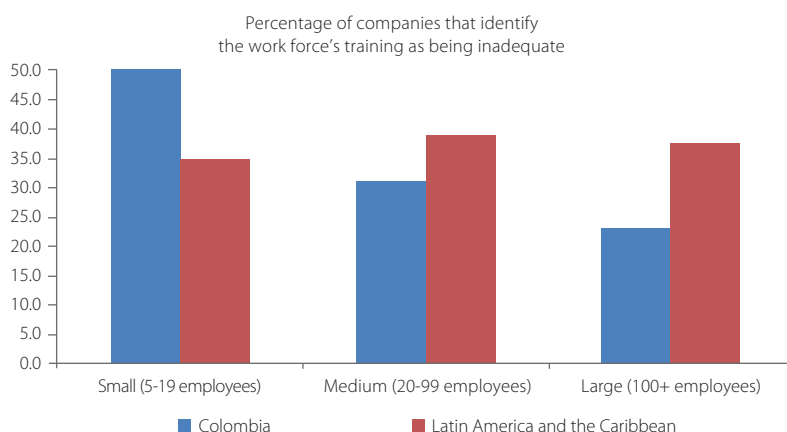
The skills gap is large and fed by weaknesses in job training⁹⁴. The results of the *Enterprise Survey* confirm the existence of a skills gap. In Colombia, 45% of companies consider unsuitable training as a very serious restriction on their operations. One out of every three Colombian companies is unable to fill vacancies due to the lack of talent/skills in the labor force (Manpower Talent Shortage Survey, 2013). This restriction especially affects small companies. Part of this gap is related to a lack of availability of job training (Graph 38). According to CONPES 81, in 2004 there were about 2,400 high schools, 66 technological colleges, 51 professional-technical schools, 211 universities or colleges, and about 4,000 non-formal educational institutes. These institutions appear to be very heterogeneous and not sufficiently integrated or interrelated. In addition, the absence of a system of equivalences prevents people from moving between the different types of training offered. A distinctive feature of job training in Colombia is the short duration of courses. According to the DANE (DANE, 2012c), 50% of the courses offered in the period from 2010 to 2012 had a total duration of less than 80 hours,

94 This document defines job training as non-university higher education, job training, or in-house training offered by companies to their workers.

which may have implications relative to their relevance. A recent assessment of public job training offered in Chile (Rodríguez and Urzúa, 2013) concluded that programs lasting 280 hours or more had a positive impact on employment and labor income. In Colombia, only 20% of all courses are longer than 280 hours. Job training programs are not evaluated on the basis of their usefulness to the productive sector or their capacity to place graduates in profitable and good-quality jobs. Evaluation, policy formulation and the allocation of public expenditures take place, therefore, without sufficient information regarding the relevance of the different educational programs and the performance of their graduates in the working world (Flores-Lima et al., 2014).



Source: Human Capital Productivity and Training Survey (DANE, 2013).



Source: Enterprise Survey, 2010.

The rigidity in the formal market may exclude participation by women. Part-time work in Colombia is limited by labor legislation that provides that the minimum contributions to social security must be made over at least one full-time minimum salary (Private Competitiveness Council, 2009). This means the cost of part-time work is proportionally higher than full-time work, which discourages the use of part-time positions by employers. Women are especially affected by this factor because it limits their opportunities for part-time work, which is a preferred mode due to their responsibilities at home. Thirty-one percent of employed women work part-time, compared to 14% of employed men (World Bank, 2012).

Proposals. The proposals for dealing with and reducing informality are: (i) implementing salary measures to promote employment in the formal economy; (ii) reducing other obstacles for entering the formal work market; (iii) strengthening the ratio between public job training and the demand by companies, and (iv) promoting women access to the job market.

Implement salary-related measures to promote employment in the formal economy. In Colombia, increases in the minimum salary should be associated with the average growth in the productivity of the economy or, as a variation on that same method, associated with the growth in productivity for different sectors of the economy. This might help increase incentives for contracting formal workers⁹⁵. In addition, as an interim measure, a subsidy mechanism could be implemented for contracting workers who will be paid around one minimum salary. A subsidy to companies contracting workers could be considered at around 20% of the minimum salary for workers that earn between 1 and 1.5 minimum salaries and 15% for workers that earn between 1.5 and 2 minimum salaries. This measure could potentially formalize the 1.5 million informal salaried workers at a gross cost that could be around 0.6% of the GDP. The costs of this measure would be well compensated with the higher collections in social security and greater productivity.

95 As a transitional measure, a subsidy mechanism could be implemented for contracting workers that earn around one minimum salary. A subsidy to companies who contract workers could be considered at 20% of the minimum salary for workers who earn between 1 and 1.5 minimum salaries and 15% for workers who earn between 1.5 and 2 minimum salaries. This measure could potentially formalize the 1.5 million informal salaried workers at a gross cost that could be around 0.6% of the GDP. The costs of this measure would be well compensated by the higher revenues for social security and greater productivity.

Reducing other obstacles for entering the formal work market. Forty percent of companies suggest that severance pay is one of the primary restrictions on hiring workers in the formal economy. Making the job market more flexible can have a positive impact on employment, as suggested by the performance of economies such as that of the United States compared to that of Continental Europe. Reducing the cost of severance pay packages by reducing the number of days to be indemnified may help make this market more flexible, increase formal contracting, and mitigate the effects of temporary contracts. Currently, employer severance payments lead to surcharges on formal work of 8.3% per year (Bosch et al., 2015). A partial reduction in severance payments could be replaced by modern unemployment insurance with contributions from workers and employers equal to 3% or 4% of the payroll, or from tax contributions coming from a higher tax revenues, or a combination of the two.

Strengthening the ratio between public job training and the companies' demand. Companies question the relevancy of job training. One way of reconciling this point of contention is to establish a flexible and permanent system for evaluating the relevance of job training through surveys. In addition, an independent council could be created in which the corporate sector, the government and the public job training institutes are represented. This council, based on periodic information from surveys regarding relevancy, could update the curriculum and the training areas to dynamically adapt the job training system to the real demands of the economy.

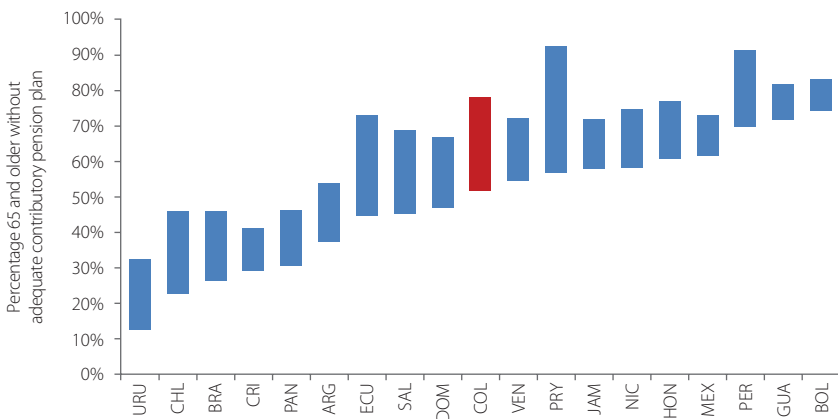
Stimulate the inclusion of women in the job market. The legal obstacle that discourages part-time contracts in the formal economy, which affects women especially, could be removed, allowing social security contributions that are proportional to the amount of time worked. Thus, the creation of part-time jobs could be promoted, from which mainly women could benefit.

Consolidating a Sustainable and Inclusive Pension and Healthcare System

As a result of the high levels of informality, coverage of pensions is low and unequal. Contributory pensions cover 32% of the workers, a lower level than in other Latin American countries such as Argentina with 54%, Brazil with 65% or Chile with 74%. Based on the current systems, the projection for 2050 could mean for Colombia a lack

of coverage at rates between 50% and almost 80% of people older than 65 (see Graph 39). The minimum salary, which has been increasing faster than the average for labor productivity, could be excluding contributions from workers in the lower income deciles. There are problems with equality, because pensions supported by the Social Security in the Medium Premium Regime (RPM pensions) are 70% subsidized and there is a contingent fiscal pressure on the non-contributory system (Colombia Mayor). Ninety-two percent of RPM subsidies benefit quintiles 4 and 5 of the population with a cost of 1.5% of the GDP. More than 3 million workers, most on their own initiative, pay in to the contributory healthcare system, but do not make pension contributions. Of those, more than half have incomes higher than 1 minimum salary, which would make them potential contributors. In addition, coverage is higher for Colombian men in contributory pensions than for women by 10 to 15 percentage points, with access to pensions at close to 30% for men older than 65 while being only 20% for women of the same age (Roffman et al., 2013). This situation is due basically to differences between employment participation of men and women and the quality of their employment as measured by time and income. Other factors that explain this situation, in addition to the characteristics of the labor market described above, are (i) fragmentation of the system, (ii) sustainability, and (iii) administration costs (IDB, Bosch et al., 2015).

Graph 39. People Older than 65 without an Adequate Contributory Pension in 2050



Source: Bosch et al. (2015).

The social security system is fragmented into various regimes with different rules and benefits. The system is based on a pillar of compulsory contributions where two regimes coexist and compete: (i) a mechanism with defined benefits, the Medium Premium

Regime (RPM), administered by the government through Colpensiones; and (ii) a mechanism with defined contributions, the Individual Savings with Solidarity Regime (RAIS), managed by private pension funds companies (AFPs)⁹⁶. Affiliation with the system is mandatory for both salaried and self-employed workers and there is a possibility of switching between regimes every 5 years and up to 10 years prior to reaching the age of retirement. Both regimes have a solidarity component represented in the RPM by the Pension Solidarity Fund (FSP) and by the Minimum Pension Guarantee Fund (FGPM) in the RAIS. There is also a non-contributory monetary subsidy program targeting vulnerable adult population groups through the *Colombia Mayor* program. There is also an intermediate pillar between contributory and non-contributory, known as Periodical Economic Benefits (BEPs). It was conceived as an individual savings mechanism, voluntary and flexible, with government support, that grants benefits on a bi-monthly basis for an amount that may be lower than the minimum salary.

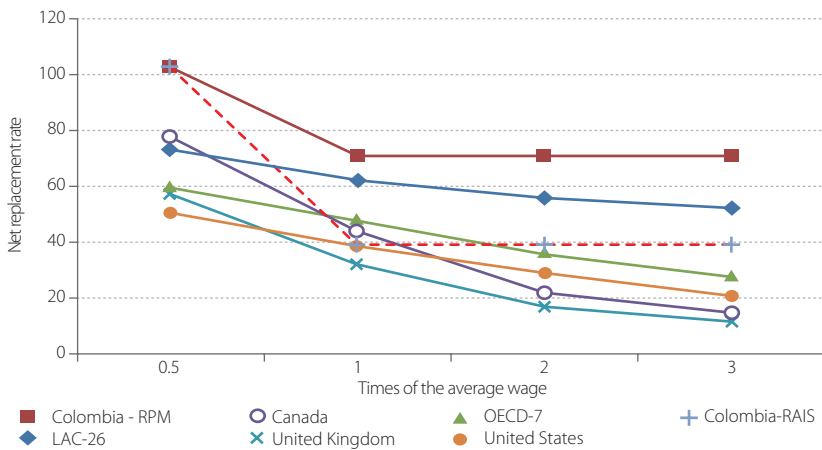
The fiscal cost of Colombia's pension system is high relative to its coverage. Colombia assigns 3.8% of the GDP to the public pension system financed by the national budget to cover one-third of all people in the age of retirement. Chile has coverage for two-thirds of the same population group, at a slightly lower fiscal cost, equal to 3.1% of the GDP. In turn, OECD pension systems have an average fiscal cost of 8% of the GDP with practically universal coverage, though with compromised sustainability (OECD, 2014c). Even though Law 100 of 1993 in Colombia was going to raise retirement age to 62 years for women and 65 for men, and terminate the RPM, those measures were never taken. Men currently retire at the age of 62 and women at the age of 57, compared to the average for Latin American and OECD countries that is 64 and 62, respectively, with the extreme being the case of England, where retirement age is 68 for both sexes. Reforms in 2005 and 2009 reduced the actuarial value of the system, but the fiscal cost of pensions has been increasing. While the RAIS keeps replacement rates between 45% and 55% of the salary, RPM has them in the range of 65%-85%, with the latter being subsidized through the national budget. (see Graph 40).

Management and administration costs are high and there are risks that have not been quantified. The set up for the RAIS and the high concentration in the industry impacts the prices of social security insurance and the high commissions (see Graph 41). In addition, there are inefficient transfers of affiliates between the RAIS and

96 There are also special regimes for judges and security forces.

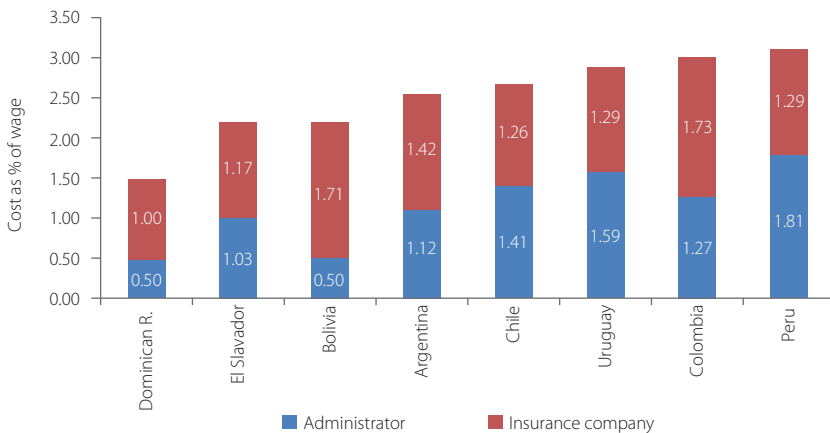
RPM. The life annuities market cannot work properly under the current benefits scheme and programmed retirement does not work as such, given the impossibility of lowering pensions nominally without them falling below the minimum salary. There are also other risks stimulated by the different interpretations of system regulations. They include the recognition of benefits via a judicial remedy in the form of an *Amparo* proceeding, and the expansion of non-contributory benefits if case law comes to be established that recognizes those benefits as pensions.

Graph 40. Replacement Rates. International Comparisons



Source: Bosch et al. (2015).

Graph 41. Commissions of Pension Fund Management Companies and Price of Social Security Insurance (2012)



Source: IDB, Bosch et al. (2015).

Proposals. The following are potential solutions to the challenges of the pension system in Colombia: (i) move toward a long-term systematic reform of the pension regime; (ii) facilitate and ensure contributions; (iii) reform the RAIS; (iv) keep the pension system sustainable by increasing the years for making contributions and raising the retirement age.

Move toward a long-term systematic reform of the pension regime. Reforms are possible that will improve the institutional design, reduce inequality, and increase coverage. These reforms should be framed within a medium and long-term vision of Colombia's labor market and the social insurance system (not only of the pension system but also the healthcare system). IDB Studies aimed at improving institutional design and increasing coverage for the pension system propose the following path: (i) ensure a solidarity pillar based on *Colombia Mayor* for those workers without a contribution-based pension; and (ii) maintain a contributory pillar based on the RAIS and the RPM. In this case, parametric reforms of the RAIS are required to make it more equitable and sustainable. In the event these reforms are successful, the RPM could fade away. In terms of costs, the baseline scenario consisting in maintaining the current system, would produce public expenditure in 2030 of 3.5% of the GDP. In this scenario, if formalization increases, the fiscal cost could rise to up to 4.5% of the GDP. In the case of a gradual reform of the system with universal coverage plus the benefit of a minimum salary, the fiscal cost would represent 6.3% of the GDP, an additional cost of 2.8% of the GDP relative to the baseline scenario. A variant of this scenario could be universal coverage, with a benefit of 50% of the minimum salary. In this case, the fiscal cost would be 4.8% in 2030, which would represent an additional 1.3% of the GDP.

Facilitate and ensure contributions. The government should make an effort to facilitate ways to pay in to the contributory regime for workers who are receiving subsidized healthcare. In addition, workers making contributions to healthcare but not to pensions should be inspected to ensure they make contributions to the pension system. Self-employed workers who do not classify for obtaining subsidized healthcare should be required to contribute to the pension system if they have payment capacity (proven through tax records), while in the medium run, the tax treatment for all workers should be equal for them to obtain healthcare benefits.

Reform the RAIS. Reforms to the individual savings regime are necessary, especially regarding its financial administration. These reforms include: (i) breaking down

the commissions of the fund managers between the cost of disability and survival insurance and the cost of managing individual savings accounts; (ii) setting a ceiling on administrative costs as a percentage of the flow in order to increase commissions; (iii) auctioning new affiliates to promote competition; (iv) promoting the participation of other actors in fund management; (v) improving advisory processes when transfers are permitted between the RAIS and the RPM, in order to prevent non-optimal transfers for the affiliate; and (vi) modifying the current rules as follows: (a) change the possibility of transferring prior to retirement from 10 years to 15 years in advance; (b) extend the minimum permanence in a regime from 5 years to 8 years; and (c) prohibit transfers of new affiliates.

Keep the pension system sustainable by increasing the years for making contributions and raising the retirement age. Legislation in 2005 and 2009 put limits on the value of pension liabilities and prohibited employment agreements that have more favorable conditions than those governing the pensions system with defined benefits. This terminated exceptional regimes as of 2010. However, an extensive “transition regime” was approved to implement the increase in years for making contributions and in the pension age from 55/60 to 57/62 for women and men, respectively. Given that in Colombia most workers pay into the system for approximately 20 years, to eliminate subsidies, recent studies have estimated that the pension entitlement should be less than 46.4% of the average real salary against which contributions were made during the whole time. Otherwise, if a pension is desired at a replacement rate of 65%, the period for making contributions to the system must be increased by 10 years and the age for receiving a pension must be raised to 62/65 years for women and men, respectively. It has been estimated that raising the retirement age would save the system approximately 0.5% of the GDP (Clavijo et al., 2013).

Toward Sustainable and Inclusive Healthcare Improving Quality, Efficiency, and Equality in the Provision of Services

The healthcare system in Colombia is based on an insurance model. Under this system, users are beneficiaries of health insurance that covers a mandatory benefits plan. The insurance is financed using two different regimes: (i) the contributory regime, co-financed by the employer and the employee, or by workers on their

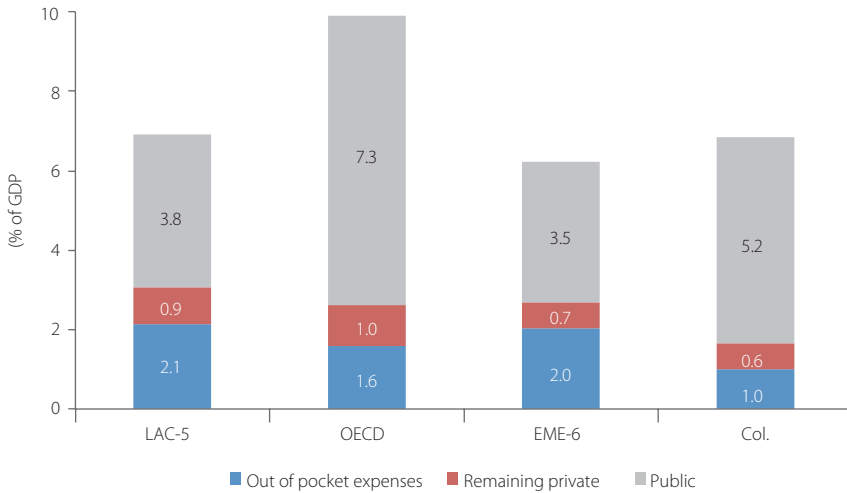
own initiative; and (ii) the regime subsidized by the government for those citizens who do not have a job. Insurance companies capture the resources transferred by the public sector based on the number of persons insured, and the payments by the private sector into the contributory regime. In turn, insurance companies have to hire a network of service providers from public and private bidders. Insurers in the subsidized regime should contract 60% of the services from public sector providers. There is also the Solidarity and Guarantee Fund (i.e. the *Fondo de Solidaridad and Garantía* – FOSYGA), a government fund that compensates the expenditures between insurers based on the differences in the costs of the services to their affiliates.

The General Social Security Healthcare System has made substantial achievements but faces significant challenges. Some of the results are: (i) 97% of the population is covered (Ministry of Health and Social Protection. SISPRO, 2014); (ii) access to services has substantially improved, 99% of all births are attended in healthcare centers (Minsalud, 2013); and (iii) financial protection for Colombian households for healthcare expenditures is the highest among the region's countries; thus, out-of-pocket expenses for healthcare is currently 1% of the GDP (see Graph 42). The healthcare system faces several challenges, however. In particular, there are challenges to (i) strengthen its financial sustainability; (ii) make further improvements in access and equality; and (iii) preserve and strengthen the system's legitimacy by raising the quality of services provided by insurers and service providers (Nuñez, 2012).

The healthcare system's financial sustainability is at risk. Expenditures by the healthcare sector in Colombia, including the public and private sectors, totaled 7% of the GDP in 2012, within the range of LAC-5 and 30% lower than the OECD (Graph 43). The recently approved Statutory Healthcare Law declared health to be a fundamental right. This implies serious financial uncertainties, because it potentially requires the system to pay for everything the doctor prescribes, making it difficult to define an explicit benefits plan and, with that, the amount of the premium to be agreed on with insurers. With these legal changes, the increase in the costs of the system has been estimated at 0.5% to 1% of the GDP (Cardona, 2013 and Riascos, 2013). There is also a debt of insurers to service providers corresponding to payments for drugs and health technologies that are not included in the benefits plan. This situation came about due to legal proceedings (i.e. injunctions to protect a constitutional right in

the form of a legal protection or “*tutela*”) that protect the rights of the users who file them. It is estimated that as of July 2013, this debt totaled 1% of the GDP. Finally, the prices of materials are affected by fluctuations due to imperfect markets (Nuñez, 2012).

Graph 42. Expenditures in Health, % of the GDP 2012



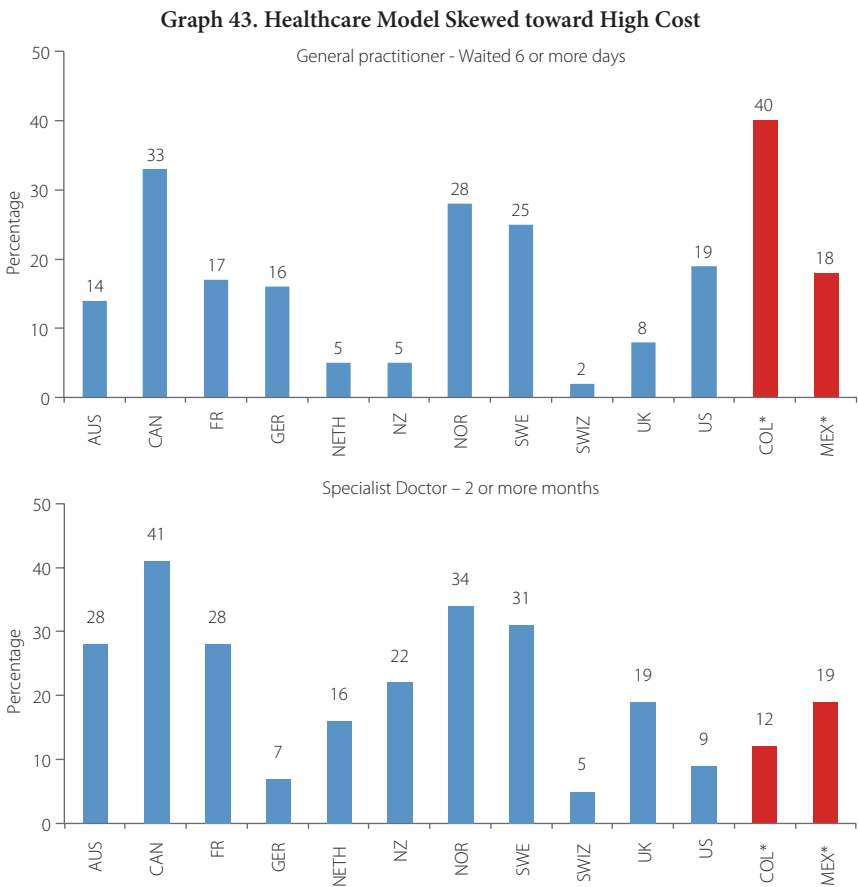
Source: World Bank (2014a).

The healthcare system has problems with access and equality. The lack of effective and equal access to healthcare services comes from the system’s bias towards curative, specialized and high-cost medicine⁹⁷. The rate for the use of highly complex services is over 90% while the rate for the use of basic services is 60% (Ministry of Health, 2014), (see Graph 43). These services have been concentrated in the main cities of the country, where the market is larger, and therefore rural areas and zones with scattered population have few services at the level of primary care, with very little decision-making capacity. Ninety percent of the institutions providing healthcare services are concentrated in metropolitan areas and 88% of the physicians are available to attend 55% of the population. In a city such as Bogotá, 53% of its inhabitants use healthcare services, while in Chocó, only 8% use them⁹⁸.

97 Extensive evidence proves the importance of emphasis on primary care relative to results and healthcare costs: Kringos et al (2013); Starfield (2012).

98 Own calculations based on the Ministry of Health (2012) and (2013).

The lack of competition puts a brake on the system’s efficiency. The healthcare system was designed so that insurers would compete in terms of the quality of the services. There are restrictions, however, on a user switching providers (EPS), which inhibits competition within the system because: (i) all pension funds are paid the same amount per capita (ii) incentives for attracting more affiliates are also limited because it is difficult for users to compare quality and switch between EPSs (Nuñez, 2012; and Bardey, 2013).



Source: Guanais (2010).

Proposals. The healthcare system can improve its sustainability and effectiveness through the following policies: (i) control healthcare expenditures and increase the system’s resources; (ii) strengthen institutional capacity and investment to

improve access and equality; and (iii) improve incentives for quality for insurers and service providers.

To improve financial sustainability, healthcare expenditures must be controlled and the system's income must be increased. Relative to expenditures, two types of measures can be implemented: (i) creating incentives for efficient use of healthcare technologies by regulating access and establishing prices as a function of the contribution procedures make to good health; and (ii) creating incentives for efficiency and quality for primary care, and taking away incentives for the use of high cost services. This mechanism, used in Germany and Brazil, for example, is known as “relative effectiveness assessment.” On the income side, increments in public resources may potentially be required to increase the amount of the premiums in the subsidized regime, as well as those in the contributory regime.

Increase institutional capacity and investments to improve access and equality. In this area, the following is proposed: (i) strengthen decision-making capacities in the provision of basic attention with a model based on primary healthcare, and improvements in infrastructure and in human talent; (ii) strengthen the capacities of regional institutions to manage the health system; and (iii) expand the availability of infrastructure, human resources, and equipment in rural and isolated areas through public-private alliances. These investments are estimated at 0.075% of the GDP per year.

Increase insurers and service providers' incentives to improve quality. A mechanism for results-based payments is proposed for insurers as well as for service providers. An estimated 5% of administrative expenses could be dedicated to this incentive mechanism (IDB, Universidad de Los Andes, 2014). In order to increase the capacity of users to evaluate the quality of services, the Ministry of Health is publishing a ranking of insurers and service providers. These types of measures are aimed at increasing the information available to the public, and could be complemented by independent rankings by users.

Box 10 describes the opportunities and the initial actions that the Private Sector of the IDB has begun to develop in support of healthcare in Colombia, as it has in other sectors.

Box 10. The Private Sector of the IDB in Health

	Opportunities	Exemplary Projects
Credit for expanding medical providers	Mid-sized hospitals and medical groups find it hard to obtain long-term credits. NSG operations can lend to organizations, especially those who serve low-income population groups and operate in rural areas.	<i>Centro Hospitalario Serena del Mar.</i> In 2014, the CII approved a subordinated loan for US\$10 million and a term of up to 15 years to finance the Centro Hospitalario Serena del Mar in Cartagena, Colombia. The new healthcare facility will have the most advanced technologies in the country. The CII will be used to build the first phase, which implies more credit risk and has more difficulties accessing financing. The CII funds would be invested through a quasi-capital structure, in local currency, participating jointly with the International Finance Corporation, IFC.
Public-Private Associations (PPAs) for healthcare	PPAs in the sector have a law and a regulatory framework. NSG operations can offer financing for opportunities that come up.	
Structure a way to facilitate working capital for providers	Under the current system, private providers experience delays in payments from public institutions. A credit facility can be created where providers can use pending accounts with public institutions as collateral to be able to repay and obtain loans for working capital. The current reform of the healthcare sector establishes methods for catching up on pending payments. This facility would be a temporary solution.	

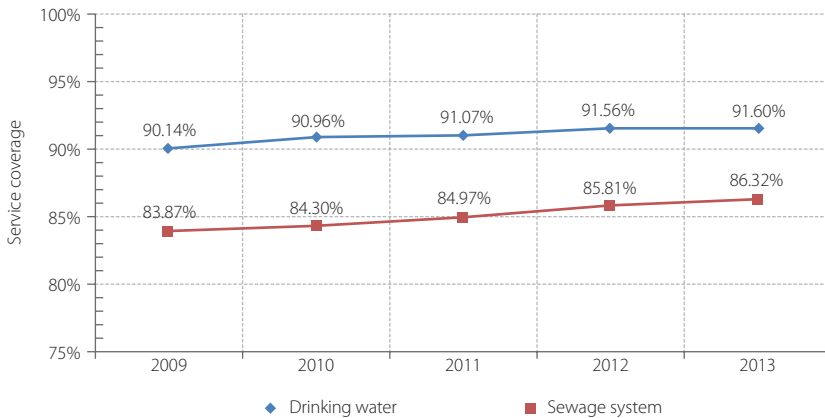
Further Increase Equal Access to Quality Basic Services

The indicators of coverage for water, sewage, and power utilities show a trend toward progressive improvement, but access is not universal. According to the information published by the DANE, urban coverage for water and sewage public utilities in Colombia as of 2012 was 94.2% and 89.03%, respectively (SSPD, 2012), and information published by GEIH states that in 2013 the nominal water coverage was 91.6% and coverage for sewage was 86.3%⁹⁹ (Graph 44). Relative to water and sanitation services, coverage is unequal between urban and rural areas, and unequal across different regions, especially in areas of the Caribbean and the Pacific (see

99 Relative to the estimated coverage for 2009, the figures above represent increases of 1.36% and 2.45%, respectively.

Graph 45). Urban areas have water coverage of 97.4%, while in rural areas 74.3% have water. The Pacific region has an average coverage that is 10% lower than the rest of the country, and rural areas of the Caribbean barely reach coverage of 58% (CONPES, 2014b). Relative to electricity, 96% of the population is covered, with 99% in urban areas and 85% in the rural sector. Still, 3.9% of the population lives in homes with no utilities. The country's installed capacity is 147 GWh, and the demand for 2013 was just 68.9GWh.

Graph 44. Evolution in Water and Sewage Coverage 2009-13

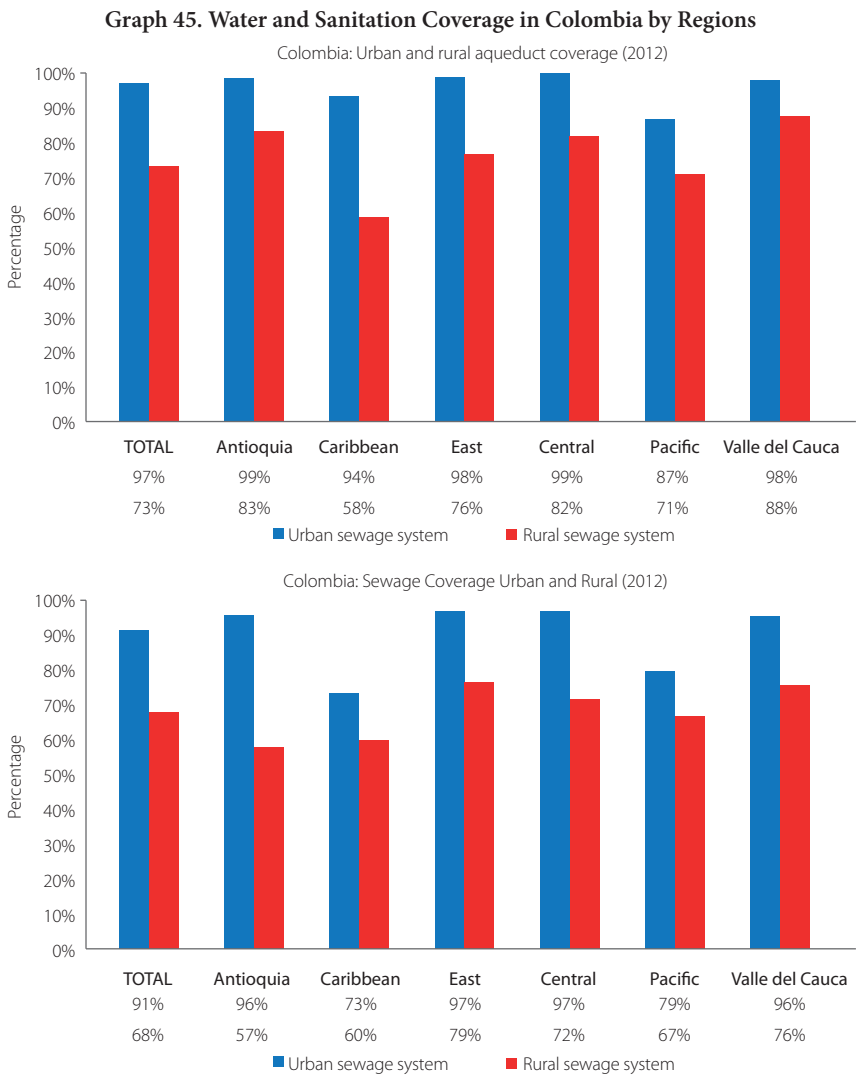


Source: Conpes (2014b).

The quality of public services is deficient. Relative to continuity in the provision of water services, 70% of all providers supply water to the population on a continuous basis (SSPD, 2012). And relative to the quality of the water, 58% of the population receive water suitable for human consumption and the rest received water with some risk (National Health Institute, 2013). Thus, only 53.4% of the urban population and 4.6% of the rural population receive potable water. In the rural area, the Water Quality Risk Indicator (IRCA) was 49.8% (National Health Institute (INS), October 2013), classified as a high-risk level, while the average for urban areas from 2007 to 2012 was 13.2 %, corresponding to a low level risk¹⁰⁰. The factors that explain this deficiency are (i) lack of financing, (ii) the governance of utility companies (iii)

100 CONPES 3810: In those regions of the country where access to water and basic sanitation is deficient, water is recognized as a vehicle for disseminating diseases that mainly affect children under 5 years of age, who are prone to diseases such as Acute Diarrhea Disease (ADD). In Colombia, in the period from 2005 to 2011, the mortality rate from ADD (deaths of children younger than 5 per 100 thousand live births) in children under the age of 5 went down 72.1%.

the arrangements for provision at the rural level, and (iv) vulnerability to climate change. The quality of the electrical service in terms of continuity and voltage level varies greatly, and there are investment lags that affect the quality of the service and impose costs on the productive sector and on households. For example, in the case of rural areas serviced by the power system that is not interconnected, providing electricity to 4% of the population, the duration of the flow of energy is somewhere between 4 and 9 hours per day (Ministry of Mines and Energy).



Source: Conpes (2014b).

Water service fees are outdated. Users are divided into residents and non-residents, and the former are classified into six different income level groups based on their socio-economic conditions (Chart 5). Solidarity and redistribution criteria help define the rate structured¹⁰¹ so that residential users with financial capacity and non-residential users help users with a lower capacity in ranges that will cover their basic needs¹⁰². The redistributive impact of such subsidies (electricity and gas, water and telecommunications) is low because of failures in focusing the subsidies (CAF, 2008) and due to the fact that the poorest homes may not be connected to public utilities. The division by income level leads to an imbalance between users who contribute resources to the solidarity funds and those who receive those resources, and it is necessary to have resources other than the contributions coming from the rates charged to cover the deficits (for small providers, income groups 1, 2 and 3 are 90%). In the case of water and basic sanitation, the effective government subsidy is 0.05% of the GDP (MVCT, 2014).

Chart 5. Participation of Subsidized Income Level Groups and Contributors – Water

Range of company	Groups 1, 2, and 3	Group 4 and Official and Other Users	Groups 5, 6. Commercial and Industrial Users
From 2,501 to 25,000	90.6%	3.3%	6.1%
To 80,000	80.9%	9.8%	9.2%
To 200,000	77.6%	10.0%	12.4%
Higher than 200,000	70.6%	14.3%	15.1%
Total	75.4%	11.7%	12.9%

Source: SSPD.

101 Law 142 of 1994, Article 87. Criteria for defining the pricing regime.

102 The rate for residential public utilities is in general the amount paid by the user of the respective service to the company providing the utility based on the consumption measured; it is set up as described in the law and should include a surcharge for users at income levels 5 and 6 and for industrial and commercial users. The purpose of this surcharge is to help users from low income levels to pay for their utilities to cover their basic needs: (i) The contribution is a mandatory element, factor, or contribution paid by the users at income levels 5 and 6 and industrial and commercial users, in addition to the cost or real value of their utilities, which becomes a type of subsidy for the income groups benefiting from the same; and (ii) the subsidy includes all the support received by the users of residential public utilities in order to pay the company providing the service for the real costs of providing the service (implicit, offset, and direct).

The structure for providing water utilities is scattered and not very profitable. The emphasis on decentralization worked for drinking water and sanitation solutions in urban zones, but it did not work for rural zones and small municipalities, and it did not deal with environmental issues. The development of the sector has been different for large and small providers (fewer than 2,500 subscribers). For 2012, a total of 2,371 providers were registered for water and sewage services, of which 90% serve fewer than 2,500 subscribers. There are also 11,500 entities providing services in rural zones¹⁰³. In the case of public sanitation services, there were 1,180 providers registered, of which 73% served markets with fewer than 2,500 subscribers. The quality of such services provided in Colombia is varied: it depends on the size of the municipality, the type of provider, and especially the degree of rurality. Local governments with better developed management capacity – usually those in large cities with human capital that is more skilled – have successfully transformed the quality with which these services are provided, as in the case of Empresas Públicas de Medellín. But most of them have not been able to meet the quality requirements established according to the regular standards for those services due to a lack of economies of scale. Moreover, 43% of the providers are at a high level of financial risk, 17% at a medium level and 40% at a low level. The evaluation that the Superintendence of Residential Public Services (SSPD) does every year shows that in comparison with 2011, most of the companies with a high risk level were public (SSPD, 2012).

The climate affects the provision of the services. During the 1970-2012 period, more than 2,900 events were recorded where natural effects had an impact on sewage and water infrastructure, of which 35% took place in 2010 and 2012 (see Chart 6). Most were events derived from floods and landslides. With the increase in the frequency and intensity of the natural phenomena that impact the sector, the economic effects are increasingly greater (MVCT, 2014b).

Chart 6. Financial Losses and Number of Impacts Recorded on Water and Sewage

Years and Event	Number of impacts recorded	Loss (million COP current)
1974-1976. La Niña	80	42.5
1986-1988. El Niño	113	3,298.5

103 As per the Water and Sewage Sector Report 2006-2009, providers serving less than 2,500 subscribers have the lowest rates.

Years and Event	Number of impacts recorded	Loss (million COP current)
1996-1998. Neutral	236	7,516.5
2010-2011. La Niña	580	525,867.0

Source: DesInventar, UNGRD and VASB.

Proposals. The efficiency and sustainability of power, potable water and sanitation services may be improved through the following policies: (i) improve the coverage and quality of electricity and water utilities; (ii) reduce the fiscal cost of subsidies; and (iii) increase and improve the provision of water and sanitation services in rural areas and small communities; and (iv) strengthen the environmental sustainability associated with the provision of potable water and basic sanitation services.

Coverage and quality of water utilities can improve substantially with more public investment effort. It is estimated that the investment needed in the water and sewerage sector for universal coverage, based on the need to cover the population group as a function of homes that have no service and the cost of connecting them to the systems, is 1.5% of the GDP¹⁰⁴. According to the National Development Plan, the goal is to increase the percentage of water that is treated from 33% to 41% (DNP, 2014b). Critical areas, due to environmental impacts, are the watersheds of the Bogotá, Cauca, Medellín, Chinchiná, Chicamocha, Otún, Consota, Río de Oro, and Fonce Rivers and Laguna de Fúquene. The estimate for the investment necessary to manage sewage is 0.8% of the GDP. Drinking water and basic sanitation companies make an estimated investment each year of 1.8% of the GDP. In summary, the investment required for attaining total coverage for the system and improving the quality of water and sanitation in the country is 3.2% of the GDP, at an annual cost of 0.2% of the GDP over twenty years. Despite the fact that surplus power was generated in 2015, in a scenario of 6% economic growth as proposed by this strategy, a significant increase in demand would be projected for the energy sector. In addition, in the non-interconnected system, additional power generation is required to meet the appropriate standards for coverage and quality. Within this framework, public investments in the electric sector will require resources equal to 0.6% of the GDP per year.

104 The calculation is made based on the deficit in coverage as estimated from the DANE projections, the growth of the population, and the cost of a new residential connection according to average prices reported by providers.

Progressively reduce the fiscal cost of subsidies to water services. The government's contribution to these subsidies is equal to 0.05% of the GDP, and has been growing due to the reduction in the number of homes paying high rates. In addition, the progressive reduction of poverty suggests there is an opportunity to review the policy and reduce this expenditure. The measures to be adopted should include fine tuning the focus of these subsidies on sectors below the poverty line and especially those living in extreme poverty.

Increase and improve the provision of water and sanitation services in rural areas and small communities. Due to institutional arrangements and the size of rural population groups, there are legal and economic restrictions on attaining economies of scale. Service providers in small towns thus need financial and technical support. The following is therefore proposed: (i) generate incentives for consolidating companies to cover larger areas of territory in order to generate economies of scale; (ii) improve the technical competencies of those companies' human resources; and (iii) provide technical assistance and financial support for the design, financing, operation and maintenance of the company's physical assets. These measures would improve the sustainability of their business models.

Strengthen environmental sustainability. This challenge requires developing regulations to promote investment in resilient infrastructure. Comprehensive management of water resources should continue to be promoted, prioritizing remediation of the country's most critical watersheds. These actions should take place within the framework of strengthening sector planning, financial management, and project management. Sector planning processes and the coordination of the different instruments should therefore be improved, with the purpose of defining medium and long term plans, which should also be appropriately coordinated with sources of financing. Within this framework, and as part of this proposal, the functioning of the Unique Information System (SUI) should be optimized. And lastly, but no less important, it is crucial to have strategies in rural areas that guarantee environmental sustainability through appropriate management of watersheds and the preservation of the resource.

The Box 11 lists the opportunities that have been visualized for action by the Private Sector of the IDB Group in Colombia, and examples of interventions in the Water and Sanitation sector in other countries of the Region.

Box 11. The Private Sector of the IDB in Water

	Opportunities	Example Projects
Introduce innovative arrangements for financing water and sanitation for vulnerable population groups	There are major deficits in the coverage of water and sanitation services in rural zones, in small municipalities – especially in the Caribbean and the Pacific, and on the periphery of large cities. Financing is required for private operators working in these zones, as well as micro-loans so that isolated communities can have access to these services. Smaller providers must also be strengthened and institutional coordination must be improved between private operators and local authorities.	<i>Visión Banco II (PR-L1088)</i> . The IDB plans to issue a loan for US\$10 million to facilitate potable water and sanitation services to rural populations at the bottom of the pyramid in Paraguay. Through this project, financing would be provided to water and sanitation boards (Juntas de Agua y Saneamiento – JAS) constituted by neighborhood associations with licenses to distribute water in rural zones and neighbors who want to connect their homes to the distribution network.

IX. Cost of the Proposals and Financing Sources

The investments required to carry out the public policies recommended in this document represent about 7% of the GDP. Public investment is currently approximately 3.6% of the GDP. The national government contributes close to 55% of the total, leaving sub-national governments with the remaining 45%. This Strategy proposes an increase in investment of slightly over 3.5% of the GDP, reaching about 7% of the average GDP per year. This investment effort must also be complemented by an increase in current expenditures of 2% of the GDP for the different lines of action of this strategy, plus 2% of the GDP for pensions¹⁰⁵. These projections imply a total public expenditure of about 23% of the GDP, of which 16% of the GDP would correspond to current expenditures. The tax resources required to cover the increase in public expenditure would come from a comprehensive tax reform on the one hand, and on the other hand, from the reform to the pension system. The tax reform would permit progressively increasing income over the years to a range from 6% to 9% of the GDP to cover the increase in investment and current expenditures.

105 Average scenario between the different options proposed by this strategy for the pension system.

Chart 7. Average Public Investment in Gross Formation of Fixed Capital (% of the GDP)

Sector	Current Annual Investment	Additional annual Investment	Total annual Investment	Total Investment 20 years
<i>Central Government</i>				
Innovation	0.1%	0.2%	0.3%	6.2%
Agriculture	0.0%	0.1%	0.1%	2.1%
Education	0.0%	0.20%	0.2%	4.8%
Transportation	0.8%	1.3%	2.1%	41.6%
Urban Infrastructure	0.0%	0.0%	0.0%	0.2%
Water and Sanitation	0.1%	0.1%	0.1%	2.5%
Energy	0.1%	0.5%	0.6%	11.6%
Healthcare	0.0%	0.0%	0.0%	0.2%
<i>National Subtotal</i>	<i>1.1%</i>	<i>2.4%</i>	<i>3.5%</i>	<i>69.2%</i>
Rest of the National Investment	0.9%	-0.3%	0.6%	11.8%
Total National Investment	2.0%	2.0%	4.0%	81.0%
<i>Sub-National Governments</i>				
Sub-National Investment	1.6%	1.7%	3.3%	66.0%
Total Investment	3.6%	3.8%	7.4%	147.0%

Source: Own production based on the Proposals in the three policy areas of the strategy.

Notes: (i) Estimates based on the execution of the General Budget of the Nation (MHCP 2014), Gross Formation of Fixed Capital of the Public Sector of the national accounts (DANE 2012a); (ii) Additional Sub-National Investment includes: health, agricultural sector, education, transportation, urban water and sanitation infrastructure; (iii) by way of comparison, investments provided in the projects of 4G roads for US\$25 billion represent an approximate total of 8% of the GDP at 2014 prices: within a period of 10 years, this investment would cover 0.8% of the annual GDP.

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Abbreviations

4G	Fourth Generation of Road Concessions
ADC	Andean Development Corporation
ADD	Acute Diarrhea Diseases
AFP	Sociedades Administradoras de Fondos de Pensiones y Cesantías [Private Pension Fund Companies]
ANIF	Asociación Nacional de Instituciones Financieras [National Association of Financial Institutions]
BCS	Bank's Country Strategy
BEP	Beneficios Económicos Periódicos [Periodic Economic Benefits]
BNDES	Banco Nacional de Desarrollo Económico y Social [National Economic and Social Development Bank]
CAN	Andean Community
CAPTAC-DR	Centro Regional de Asistencia Técnica para Centroamérica, Panamá y República Dominicana [Regional Technical Assistance Center for Central America, Panama, and the Dominican Republic]
CDC	Country Development Challenges
CIAT	Centro Interamericano de Administraciones Tributarias [inter- American Center for Tax Administrations]
CONPES	Consejo Nacional de Política Económica y Social [National Council for Economic and Social Policy]
COP\$	Colombian Pesos
CORFO	Corporación de Fomento de la Producción de Chile [Production Development Corporation (Chile)]
CPA	Comité de Programación de la Administración [Administrative Programming Committee]
CREE	Impuesto sobre la renta para la equidad [Income tax for equity]

DANE	Departamento Administrativo Nacional de Estadística [National Administrative Department of Statistics]
DIAN	Dirección de Impuestos y Aduanas Nacionales de Colombia [Colombian National Taxes and Customs Department]
DNP	Departamento Nacional de Planeación [National Planning Department]
ECLAC	Comisión Económica para América Latina y el Caribe [United Nations Economic Commission for Latin America and the Caribbean – ECLAC]
EFTA	European Free Trade Association
EIA	Energy Information Administration
EME-6	Includes South Africa, South Korea, Indonesia, Malaysia, Thailand, and Turkey
EPS	Entidades Prestadoras de Salud [Healthcare Providers]
FGPM	Fondo de Garantía de Pensión Mínima [Minimum Pension Guarantee Fund]
FINAGRO	Fondo para el Financiamiento del Sector Agropecuario [Fund for Financing the Agriculture and Livestock Sector]
FOSYGA	Fondo de Solidaridad y Garantía [Solidarity and Guarantee Fund]
FSP	Fondo de Solidaridad Pensional [Pension Solidarity Fund]
FTD	Fixed Term Deposit
GDP	Gross Domestic Product
GMF	Gravamen a los Movimientos Financieros [Tax on Financial Transactions]
GNC	Gobierno Nacional Central [Central National Government]
GWh	Gigawatts per hour
HDI	Human Development Index
ICA	Impuesto de Industria y Comercio [Industry and Commerce Tax]
ICFES	Instituto Colombiano para la Evaluación de la Educación [Colombian Institute for Educational Assessment]
IDB	Inter-American Development Bank
IFPRI	International Food Policy Research Institute
IGAC	Institute Geográfico Agustín Codazzi [Augustin Codazzi Geographic Institute]
ILO	International Labour Organization
IMF	International Monetary Fund

INTOSAI	International Organization of Supreme Audit Institutions
IPSAS	International Public Sector Accounting Standards
LAC	Latin America and the Caribbean
LAC-5	Includes Brazil, Chile, Colombia, Mexico and Peru
M	Millions
MFA	Más Familias en Acción [More Families in Action]
MHCP	Ministerio de Hacienda y Crédito Público [Ministry of Finance and Public Credit]
MM	Billions
MSME	Micro, Small and Medium Enterprises
NER	Nominal Exchange Rate
NSG	Non-Sovereign Guarantee
OECD	Organization for Economic Corporation and Development
PISA	Program for International Student Assessment
PND	Plan Nacional de Desarrollo [National Development Plan]
PPA	Public-Private Association
PPP	Purchase Power Parity
QRR	Quality and Risk Review
R+D	Research and Development
RAIS	Régimen de Ahorro Individual con Solidaridad [Individual Savings Solidarity System]
RER	Real Exchange Rate
RICYT	Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana [Ibero-American and Inter-American Science and Technology Indicators Network]
RPM	Régimen de Prima Media [Medium Premium Regime]
SAI PMF	Supreme Audit Institutions Performance Measurement Framework
SENA	Servicio Nacional de Aprendizaje [National Learning Service]
SETP	Sistemas Estratégicos de Transporte Público [Strategic Public Transportation Systems]
SG	Sovereign Guarantee
SGR	Sistema General de Regalías [General Royalties System]
SITM	Sistema Integrado de Transporte Masivo [Integrated Mass Transportation System]
SME	Small and Medium Enterprises

SSPD	Superintendencia de Servicios Públicos [Superintendent of Public Services]
TES	Títulos de Tesorería [Local Treasury Bonds]
TFP	Total Factor Productivity
UNGRD	Unidad Nacional para la Gestión del Riesgo de Desastres [National Unit for Disaster Risk Management]
US\$	American Dollars
VASB	Viceministro de Agua y Saneamiento Básico de Colombia [Colombian Assistant Minister for Water and Basic Sanitation]
VAT	Value Added Tax
WEF	World Economic Forum

Simón Gaviria Muñoz, General Director of the National Planning Department

"This IDB Strategy is in line with the diagnosis and strategic proposal of the 2014-2018 National Development Plan ... given its emphasis on increasing productivity, improving public management and permitting more social mobility ... It is a sample of the IDB's invaluable analytic and intellectual contribution to the discussions on economic and social development of the Country and of Latin America".

Juan Carlos Echeverry, President of Ecopetrol

"...The Inter American Development Bank's strategy with Colombia... constitutes a valuable analytical tool for decision making on economic and social issues, with the intent of strengthening the work that has been carried out by the country in the pursuance of reducing poverty, increasing productivity, social mobility, and improving public management".

Iván Duque Márquez, Senator of the Republic

"The IDB has been a historical ally of the Colombian State in building policies and projects to generate economic and social development. The IDB strategy... has the main purposes of accompanying a structural tax reform, contributing to a transformation of the national pension system and making social expenditures more effective, among others. Support by the IDB on these three fronts will be definitive for the country's economic sustainability".

Rosario Cordoba, President of the Private Council on Competitiveness

"The IDB's Country Strategy is ambitious and should it become reality, it would make Colombia a more competitive and productive country, but especially, a more equitable one. The strategy's implementation... requires political will, as well as huge resources ... which may only be achieved through a structural tax reform that would considerably increase collection".

Leonardo Villar, Executive Director of Fedesarrollo

"This strategic document constitutes a valuable contribution for discussing public policies in Colombia... It is an innovative and particularly demanding vision within a complex context for the region... Without a doubt, the long term vision and international experience contributed by the IDB will help our authorities in adopting suitable decisions".

Sergio Clavijo, Director of ANIF - Economic Studies Center of Colombia

"The strategy proposed by the IDB for Colombia... has the virtue of finding concrete links among policies within the macro- and micro-economic levels ... Promoting these reforms will not be an easy task, but all the achievements between 2005-2015 are good example that such efforts pay, in terms of poverty reduction and of middle class expansion.