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# Ecuador

## Systematic Country Diagnostic

**Bolivia, Chile, Ecuador, Peru and Venezuela  
Country Management Unit**

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## Acronyms

ASPIRE	Atlas of Social Protection Indicators of Resilience and Equity
BCE	Central Bank of Ecuador
BDH	Human Development Transfer - Bono de Desarrollo Humano
BIESS	Bank of Ecuadorian Institute of Social Security
CCT	Conditional Cash Transfer
CEDLAS	Center for Distributive, Labor and Social Studies
CONAIE	Confederation of Indigenous Nationalities of Ecuador
ECV	Quality of Life Survey – Encuesta de Calidad de Vida
ENEMDU	Labor Force Household Survey
ENIGHUR	National Survey of Income and Expenditures of Urban and Rural Households
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
IDB	Interamerican Development Bank
IESS	Ecuadorian Institute of Social Security
IFC	International Finance Corporation
ILO	International Labor Organization
IMF	International Monetary Fund
INEC	National Statistical and Census Institute
JMP	Joint Monitoring Program
LAC	Latin America and the Caribbean
LAPOP	Latin America Public Opinion Project
MAG	Ministry of Agriculture
MEF	Ministry of Economy and Finance
MIGA	Multilateral Investment Guarantee Agency
OECD	Organization for Economic Co-Operation and Development
PPP	Purchasing Power Parity
PWT	Penn World Table
SEDLAC	Socio-Economic Database for Latin America And the Caribbean
SENPLADES	National Secretariat of Planning and Development
SERCE	Second Comparative and Explanatory Study
SIPA	Agriculture Public Information System
TERCE	Third Comparative and Explanatory Study
TFP	Total Factor Productivity
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
WASH	Water Supply, Sanitation and Hygiene
WB	World Bank
WDI	World Development Indicators
WTO	World Trade Organization

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## Overview

*During the last fifteen years, Ecuador's economic growth translated into impressive social gains. Yet, structural vulnerabilities emerged during this period and remained hidden by favorable external conditions during the commodity boom. The plunge in oil prices unveiled deep-rooted challenges such as macroeconomic imbalances, inefficiencies of the public sector, weak competitiveness, and underinvested private sector. Going forward, these are priority challenges to be addressed for continuing reducing poverty and boosting shared prosperity in a sustainable manner.*

### i. ECUADOR IS AN OIL-PRODUCING DOLLARIZED ECONOMY WITH RICH NATURAL ENDOWMENTS ...

1. **Ecuador is an upper middle-income country with a diverse geography.** Ecuador's per capita income (US\$ 10,459 Purchasing Power Parity 2011) has recently crossed the World Bank's upper middle-income threshold. The Andean mountains and the Pacific Ocean divide Ecuador into four diverse landscapes: (i) the Costa region to the west with gentle coastal plains, which hosts export fishery and agro-industries; (ii) the Sierra central highlands region, where the country's capital city, Quito, is located, which hosts key manufacturing industries and export flower businesses; (iii) the Amazonia to the east with flat to rolling eastern jungle, rich biodiversity and the country's oil and mineral reserves; and (iv) the Galapagos Islands, a unique eco-system and important tourism destination.
2. **Ecuador has a heterogeneous population.** According to the 2010 census, most of the population self-identifies as Mestizo (72 percent). Around 7 percent of the population self-identifies as Indigenous and around 7.2 percent as Afro-descendant. Ecuador concentrates the sixth largest Indigenous population and the fifth largest population of Afro-descendants in Latin America. The remainder of the population self-identifies as Montubio (7.4 percent), white (6.1 percent), or other (0.4 percent). The bulk of the country's 16 million inhabitants are located in the Sierra and Costa regions.<sup>1</sup>
3. **Ecuador has an abundant natural capital endowment.** The country has significant mineral reserves and endowments of crop and pasture land. Around two-fifths of the country's land mass of 276,841 square kilometers is cultivated, with agricultural land comprising the majority (30 percent), followed by permanent crops (6 percent) and arable land (5 percent)<sup>2</sup>. It is the World's 11<sup>th</sup> most biodiverse nation. Its 76 protected areas (including the Galapagos Archipelago), which cover 20 percent of its land and 13 percent of its marine areas are an integral source of eco-tourism.
4. **Oil plays a central role in Ecuador's economy.** Ecuador is the fifth largest oil producer in Latin America and the smallest OPEC member. Crude oil reserves are estimated at 8.3 billion barrels and are expected to last 35 years at current production rates, according to OPEC. While oil and oil-related activities currently account for only about one tenth of Ecuador's GDP, they represented up to a half of its exports and a third of its fiscal revenues during the boom years (2003-2014). Ecuador's economic cycle has been strongly correlated with oil prices. Similarly, the sector's fortunes have affected the country's fiscal stance and actions, particularly after 2007 when the State became the key administrator and investor in this sector.
5. **Ecuador is a dollarized economy.** In January 2000, the government of Ecuador adopted the US dollar in response to a major economic and political crisis, which brought the nation to the verge of hyperinflation. Its national currency (the Sucre) was depreciating rapidly due to the government's

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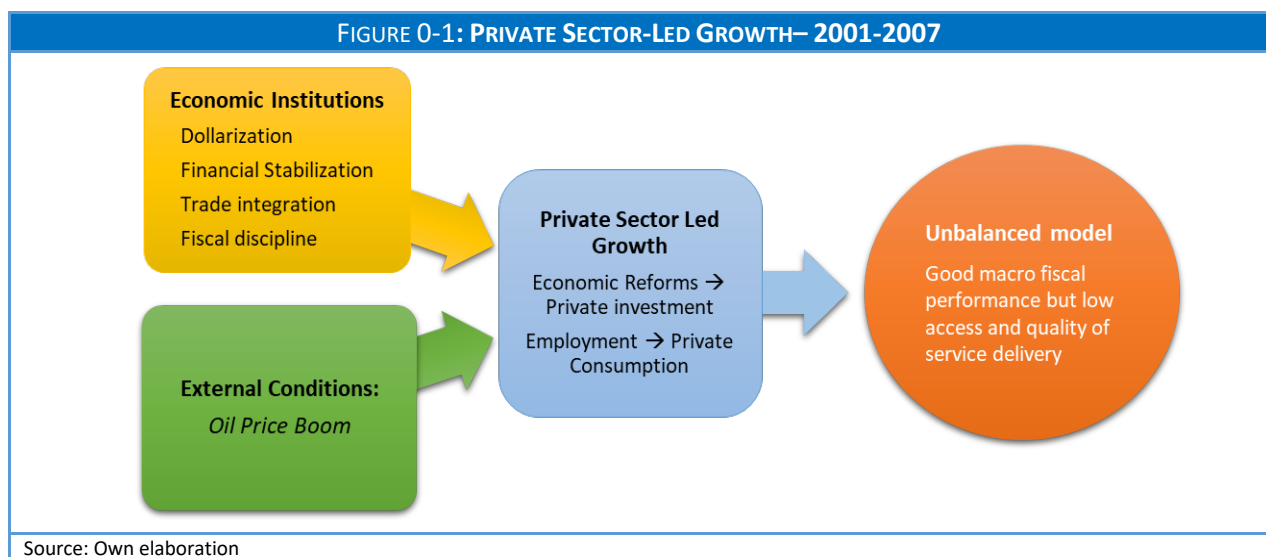
<sup>1</sup> Only 5 percent of the population live outside these regions.

<sup>2</sup> World Development Indicators.

monetization of the fiscal deficit. This situation led to one of the most debilitating banking crises in Latin America and the Caribbean (LAC). The economy entered a deep recession, with GDP contracting by 4.7 percent and unemployment increasing to 15 percent. By establishing a solid nominal anchor, dollarization provided the population with a stable medium of exchange as well as a reliable store of value. However, dollarization implies that a country gives up monetary policy and relies solely on fiscal policy and external buffers to mitigate the impact of shocks and to manage internal liquidity.

ii. ...IT HAS WITNESSED HIGH GROWTH AND SUBSTANTIAL SOCIAL GAINS OVER THE 2001-2014 PERIOD...

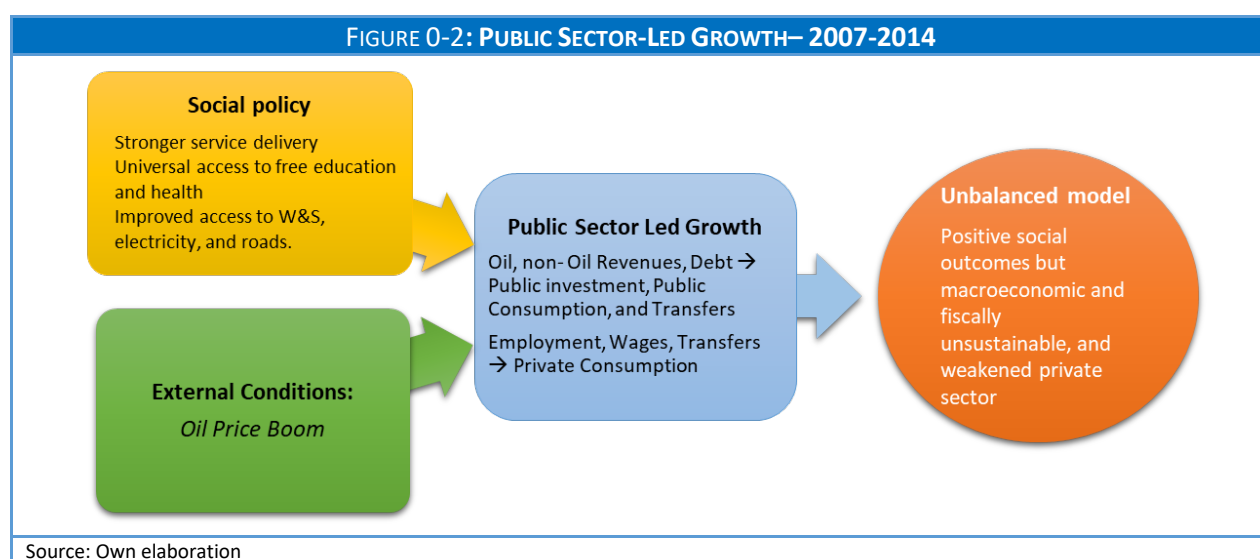
6. **Ecuador has achieved substantial economic and social gains over the 2001-2014 period.** Annual growth in real GDP averaged 4.5 percent between 2001 and 2014, well above the regional average of 3.3 percent. During this period, real GDP increased 79 percent, while real GDP per capita increased by 43 percent. High economic growth and changes in the distribution of income helped lift 1.4 million people out of poverty. The income of the poorest 40 percent of Ecuadorians (the 'bottom 40') increased substantially faster than the national average. During this period, the country experienced the second highest growth rate in Latin America.
7. **Tailwinds from favorable external conditions, together with economic reforms, supported growth, which was initially driven by private demand until 2007 (Figure 0-1).** Ecuador experienced an exceptionally positive terms of trade shock as the price of oil increased tenfold between 1998 and 2012. The country also benefited from key economic reforms implemented in the early 2000s, including dollarization, financial sector stabilization, and trade integration, together with fiscal discipline. Favorable external and internal conditions fueled private demand, which accounted for the bulk of 4.8 percent average annual growth between 2001-2006.



8. **During the 2001-2007 period, growth and macro stability aided poverty reduction.** Households benefited from the economic expansion through higher employment rates, increases in real labor income, and lower inflation. Poverty rates, which had increased sharply during the crisis in the late 1990s, fell back to pre-crisis levels by 2006 (Rinne and Sánchez-Páramo, 2008). Despite these positive developments, this period saw rises in underemployment, informality, and temporary employment. Firms took advantage of flexible employment arrangements to avoid paying obligations associated with permanent employees.



9. **However, progress on non-monetary dimensions of welfare was rather limited.** While public expenditures in education and health increased and social programs were better targeted to poor households from 2003 onwards (Mrazek, 2008), overall social spending remained low by regional standards (accounting for 5 percent of the GDP in 2006). In addition, inequalities in access to primary and secondary education persisted, as did differences in the quality of education and health services between poor and non-poor and between urban and rural areas. Access to water and sanitation and transport services was also low by regional standards (Drees-Gross, *et al.*, 2008).
10. **After 2007, economic growth was largely driven by the expansion of the public sector (Figure 0-2).** In 2011, the government renegotiated oil contracts with the private sector, resulting in a larger share of oil revenues flowing to the public sector. In turn, oil resources increasingly financed the expansion of both current and capital government spending. Public demand became the main driver of growth, accounting for two-thirds of the 4.4 percent average annual growth between 2007 and 2014. Public spending increased exceptionally from 20 percent of GDP in 2004 to 43 percent by 2014, well above Ecuador's regional and structural peers<sup>3</sup>.



11. **Most of the additional public resources were allocated to public investment and wages.** Public investment nearly tripled, from about five percent of GDP in 2004 to 14 percent in 2014. This was largely on account of an ambitious government program to invest in the oil, hydropower, transport, education, and health sectors, as well as in other social infrastructure. The public wage bill increased by 2.6 percentage points of GDP during the same period,<sup>4</sup> affecting labor costs and employment prospects in the private sector.
12. **Welfare gains intensified after 2007.** Monetary poverty fell from 36.7 percent in 2007 to 22.5 percent in 2014. Shared prosperity also improved as the income of the bottom 40 grew almost twice as fast as the national average (i.e. about 7 percent vs. 4 percent). As a result, inequality declined significantly with the Gini index dropping 9 percentage points over the decade, reaching 0.46 in 2014.

<sup>3</sup> Structural peers include Colombia, Kazakhstan, Malaysia, Peru, Romania, and South Africa. The peers were selected taking into account per capita income, size and reliance on natural resources.

<sup>4</sup> In 2012, the government introduced a nominal freeze of civil servants pay to reduce spending pressures; yet the public wage bill has continued to grow at about 5 percent each year.

13. **Labor income and public transfers were the main contributors to welfare gains.** Labor income growth contributed to more than 70 percent of poverty reduction. The underlying drivers of this growth were an increased labor demand in some non-tradable sectors, such as construction and services, linked to government spending and coupled with active use of minimum wage and other labor regulations. Public transfers increased through the scaling up of Ecuador's primary conditional cash transfer program, the *Bono de Desarrollo Humano*, in 2007. These transfers accounted for about 9 percent of the overall poverty reduction, and almost 20 percent of the reduction in rural areas. Higher disposable income enabled young working adults to withdraw from the labor market and invest in their own education.
14. **Improved access to basic services also contributed to improve welfare.** The large increase in education and health spending mandated by the 2008 Constitution, coupled with the establishment of free public health and education services, improved outcomes in these sectors.<sup>5</sup> The infant mortality rate fell from 23.7 to 17.8 per 1,000 live births between 2007 and 2014, while the under-5 mortality rate decreased from 28.3 to 20.9 per 1,000 live births. Between 2007 and 2014, access to basic education became close to universal and net enrollment rates in upper-secondary and tertiary education increased by 19 and 14 percentage points, respectively.
15. **Public investment in infrastructure enabled traditionally underserved populations to gain better access to basic services, such as water, sanitation, and electricity.** Access to water and sanitation services increased substantially, reaching 92 percent and 85 percent in 2014, respectively.<sup>6</sup> This period also saw access to electricity become universal and the country's energy matrix partially shifted towards renewable sources.

iii. *...BUT THE DECLINE IN OIL PRICES AFTER 2014 EXPOSED UNDERLYING VULNERABILITIES AND THE STATE-LED ECONOMIC MODEL BECAME UNSUSTAINABLE.*

16. **The macroeconomic policy stance amplified the link between commodity prices and growth.** Ecuador's dollarization places a strong weight on fiscal policy to attenuate economic fluctuations. During the oil price boom, Ecuador faced important *trade-offs* between safeguarding its macroeconomic stability by saving its commodity windfall, and intensifying social gains by investing and redistributing these resources to promote social gains. Prudent fiscal management during the first half of the 2000s, created fiscal savings and mitigated the symptoms of Dutch disease (World Bank, 2014). The country's expansionary fiscal position, which began in 2008 when oil prices were still high, fueled domestic demand. However, it reduced the space necessary for a countercyclical response when oil prices fell in 2014. As a result, Ecuador had one of the most pro-cyclical fiscal policies in the region post-2008 (Vegh, 2008).
17. **Macroeconomic conditions started to deteriorate even before the fall in oil prices.** Small fiscal savings during the early boom years were depleted while oil prices were still high. As a result, Ecuador had limited fiscal buffers, which prevented a smooth adjustment to lower oil prices. On the back of ambitious investment plans after 2007, Ecuador's fiscal deficit widened to around five percent of GDP in 2013-14. These investments were initially financed with domestic revenues, but later became increasingly reliant on external and domestic borrowing. Public debt started to climb as the fiscal deficit worsened, doubling between 2010 and 2014.

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<sup>5</sup> The 2008 Constitution mandated a minimum spending of 6 percent of GDP in education and 4 percent of GDP in health.

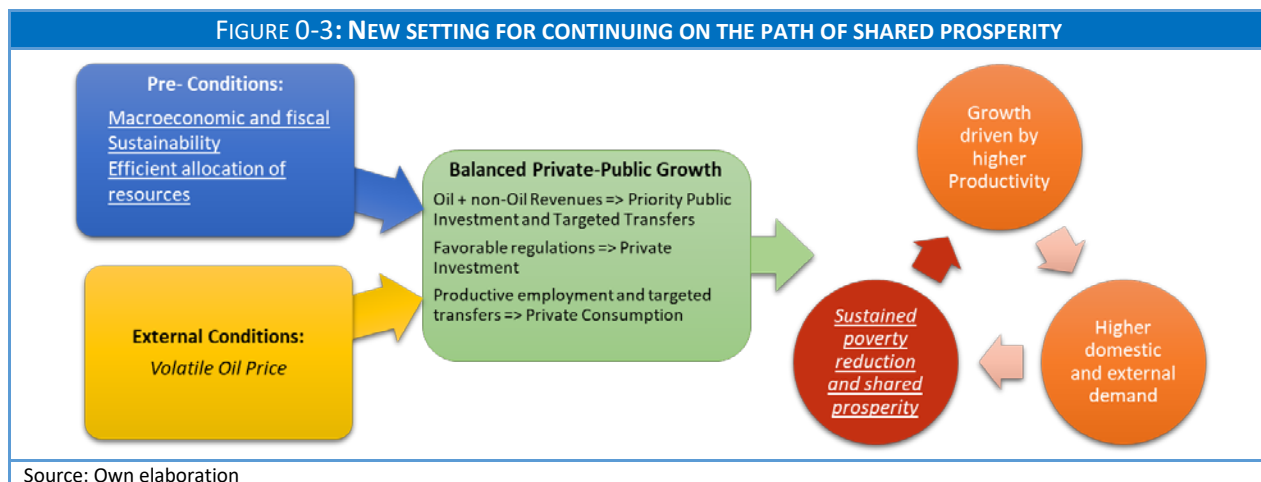
<sup>6</sup> World Health Organization - UNICEF: Joint Monitoring Program, 2016

18. **Public sector expansion strengthened service delivery, but at the expense of efficiency.** While important social gains were achieved, public resources were not always allocated towards projects with the highest social returns. For instance, investments in new or renovated hospitals have not resulted in an increase in the availability of beds, nor in the number of hospital discharges. Similarly, investments in higher education have not ensured higher rates of completion, while investments in infrastructure (such as airports, and hydro-plants) have not been fully exploited.
19. **The private sector's competitiveness was undermined by restrictive regulations, uncertainty in the enforcement of rules and contracts, and symptoms of Dutch disease during the last half of the boom years.** Distortions associated with rigid regulations governing the labor market, business, and finance limited the reallocation of factors toward more productive uses and encouraged informality. At the same time, the predictability needed for private investment was undermined by a combination of high operating costs, frequent changes in taxes and tariffs, and weak enforcement of contracts. Finally, the combination of strong domestic demand and high labor costs drove up real exchange rates. Estimates indicate an overvaluation of up to 20 percent by 2014, consistent with the symptoms of Dutch disease.
20. **As oil prices declined, macroeconomic and structural vulnerabilities came to the fore, hitting the Ecuadorian economy hard.** When oil prices fell in 2014, revenues plummeted and spending declined, mainly due to cuts in public investment. Even so, fiscal deficits widened, arrears accumulated, and the public debt increased swiftly. External imbalances associated with lower oil exports and increased capital outflows have led to a sharp decline in international reserves since 2015.
21. **With a dollarized economy and limited fiscal buffers, Ecuador could neither depreciate its currency nor undertake countercyclical fiscal policy.** As the state-led growth model became unsustainable, the stagnant and constrained private sector was not able to compensate quickly for the decline in public investment and oil exports. The result was that economic growth declined sharply and poverty reduction stalled.

*iv. ECUADOR NEEDS TO REBALANCE ITS ECONOMY AND FIND NEW ENGINES FOR PROMOTING SUSTAINABLE AND INCLUSIVE GROWTH.*

22. **The central premise of the proposed framework for accelerating growth, poverty reduction, and shared prosperity is a rebalancing of growth between public and private sectors with greater reliance on increased productivity gains in both sectors (Figure 0-3).** Volatile oil prices are likely to be the 'new normal' that the country will face in the years to come. In addition, the normalization of monetary policy in the United States and Europe could further tighten the external financing conditions Ecuador faces. Under this unfavorable external environment, Ecuador will need to lay the foundations for reigniting and sustaining growth. In doing so, the country will inevitably face trade-offs, and should carefully weigh the type and timing of actions to be taken. While addressing fiscal imbalances soon is critical to build credibility with markets and resilience, adjusting too quickly could depress economic activity as public sector has been the main engine of growth. Raising tax revenues could ease the required cuts on public spending, but would increase costs for a private sector that already struggles to be competitive. Finally, it is important to consider how to adjust public spending in order to safeguard social priorities. In this context, reducing barriers that prevent factors from moving towards activities with higher returns can help unlock productivity gains needed to support growth, with limited downside effect.
23. **This SCD identifies the foundations of the sustainable and inclusive growth process through a prioritization of challenges and opportunities.** Three key elements must be in place for such growth

process to take place, which are the bases of the prioritization exercise: (i) promoting macroeconomic sustainability; (ii) enabling an efficient allocation of resources in the public and the private sectors, and (iii) protecting the poor and the vulnerable. Challenges and opportunities -grouped in four pillars- are identified as priorities if they contribute significantly to at least one of the above elements and do not undermine the others. (Table 0-1). Another element considered in this prioritization exercise is whether the identified challenges or opportunities are expected to be addressed in the short (ST), medium (MT) or long term (LT). The analysis also evaluated the possible timeframe under which actions are implemented toward tackling the identified difficulty or achieving the identified goal. It also conveys a sense of urgency in implementing such actions. The timeframe considers the short term as being approximately within one year, the medium term as within four to five years, and the long term as more than five years.



24. **In the short term, it is critical to address macroeconomic imbalances (Pillar 1) and lift barriers to private sector development (Pillar 2), while also protecting the recently achieved social gains.** Bringing the fiscal accounts to a sustainable position is essential for reducing uncertainties, relieving external pressures, safeguarding the dollarization regime, and creating conditions for growth to accelerate. This adjustment will inevitably entail rationalizing public spending, which ideally should be done through efficiency gains that protect priority social spending. As the public sector downsizes, the private sector is expected to take a more prominent role. For this to happen, an enabling and competitive business environment needs to be in place. In turn, a dynamic private sector would further contribute to the fiscal and the external sustainability through higher tax revenues and exports, and would reinforce a virtuous cycle. These conditions will allow Ecuador to reap the returns of its medium to long-term agenda of further improvements in human capital (Pillar 3), physical capital and natural capital (Pillar 4), while at the same time protecting the country's poor and vulnerable populations.

25. **The first pillar proposes supporting conditions for addressing macroeconomic imbalances.**

- a. *Bring fiscal accounts to a sustainable position, rebuild fiscal buffers, and put in place fiscal institutions to adequately manage oil windfall:* as a dollarized economy, Ecuador has to rely on fiscal policy to mitigate the impacts of economic shocks. However, a concrete adjustment is needed to avoid the fiscal stance from becoming unsustainable. In this context, it is important for the country to rebuild its fiscal buffers and develop instruments to ensure that these buffers are used counter cyclically.
- b. *Improve the efficiency of public spending at different government levels, and shift resources towards priority social spending:* fiscal efforts should be complemented by measures to improve targeting

and increase efficiency in government spending. This would deliver savings while also safeguarding social gains, particularly for the most vulnerable.

- c. *Increase efficiency and neutrality of the tax system; broadening bases, phasing out distortive taxes, and rationalizing tax benefits.* Improving the design and efficiency of Ecuador's tax system marks a critical step. Reducing exemptions and rethinking highly distortive taxes would assist in achieving greater efficiency.
- d. *Address external imbalances and rebuild international reserves to safeguard the dollarization regime:* Ecuador needs to safeguard the dollarization regime by addressing external imbalances and rebuilding its international reserves, which have been depleted following the drop-in oil prices. However, reducing external pressures and regaining competitiveness will entail adjustments in the real effective exchange rate. This can be done by bringing domestic prices and unit labor costs back into line. The process of realigning prices and costs requires productivity gains that are consistent with, or greater than, those of competitors. Such a process could entail reallocations that result in adjustments in average real wages and other factor rents.

**26. The second pillar contemplates challenges and/or opportunities to lift barriers to private sector development.**

- a. *Align labor cost to productivity, modernize labor regulations, and increase effectiveness of safety nets:* Ecuador's labor market remains remarkably rigid. This restricts the private sector's ability to adapt rapidly to changing market conditions. Ongoing efforts to increase labor flexibility in key exporting sectors are welcome, but broader reforms may be needed. At the same time, it is important to provide social safety nets for vulnerable employees.
- b. *Integrate the economy with the rest of the world by revamping policies to attract foreign investments and by reducing barriers to trade:* it is important to consider resolving existing disincentives to foreign investment, such as the lack of a comprehensive regulatory framework and institutional setting for public-private partnerships, as well as the absence of limited liability ownership rules. Steps to reduce the burden of trade regulation should also be evaluated, including lowering tariff and non-tariff barriers to trade.
- c. *Reduce costs and uncertainties associated with business regulations and its enforcement:* despite recent progress, regulations make it difficult to open and close a firm. The time and costs involved in registering a new business in Ecuador are high compared to regional peers. In addition, frequent changes in taxes and tariffs add uncertainty to investment decisions. Efforts to reduce these costs and uncertainties should be evaluated.
- d. *Reduce distortions associated with financial regulation and strengthen regulatory institutions:* Ecuador's private sector would benefit from greater access to credit, which would require efforts to address distortions caused by the financial regulatory system. In turn, this entails leveling up regulatory requirements for, and oversight of, public banks and cooperatives to those of private banks, as well as relaxing ceilings on lending rates. Further reform efforts should consider reducing regulatory burdens, such as advanced tax payments and unclear insolvency proceedings.

**27. The third pillar identifies challenges and/or opportunities to build human capital and expand economic opportunities.**

- a. *Improve quality of education:* although Ecuador has made large investments in educational infrastructure, the quality of education remains below standard and impacts on labor productivity have not yet materialized. In this context, it is necessary to improve teachers' professional

development. Also required is an increase in the relevance of acquired cognitive and non-cognitive skills demanded by the labor market. In addition, improving access to education and learning outcomes in lagging regions and among ethnic minorities is key to reducing existing disparities.

- b. *Strengthen coordinated efforts to address high levels of malnutrition and stunting, and to reinforce preventive and primary health care:* given that labor productivity is impacted by health outcomes efforts to reduce chronic malnutrition and stunting are imperative. This will require multiple efforts that are synchronized and integrated across sectors as well as across different levels of government. Furthermore, Ecuador urgently needs to reverse the declining trends in immunization rates and to improve coverage of essential maternal health services.
- c. *Strengthen gender-based violence prevention efforts:* to address gender violence, priorities should include improving the efficiency of the government's multi-sectoral approach to prevention and victim protection. This will require greater cooperation between the government, civil society organizations, and the private sector. At the same time, it will be important to increase the scope of services to victims so as to reach the most vulnerable, with particular focus given to indigenous, afro-descendent and disabled women.
- d. *Enhance integration of vulnerable groups and ethnic minorities:* revisions to the existing system of social transfers would help to increase their coverage and improve their targeting, which will in turn help make the transfer system more pro-poor and less liable to leakages. In this way, the system will better protect and integrate vulnerable groups. In addition, reforms to the social registry are needed in order to link beneficiaries across various programs more efficiently and to extend their ability to access effective grievance redress mechanisms. Finally, building a more cohesive society requires a greater assimilation of the country's various ethnic groups. This demands a better understanding of the socio-economic and political limitations of these groups, as well as, a revision of policies intended to address these limitations. Helping here would be a more participatory approach to development, where local knowledge is also included in policy priorities.

**28. The fourth and final pillar identifies challenges and/or opportunities to improve the use of physical and natural capital.**

- a. *Rethink strategically the use and the sustainability of recently built infrastructure and resolve how to deal with unfinished projects:* over recent years, Ecuador has invested heavily in its energy sector and transport infrastructure, particularly roads, ports, and airports. Many of these investments remain non-operative or under-utilized. In this context, it is critical to put in place a strategy for managing existing assets, increasing utilization capacity, adjusting services costs, and possibly transferring the management of some assets to the private sector.
- b. *Improve quality of water, sanitation, and irrigation services:* recent improvements in access to water supply and sanitation (WSS) remain rather regressive and the water quality is low. Any progress to address this will likely start with the provision of greater clarity in the roles and responsibilities of the various national institutions responsible for WSS and with better financial management of the sector. Improving and expanding the country's irrigation network, especially in water-stressed areas, will enable agribusinesses to benefit from recent investments in upstream irrigation systems.
- c. *Invest in long-term resilience and adaptation mechanisms to address high exposure to exogenous natural hazards and climate risks:* strengthening disaster risk management (DRM) through the incorporation of mandatory DRM criteria in the design of public investment projects and through

the adoption and monitoring of a DRM strategy marks a priority. Efforts to improve environmental management and conservation are also needed.

- d. *Improve investments in natural capital stocks and environmental services to address traditional and emerging challenges under (current) fiscal constraints:* over and above individual environmental interventions, Ecuador requires a clear national strategy that drives economic growth while also delivering on the government's constitutional mandate to protect the country's natural capital in the long run.

**TABLE 0-1 PILLARS AND KEY CHALLENGES OR OPPORTUNITIES TO ADDRESS STRUCTURAL CHALLENGES**

Key challenges or opportunities	Prioritization criteria			Timing
	Macroeconomic sustainability	Efficiency gains	Poor and vulnerable	
Pillar 1: Addressing macroeconomic imbalances				
Bring fiscal accounts to a sustainable position, re-build fiscal buffers, and put in place fiscal institutions to adequately manage oil windfall	X	X	X	ST
Improve the efficiency of public spending at different government levels, shifting resources towards priority social spending	X	X	X	ST
Increase efficiency and neutrality of the tax system; broadening bases, phasing out distortive taxes and rationalizing tax benefits	X	X		ST
Address external imbalances and rebuild international reserves to safeguard the dollarization regime	X			ST
Pillar 2: Lifting barriers to private sector development				
Align labor cost to productivity, modernize labor regulations, and increase effectiveness of safety nets	X	X	X	ST
Integrate the economy with the rest of the world by revamping policies to attract foreign investments and by reducing barriers to trade	X	X		ST
Reduce costs and uncertainties associated with business regulations and their enforcement		X		ST
Reduce distortions associated with financial regulation and strengthen regulatory institutions	X	X		ST to MT
Pillar 3: Building human capital and expanding economic opportunities				
Improve quality of education, and address skill gaps in the labor market		X	X	ST to MT
Strengthen coordinated efforts to address high levels of malnutrition and stunting, and reinforce preventive and primary health care		X	X	ST to MT
Strengthen gender-based violence prevention efforts			X	MT
Enhance integration of vulnerable groups and ethnic minorities			X	MT
Pillar 4: Improving the use of physical and natural capital				
Rethink strategically the use and the sustainability of recently built infrastructure, and resolve how to deal with unfinished projects	X	X		MT
Improve quality of water, sanitation, and irrigation services		X	X	MT
Invest in long term resilience and adaptation mechanisms to address high exposure to exogenous natural hazards and climate risks	X	X	X	MT to LT
Improve investments in natural capital stocks and environmental services so as to address traditional and emerging challenges under (current) fiscal constraints		X	X	MT to LT

## Process and structure of the SCD

29. **The SCD seeks to identify the most critical constraints and opportunities facing countries as they work to end extreme poverty and promote shared prosperity in a sustainable manner.** The study steps back from the World Bank's existing portfolio, and even the Ecuadorian Government's strategy, to conduct a broad overview of socio-economic developments in the country and map challenges going forward. It is designed to inform the preparation of the Country Partnership Framework, as well as, to serve as an analytical input on the debate about strategic development priorities for the country.
30. **In the preparation of this report, consultations were held with various stakeholders.** Several rounds of bilateral consultations were undertaken with members of the Global Practice Team and the Country Team prior to the elaboration of the overall storyline. The Global Practice team participated in two rounds of discussions (October 10 and December 12, 2017) and held a full-day workshop on March 8, 2018, to discuss the storyline. In addition, a consultation process was conducted in Quito and Guayaquil with the participation of a number of representatives of Ecuadorian civil society. The consultation sought to ensure that inputs from stakeholders were taken into account when preparing the report. A World Bank visit took place from April 10 until April 12, 2018, during which several discussion sessions were held with representatives of the public sector, the private business sector, civil society, Indigenous and Afro-descendant organizations, and academia. The aim of the consultations was to provide an essential qualitative assessment to validate and complement the SCD technical diagnostic.
31. **The SCD will be followed by the preparation of the Country Private Sector Diagnostic (CPSD).** The CPSD is expected to complement the SCD by taking a closer look at the key horizontal and sectoral constraints to private investment. Together with the SCD, the CPSD will inform the WBG's Country Partnership Framework in Ecuador. The CPSD's recommendations and findings will, in a second phase, be translated into a joint World Bank-IFC implementation plan.
32. **The SCD is organized around the following set of questions:**
  - a. What are the factors that have contributed to growth? – Chapter 1
  - b. What are the factors that have contributed to poverty reduction and inclusion? – Chapter 2
  - c. What are the factors that have contributed to social, fiscal, and environmental sustainability? – Chapter 3

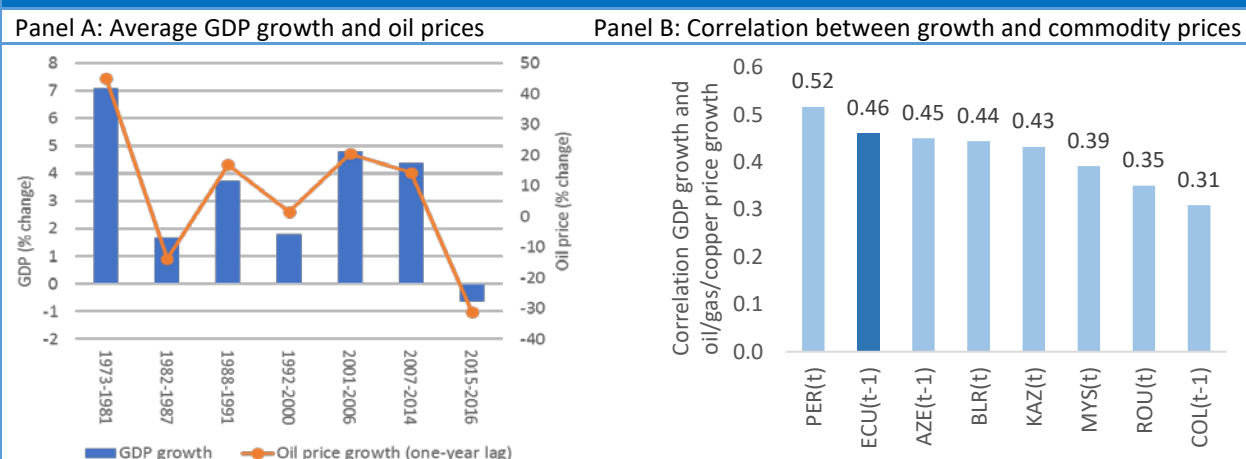


## I. Economic Growth

### i. Ecuador's recent growth performance

33. **Ecuador sustained high economic growth between 2001 and 2014.** After repeated periods of political turmoil and a deep financial crisis at the end of the 1990s, Ecuador introduced a number of structural reforms, including dollarization, financial stabilization, and trade integration. International oil prices started to increase shortly thereafter. Between 2001 and 2012, the price of oil increased ten-fold and oil rents reached a peak of 17 percent of GDP in 2012. Building on these enabling conditions, economic growth accelerated in the 2000s, reaching an average 4.5 percent during 2001-2014, well above the average for the Latin America and the Caribbean (LAC) region of 3.3 percent. During this period, real GDP doubled and real GDP per capita increased by 50 percent.
34. **External factors, explain about one third of per capita income growth during this period (Araujo *et al.*, 2015).** Favorable external conditions fueled domestic demand and savings. During the 2001-2008 period, these factors combined to help the accumulation of international reserves, the reduction of public debt, the growth in foreign investment, and the expansion of oil export volumes. After 2008 savings started to moderate, while the link between domestic demand and terms of trade strengthened. During this period, the government spent all the oil windfalls that it received (World Bank, 2015). When external conditions reverted, economic growth was severely affected.
35. **Oil resources have traditionally played a central role in Ecuador's economy.** Ecuador has large oil and mineral reserves, which are expected to last 35 years at current levels of production. At present, the country is the fifth largest oil producer in LAC and the smallest OPEC member. While oil-related activities account for a relatively small fraction of Ecuador's GDP (about 10 percent in 2014), oil exports represented half of the export basket and about one third of fiscal revenues during the boom years (2003-2014). Based on these indicators, Ecuador's reliance on oil is relatively lower than its structural peers. Yet, its GDP growth is strongly correlated with changes in oil prices, even more so than its peer countries.
36. **Over the years, Ecuador's political economy has been shaped by its oil resources.** Soaring oil prices and production in the 1970s accelerated Ecuador's growth to an annual average of 7.2 percent. Average growth fell to 2.3 percent during the 1980s and 1990s as the economy struggled to adjust to lower oil prices. This led to a period of repeated crises until prices started to recover again in the 2000s. As will be discussed more in this chapter, growth collapsed yet again when prices fell in mid-2014 (Figure I-1).

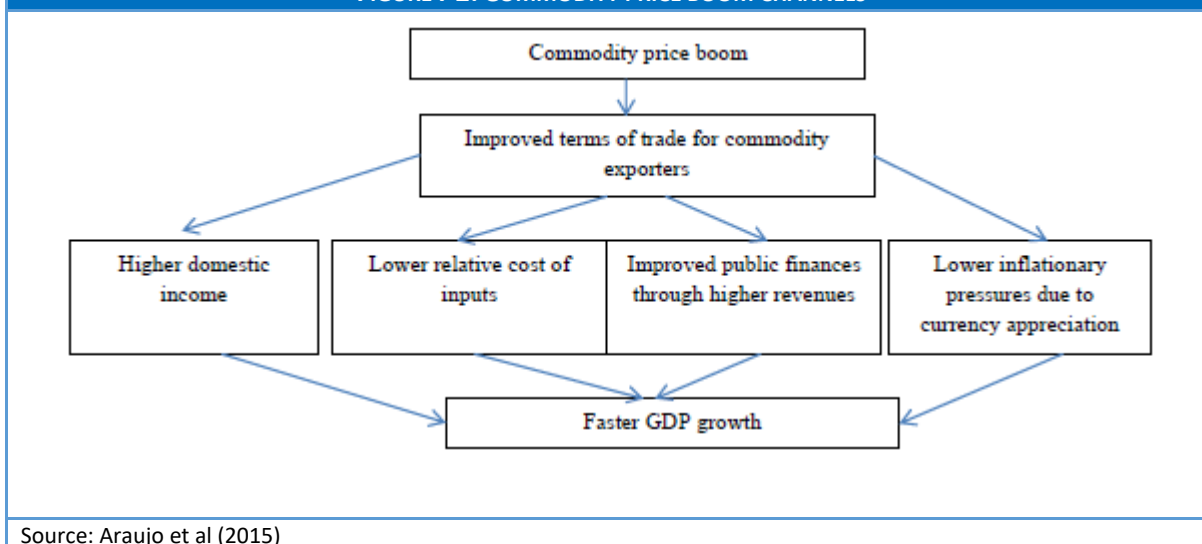
**FIGURE I-1: GDP GROWTH AND THE PRICE OF OIL**



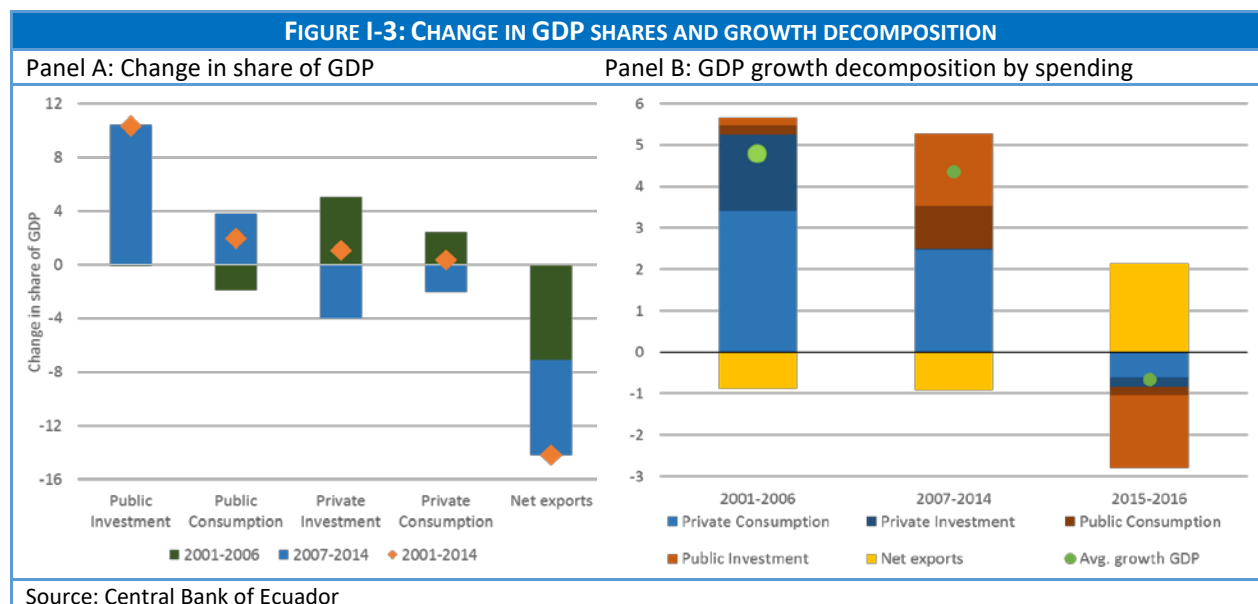
Source: Central Bank of Ecuador, WDI, and World Bank staff calculations

37. **Four main transmission channels exist between oil prices and GDP (Figure I-2).** First, higher oil prices lead to higher terms of trade, which directly raises domestic income and induces more consumption and/or savings, as experienced by Ecuador during the 2001-2014 period. Second, an increase in the price of oil reduces the relative price of other inputs, such as machines, which underpins investment that seeks to take advantage of higher profitability. Third, higher oil prices raise the level of public sector revenues, which can be invested in upgrading public infrastructure, with positive dividends for growth. This third channel is more important when (profitable) public enterprises play a more significant role in the commodity sector, as has been happening in Ecuador since 2008. Fourth, commodity booms tend to appreciate the exchange rate, which helps contain the prices of tradable goods. However, higher incomes, especially when combined with lower savings, push up the cost of non-tradable goods and services. This includes labor costs. A higher wage bill further contributes to exchange rate appreciation, harming the competitiveness of domestically produced tradable goods. This represents a classic symptom of Dutch disease. In this context, a countercyclical fiscal stance is central to mitigating the impact on relative prices.

**FIGURE I-2: COMMODITY PRICE BOOM CHANNELS**



38. **The recent oil price boom initially fueled private demand, but later supported a large expansion in public spending.** Ecuador's large terms of trade shock and economic reforms increased private sector confidence and strengthened the financial sector, which experienced a gradual recovery in deposits and credit. As a result, private investment expanded. Private consumption, on the other hand, was boosted by continued improvements in employment outcomes. Private demand accounted for the bulk of the 4.8 percent average annual GDP growth during 2001-2006, while public consumption remained constant. After 2007, the private-public shift was dramatic. Oil resources, which were increasingly channeled to the public sector, helped finance an expansion of both current and capital spending (Figure I-3). As a result, public demand became the main driver of growth, accounting for two-thirds of the 4.4 percent average annual growth between 2007 and 2014.



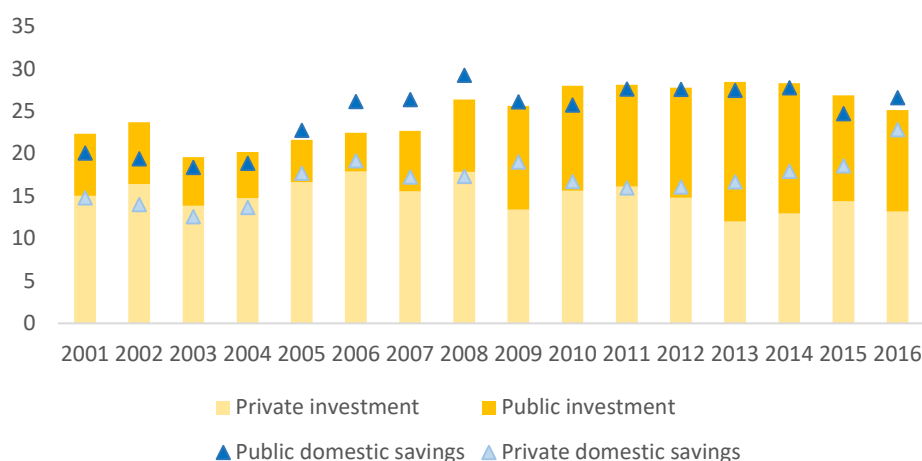
39. **High public investment sustained strong levels of overall investment, which peaked at 25 percent of GDP in 2014.** The shift from private-led investment to public-led investment had its roots in the increasing participation of the State in the oil sector, which expanded from 0.8 percent of GDP in 2007 to 2.5 percent in 2014 (BOX I-1). Public investment in infrastructure also increased dramatically as part of an ambitious agenda to improve roads, housing, schools, and hydroelectric generation. Ecuador's public investment was the highest among structural peers, averaging 11 percent of GDP between 2007 and 2014, while private investment was the lowest among peers during this period. Outside the oil sector, non-oil private investment remained stable at around 13 percent of GDP.

### BOX I-1: Shift from private to public investment in the oil sector

Since 2011, the oil sector has shifted from private operators to state-owned operators, following a change in Ecuador's contracting arrangements with the private sector. In January 2011, the government started to renegotiate oil operating contracts to replace the previous revenue-sharing agreements with a fixed, per-barrel fee for exploration and production services delivery contracts. The oil contract renegotiations made private investment more uncertain and challenging. After the renegotiation, 14 contracts were changed, while agreement could not be reached for eight contracts. For these latter cases, contracts were terminated and most of the oilfield exploitation was taken over by one of the two public oil companies: Petroecuador or Petroamazonas. During the period of higher oil prices from 2011 to 2014, production by Petroamazonas increased from less than 300,000 barrels per day (b/d) to about 430,000 b/d. The largest part of this increase occurred when Petroamazonas took over two large fields from private operators that refused to convert. In addition, Petroamazonas tripled capital investment to \$3.1 billion. Over the same period, private investment and production declined rapidly and overall output in the sector increased only marginally (from 500,000 b/d to 550,000 b/d). The government received an additional US\$2.8 billion in oil revenues from January 2011 to December 2012 due to the changes in contract modalities.

40. **Domestic savings initially followed the investment dynamics.** Unlike other countries in the region, Ecuador did not attract foreign financial flows during the boom; instead, investment was mostly covered by domestic savings. Thanks to the boost of the commodity windfall, public savings fully covered public investment until 2012 (except in 2009). Since 2013, the expansion in public investment has been associated with a decline in public savings. Private savings started to finance an increasing share of public investment, which crowded out private investment.

FIGURE I-4: GROSS DOMESTIC SAVINGS VS INVESTMENTS (PERCENTAGE OF GDP)



Source: IMF, WDI, and Central Bank of Ecuador

41. **The trade balance has reduced its contribution to growth over time; imports grew rapidly while oil volumes stagnated.** Benefiting from high international prices, export values expanded by almost ten percentage points of GDP between 2001 and 2014, reaching a maximum of 34 percent of GDP in 2007 (Figure I-5). Imports expanded faster than exports, particularly for fuel and capital goods, yielding net exports that depressed GDP growth by about 0.7 percent points on average during the boom (Figure I-6). This result reverted as the economy adjusted to lower oil prices in 2015 and 2016. Ecuador's export structure changed little during the 2000s, with primary products accounting for the lion's share of exports. Shifts in the composition of the export basket were mainly driven by changes in prices rather than in volumes. Oil exports accounted for more than half the export basket in 2014. By 2016, oil still represented approximately 34 percent of Ecuador's exported value. Other primary products, such as agriculture and minerals, accounted for an additional 50 percent of total exports in 2016.

FIGURE I-5: OIL AND NON-OIL EXPORTS (% OF GDP)

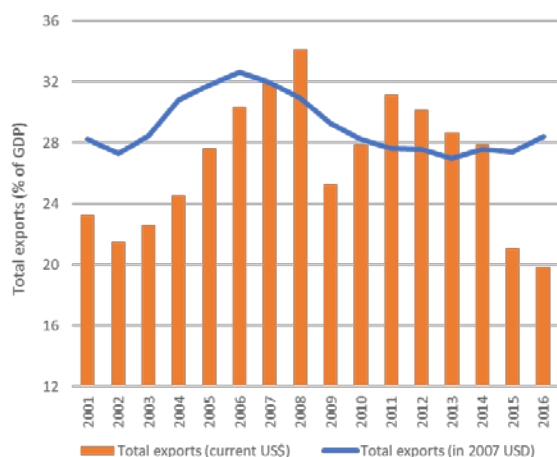
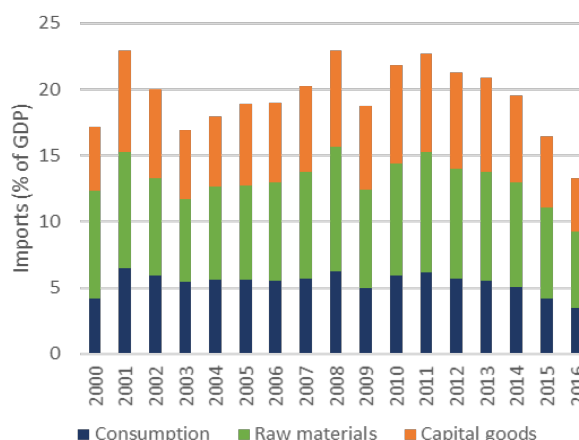


FIGURE I-6: NON-FUEL IMPORTS BY PRODUCT

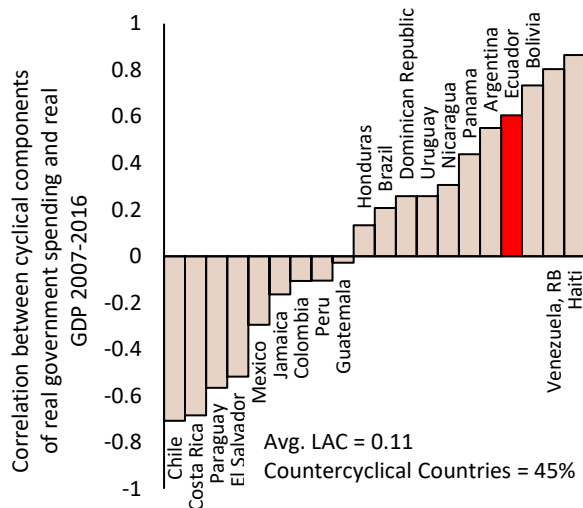


Source: Central Bank of Ecuador

#### 42. The link between commodity prices and growth was amplified by the macroeconomic policy stance.

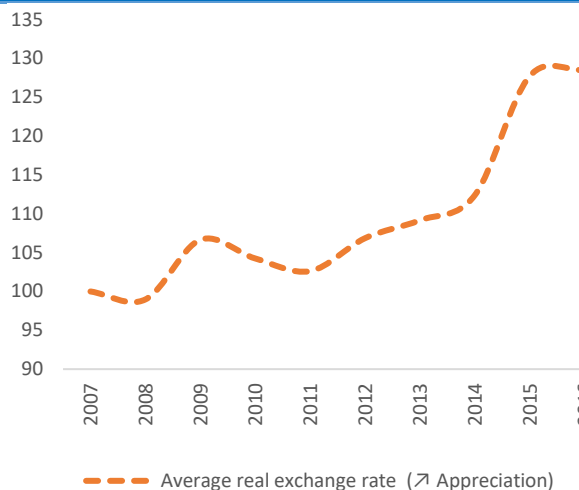
Ecuador's dollarization places a strong weight on fiscal policy to attenuate economic fluctuations. Prudent fiscal management during the first half of the 2000s helped create fiscal buffers and mitigate Ecuador from the symptoms of Dutch disease experienced by neighboring countries whose currencies appreciated during the commodity boom (World Bank, 2014). The country's expansionary and pro-cyclical fiscal position, which began in 2008 when oil prices were still high, fueled domestic demand. During this time, the government drew on a combination of oil resources, non-oil revenues, and accumulated assets to finance a large expansion in public spending. This helped significantly reduce the fiscal buffers necessary for a countercyclical response when oil prices fell in 2014. In fact, Ecuador had one of the most pro-cyclical fiscal policies in the region (Figure I-7). Ecuador's situation was further aggravated by the repercussions of a default on an international bond in 2008, which significantly raised borrowing costs and limited access to external financing resources.

FIGURE I-7: FISCAL POSITION AMONG LAC COUNTRIES



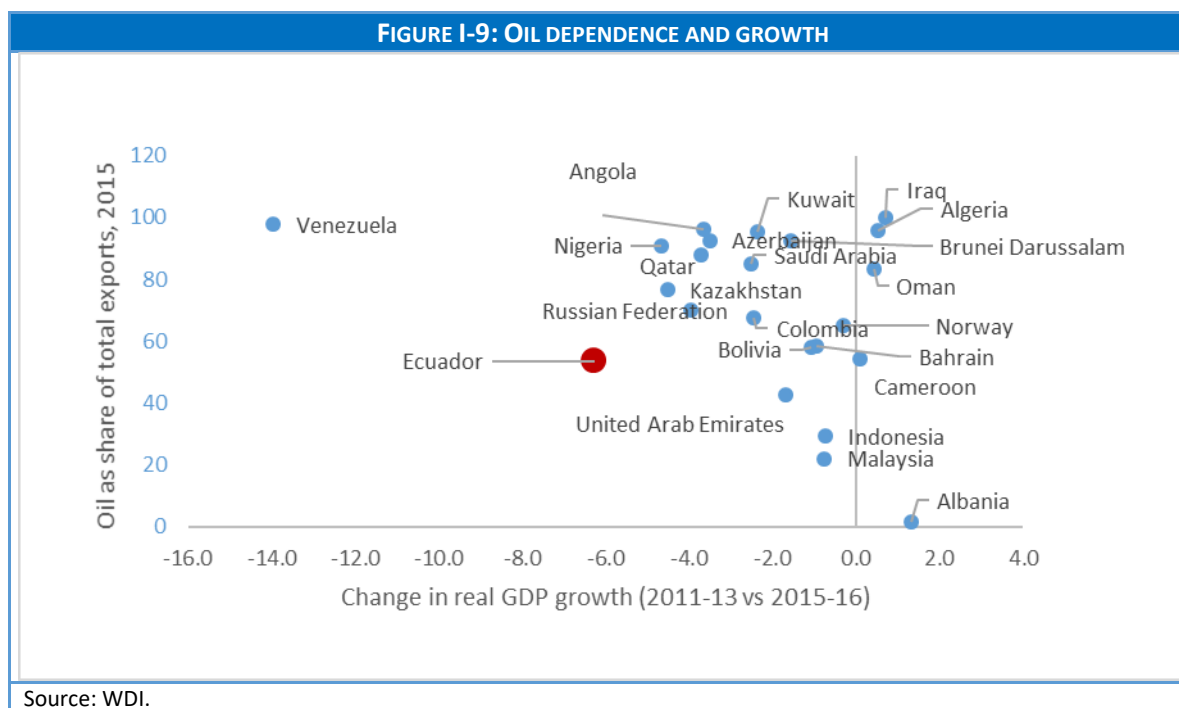
Source: World Bank (2017)

FIGURE I-8: THE REAL EFFECTIVE EXCHANGE RATE



Source: World Bank staff calculations based on Central Bank

43. **Ecuador's real effective exchange rate appreciated continuously after 2007.** Strong domestic demand contributed to an increase in domestic prices. Inflation, which averaged 2.7 percent in the first half of the boom (i.e. 2003-2007), increased to an average of 4.7 percent per year in 2008-2014. Estimates suggest an overvaluation of approximately 20 percent by 2014.<sup>7</sup> In 2015, the average real exchange rate appreciated a further 14 percent in response to a substantial appreciation in the U.S. dollar (Figure I-8). Regulatory reforms and growing public employment with a wage premium led to a sharp increase in labor costs; the real median wage increased on average 3.9 percent per year during this period. Efforts to incentivize import substitution, such as higher import tariff rates and non-tariff barriers, also increased the cost of intermediary and capital goods. This undermined Ecuador's ability to compete internationally, intensifying the symptoms of Dutch disease.
44. **As oil prices declined, macroeconomic and structural vulnerabilities came to the fore.** When oil prices fell in 2014, revenues plummeted. Given its limited space for fiscal policy maneuver and the lack of nominal currency depreciation, the Ecuadorian government was forced to adopt a sharp adjustment in public spending. Even so, fiscal deficits widened, arrears were accumulated, and the public debt increased swiftly. Lower oil exports and further real appreciation with respect to the country's main trade partners contributed to a sharp decline in Ecuador's international reserves.
45. **The shock transmitted quickly to the real sector.** With its competitiveness eroded by the real exchange rate appreciation, Ecuador's stagnant and underinvested private sector was unable to offset the decline in public demand. As a result, economic growth declined sharply. Between 2011-2013 and the end of the oil price boom in 2015-2016, real GDP growth in Ecuador declined by 6.3 percentage points, which was one of the largest declines among oil-producing countries (Figure I-9). Variables such as public debt ratios, reserve adequacy, non-oil exports in terms of GDP, and inflation all affected the impact of the oil price decline on GDP growth more than the importance of oil in exports or fiscal revenue (IMF, 2017).

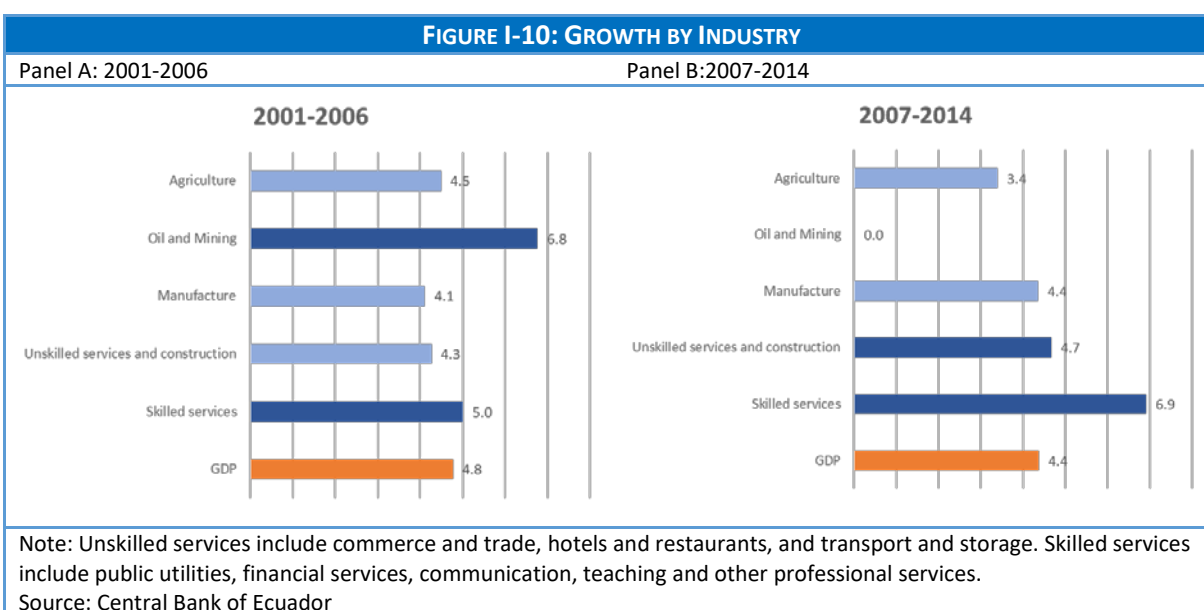


<sup>7</sup> IMF Article IV, 2015

46. **In the absence of credible adjustment, growth is expected to remain depressed over the medium term.** GDP growth rebounded to 3 percent in 2017 as aggregate demand recovered, supported by slightly improved oil prices and access to external financing. Yet, in the absence of a package of reforms to secure fiscal sustainability and increase private investments, output could decelerate back to 1.0 percent by 2020. Private sector investment is expected to expand only modestly, supported by scattered measures such as the trade agreement with the European Union (EU) and lower taxes on capital gains. In the absence of credible reforms to enable private sector development, private investment is not expected to fully compensate for an expected decline in public investment.

*a) Sector analysis of the economy*

47. **Ecuador's productive structure, which is highly based on services, remained broadly stable during the 2000s.** The service sector accounts for around 56 percent of GDP and provides more than half of the employment in the economy. The sector's participation expanded moderately during the oil boom, mainly due to an expansion in public and financial services. Manufacturing<sup>8</sup>, which accounts for almost 12 percent of GDP and around 11 percent of employment, has maintained its position since the early 2000s. Non-extractive primary activities, which account for around 9.5 percent of GDP and 26 percent of employment, saw their participation decline during the boom. Since 2014, however, they have partially recovered since 2014. Construction is the only sector that experienced a meaningful expansion during the boom. From 7.5 percent of GDP and 6 percent of employment in 2001, the sector increased to 10 percent and 7 percent, in 2014, respectively. That said, after 2015, the sector declined moderately. Finally, extractive activities increased during the first half of the boom to around 16 percent of GDP and 0.7 percent of employment, but later declined. By 2016, they comprised 11 percent of GDP and 0.4 percent of employment.



*i. Extractives*

48. **The oil sector has contributed little to real output growth.** Except for 2004, when oil output experienced a one-time increase of about 40 percent after the construction of the Heavy Crude Oil

<sup>8</sup> Excluding oil refining

Pipeline, Ecuador's real GDP growth is almost entirely explained by non-oil production. The oil sector added 0.9 percentage points of growth between 2001 and 2016. This marginal increase is set against a general decline in production since 2006 and is explained mostly by the one-off effects of the new pipeline in 2004. This compares to much more rapid growth in non-oil sectors, which grew by 3.7 percentage points over the same period.

49. **The increase in oil production by public enterprises was accompanied by a decline in production by private enterprises.** Overall production remained stable in the second half of the oil boom, but has continuously declined since oil prices dropped. The oil sector requires large-scale investments, which are not sustainable in today's more constrained fiscal context. Petroamazonas does not have sufficient resources to invest in both new fields and existing fields. Attracting private investment has also proven to be challenging. The current contracts offered by Ecuador do not provide sufficient incentives and security to investors at current oil price levels.
50. **The mining sector is small but has gained momentum in recent years.** The sector accounts for less than one percent of GDP, but its growth increased from an average of 4.1 percent between 2001 and 2006 to 11.5 percent between 2007 and 2014. Mining and quarrying contributed US\$717 million to the State in taxes and advance payments in 2017, representing an increase of 55.9 percent compared to 2016.<sup>9</sup> Mining has the potential to become a key driver of private sector-led growth in Ecuador, generating foreign exchange and fiscal revenues. Ecuador has interesting geological potential, especially in gold, copper, silver, and molybdenum. In addition, its mining prospects demonstrate several competitive advantages. These include high mineral recovery rates, low stripping ratios, access to water, and sufficient provision of electricity at attractive costs, as well as modern road, port, and airport infrastructure.
51. **The recent upsurge is also due to regulatory changes made to attract private investment.** This includes the 2009 Mining Law, which was adjusted in 2013. This new framework defines tax incentives and offers investors more certainty as fixed tributary conditions for at least 15 years. Ecuador is still building its institutional and regulatory capacity to adequately cope with sectorial governance challenges and with the local impacts of mining growth. On the one hand, the government needs to regulate the sector in such a way as to make sure that the investment climate remains attractive and competitive for investors. On the other hand, the sector's regulatory institutions must generate, maintain, and continuously improve social legitimacy and public support for mining in both its exploration and exploitation phases.

#### *ii. Agriculture*

52. **Ecuador's recent growth benefited from output and productivity gains in agriculture.** Broadly defined as agriculture, livestock, forestry, and fisheries, the agri-food sector saw its activities grow steadily during the 2000s, even after oil prices declined. The agri-food sector is larger in Ecuador than in most of its structural peers and has the potential to expand if some key challenges are addressed (BOX I-2). High commodity prices, real depreciation (over the periods 2002-2008 and 2009-2011), and public investment in infrastructure triggered small private investment in agriculture and fishing. This had positive impacts on productivity, which helped maintain production and exports under less favorable external conditions.

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<sup>9</sup> Source: SRI, Mining contributed U\$S 127 million to the State in taxes with an increase of 14.7 percent compared to 2016

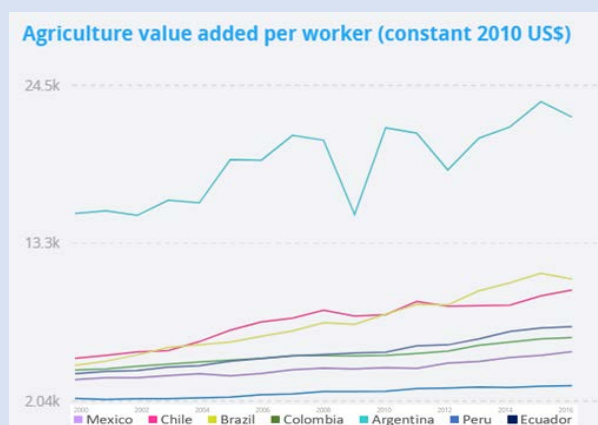


## BOX I-2: Agri-food production as a driver of growth

**The agri-food sector (agriculture, livestock, forestry, fisheries and agro-industry) has shown solid growth during the present decade, expanding at a faster pace than total GDP.** In particular, agri-food exports grew by 140 percent from US\$2.9 billion Free of Board (FOB) in 2007 to US\$7.2 billion FOB in 2016. This reflects both higher prices for food exports and higher productivity in selected export crops compared to competitors such as Brazil, Colombia, Peru, Costa Rica, and Kenya. Ecuador's long-term agriculture total factor productivity growth ranks midway relative to regional peers (IDB, 2015), but has improved during the last decade. As a result, the sector now represents 13 percent of GDP (the highest share relative to regional peers) and, based on 2015 figures, comprises more than a quarter of total employment.

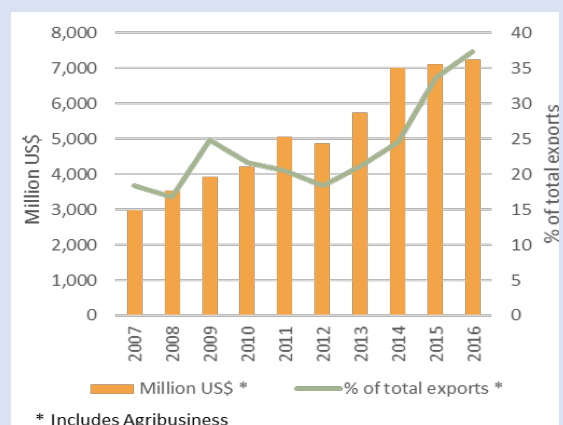
**The agri-food sector constituted the second largest currency-generating sector in the economy in the last decade.** The commercial balance of agri-food exports (including fisheries and aquaculture) increased 2.5 times between 2006 and 2015, helped by fast expansion in exports. Primary products such as bananas, cacao, palm oil, flowers and shrimp represented 86 percent of the non-oil export basket in 2016, while fish-based processed products accounted for another 3 percent.<sup>10</sup> While the basket of traditionally exported goods has not changed significantly, Ecuador's revealed comparative advantage on these products has increased. Ecuador also shows potential for emerging exports in vegetables, fruits, and oils. The recent EU trade agreement is expected to provide larger and more stable market access opportunities for Ecuador's agri-food products in the coming years.

Figure BI-1: Agriculture value added/worker (2010 US\$)



Source: WDI

Figure BI-2: Agriculture Exports



\* Includes Agribusiness

Source: Central Bank of Ecuador – World Bank

**The agri-food sector faces structural vulnerabilities that limit its expansion.** Among Ecuador's vulnerabilities are high labor, transport, and logistics costs. Lack of preferential market access relative to its competitors, coupled with high and unpredictable tariff and non-tariff barriers of its own, affect competitiveness and value-added upgrading. For example, Ecuador's agri-food exporters tend to depend between 40-70 percent on imported inputs. While there have been large investments in irrigation infrastructure, the irrigation network still does not reach all farmers. Upgrading the quality of agricultural output is also impaired by lack of access to finance, low adoption of international quality standards, and limited extension service. A relatively high rate of import rejections in the EU market and limited traceability further constrain access to external markets. Finally, the implementation of minimum prices for 38 products and the purchase of excess production combine to distort relative prices, lower incentives to improve quality, and persuade farmers to switch to higher value but riskier crops.

**An integrated approach can promote the sustainable growth of the agri-food sector.** This approach should follow four goals: (i) making producers more productive and resilient; (ii) integrating producers into domestic and global value chains; (iii) strengthening institutions and the provision of public goods; and (iv) ensuring sustainable use and management of land and water.

<sup>10</sup> INEC: Panorama Laboral y Empresarial del Ecuador, 2017

### *iii. Manufacturing*

53. **Manufacturing expanded due to domestic demand but manufacturing exports struggled during the commodity boom.** Manufacturing activities are mostly concentrated in food production, which accounts for more than 50 percent of non-oil manufacturing production. Traditional, labor-intensive activities such as textile and furniture account for around 18 percent of production, while metals and chemicals account for 10 percent. Other activities, including automotive and engineering intensive segments, account for the remaining 18 percent. The sector grew steadily during the boom. The growth rate was slightly below the average of the economy, but it expanded faster after 2007 with the support of strong domestic demand. Manufacturing exports expanded by approximately 1 percent of GDP in the first half of the 2000s, reaching a peak of 5.5 percent of GDP (17 percent of total exports) in 2007. However, exports have struggled since that time, declining continuously to 3.6 percent of GDP in 2017.
54. **Manufacturing productivity is relatively low.** The average productivity of the Ecuadorian industrial sector is equivalent to only 8 percent of that registered in the United States for the same sector. The gap is even greater in the case of the sector's labor-intensive branches, although less so for automotive production. The gap in average productivity for the sector's labor-intensive segments has not declined over time. In fact, in cases such as the automotive and other engineering-intensive areas, the gap increased between 2007 and 2014.<sup>11</sup>

### *iv. Services and Construction*

55. **Non-tradable sectors flourished due to the increase in government demand and change in relative prices.** Fueled by current and capital spending by the government, the public administration and construction sectors became primary drivers of growth and job creation after 2007. During the second half of the boom, public investment also contributed to the expansion of utility services such as water and electricity, which count upon a strong presence of the State. Other services, such as finance and communications, expanded due to an increasing presence of the State in these segments, but private providers were undercut by restrictive regulations, such as price controls and barriers to entry in these sectors. Communications received large investments in 2008, although they have contracted since. Financial services, which were dominated by private banks in the early 2000s, expanded post-2007 partially due to increasing role of state banks (BOX I-3). Unskilled services expanded continuously, but at rates below GDP. Commerce and transport, the largest unskilled services, benefited from the fast expansion in domestic demand, yet these were also affected by the fast-rising cost of labor and by import restrictions.

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<sup>11</sup> INEC, 2016: 'Evolución del Sistema Manufacturero Ecuatoriano'

### BOX I-3: State footprint in the economy

**In Ecuador, the expansion of the State went well beyond the provision of traditional public goods.** Ecuadorian State-Owned Enterprises (SOEs) are key actors in the management of oil resources and delivery of key public services. The public sector has also gained importance in the provision of financial services during the last decade. Currently, there are 31 non-financial SOEs and five public banks. As of 2013, SOEs represented about one-third of GDP, which was higher than other countries in the region such as Brazil, Colombia, Chile, México and Peru<sup>16</sup>. Their presence has increased during the last decade. Before 2008, SOE capital expenditure accounted for less than 20 percent of total public-sector capital expenditure. By 2015, this share had increased to 29 percent. Since 2007, SOEs have been generating increasing deficits with important fiscal implications. The SOE deficit accounted for 22 percent of total public-sector deficit and 2 percent of GDP. However, lack of transparency and access to financial and management information prevent performance assessment for most SOEs (CAF 2015). The State has also increased its presence in the economy through stringent regulatory frameworks. Key sectors with strong state presence include:

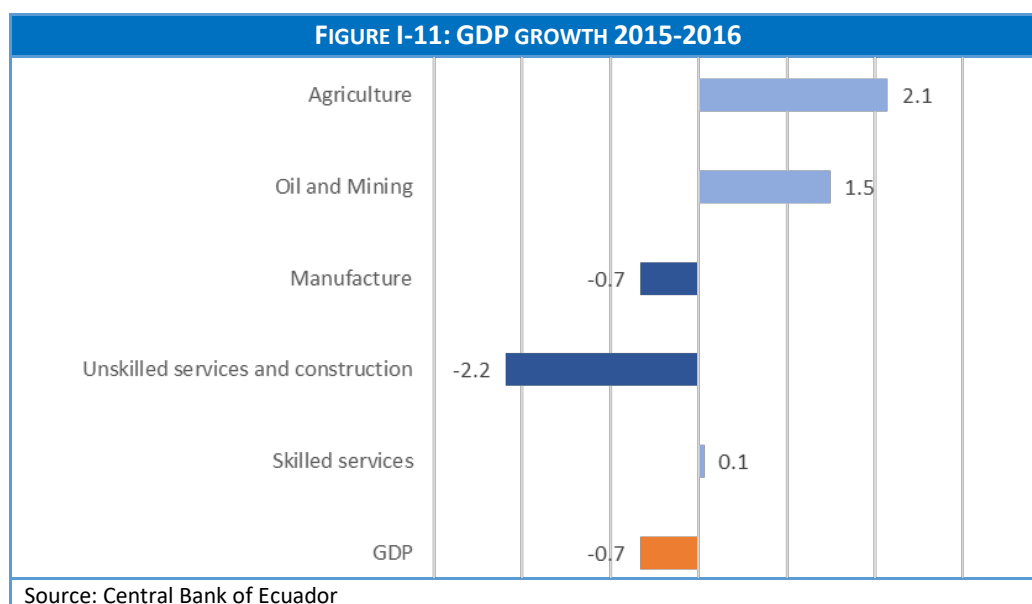
- **Oil:** in 2011, the government changed contracts with private oil operators, discouraging private investment in the sector. Since then, the bulk of investment, production and distribution has shifted to state-owned operators. While this shift directed additional oil rents to the State, it has led to stagnation in oil production.
- **Water and Sanitation Services:** water services are fully managed by the public sector. Water service providers are usually managed by local governments, while different central government agencies focus on policies, standards, norms and regulations for water resources, water rights, investment projects, and delivering water related services. Between 2006 and 2015, access to water sources and sanitation expanded significantly reaching 87 and 85 percent, respectively. This compared to the average for Latin America of 95 and 83 percent respectively<sup>12</sup>. However, when quality of services is factored in, these figures decrease significantly as just 71.1 and 76.6 percent of the Ecuadorians have access to safely managed water and sanitation services, respectively. Limited quality is associated with low standards, weak enforcement, and financial difficulties of local providers.
- **Electricity:** the power sector has also been centralized and publicly managed, in contrast to liberalized power market systems. The sector has expanded in the last decade through large public investments in generation (mostly hydro-plants), transmission and distribution, leading to universal access to services. However, its debt has also accumulated rapidly, limiting the ability to invest further or maintain current assets. Private participation has been discouraged by restrictive regulations, lack of a full cost-recovery tariff, and high uncertainty.
- **Telecommunications and digital:** this sector is considered a “strategic sector” per constitutional mandate. While there is some competition throughout the sector, the government retains a strong presence through the state-owned *Corporación Nacional de Telecomunicaciones* (CNT), which holds dominant positions in the provision of fixed-line and broadband services. Lack of a stable regulatory environment and the protectionist policies favoring publicly-owned CNT lead to high costs and lower access to service than in neighboring countries. An interval of 2 to 5 percent of the net income per capita is considered reasonable for broadband connection costs. In Ecuador, the figure is 12 percent. At 32.9 percent of the population, the country’s use of broadband services is low compared to the 43.6 percent regional average. At 87 percent, mobile penetration is also among the lowest in the region, well below the regional average of 115 percent.
- **Financial services:** the public sector has also gained importance in the provision of financial services by expanding existing intuitions<sup>13</sup> and creating new ones such as the Bank of Ecuadorian Institute of Social Security (BIESS)<sup>14</sup>. Credit operations from public financial institutions increased fourfold between 2007 and 2012, reaching 4.5 percent of GDP, a little less than one fifth of the financial system. Ecuador’s financial intermediation sector is also composed of private commercial banks and cooperatives. Each of these segments face different regulatory requirements and oversight. Weaker regulatory requirements and oversight of public banks and cooperatives have contributed to lower performance and to relatively higher risks associated with these segments. Private banks face much more stringent regulations and oversight, which has led to a broadly stable and profitable yet relatively shallow banking system. Private credit to GDP is only 29 percent in Ecuador versus 47 percent in Colombia, 36 percent in Peru and 49 percent on average in Latin America and the Caribbean.

<sup>12</sup> WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation (2015). Progress on Sanitation and Drinking Water. 2015 Update and MDG Assessment.

<sup>13</sup> Public financial institutions included one commercial bank - *Banco del Pacifico* - and two development banks -*Banco de Desarrollo del Ecuador* and *Banco BanEcuador*.

<sup>14</sup> BIESS provides mortgages and unsecured loans to IESS contributors.

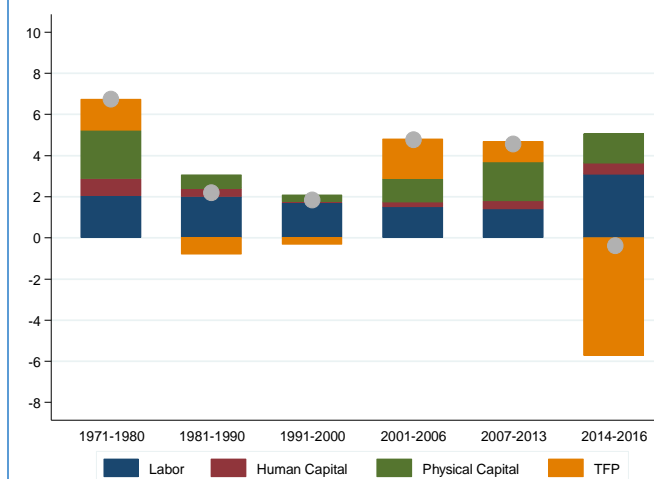
56. **The fall in oil prices since late 2014 has dragged down activity in most sectors of the economy.** All sectors have suffered the effects of fiscal constraints, the most notable of which have been capital expenditure cuts. A decade of policy changes left the private sector short of investment plans and the financial sector short of liquidity, making it difficult to rapidly reverse the stagnating trend in private investment. Only agriculture and mining were able to cash in on recent productivity gains, sustaining positive output and export growth.



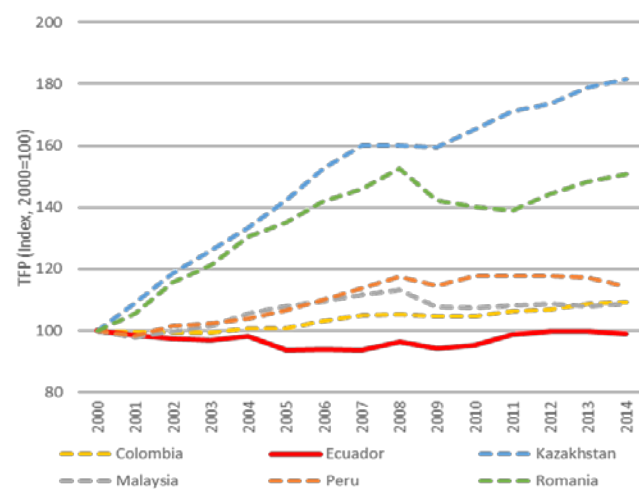
**b) Growth accounting and productivity**

57. **Ecuador's economic growth has been mainly driven by factor accumulation.** Combined gains in human capital and labor accounted for about one third of GDP expansion during the 2000s (Figure I-12). This result is consistent with the large employment gains that accompanied the commodity boom, as well as the improvements witnessed in education outcomes over the last decade. Physical capital accumulation has been more volatile and has been correlated with external conditions. It gained importance in the second half of the oil price boom, when it accounted for almost 40 percent of output growth.
58. **Total factor productivity (TFP) has remained low and its growth path mirrored commodity price cycles.** Controlling for oil prices fluctuations, TFP has had little effect on growth over the last four decades (Figure I-13). Relatively large and persistent TFP disparities among firms, coupled with slow growth for productive firms, suggest that resource misallocations are at least partially to blame for limited productivity growth.<sup>15</sup>

<sup>15</sup> Ferro *et al.*, 2013.

**FIGURE I-12: GROWTH ACCOUNTING DECOMPOSITION**


Source: Central Bank of Ecuador and World Bank staff estimates

**FIGURE I-13: TFP RELATIVE TO THAT OF US**


Source: Penn World Table 9.0

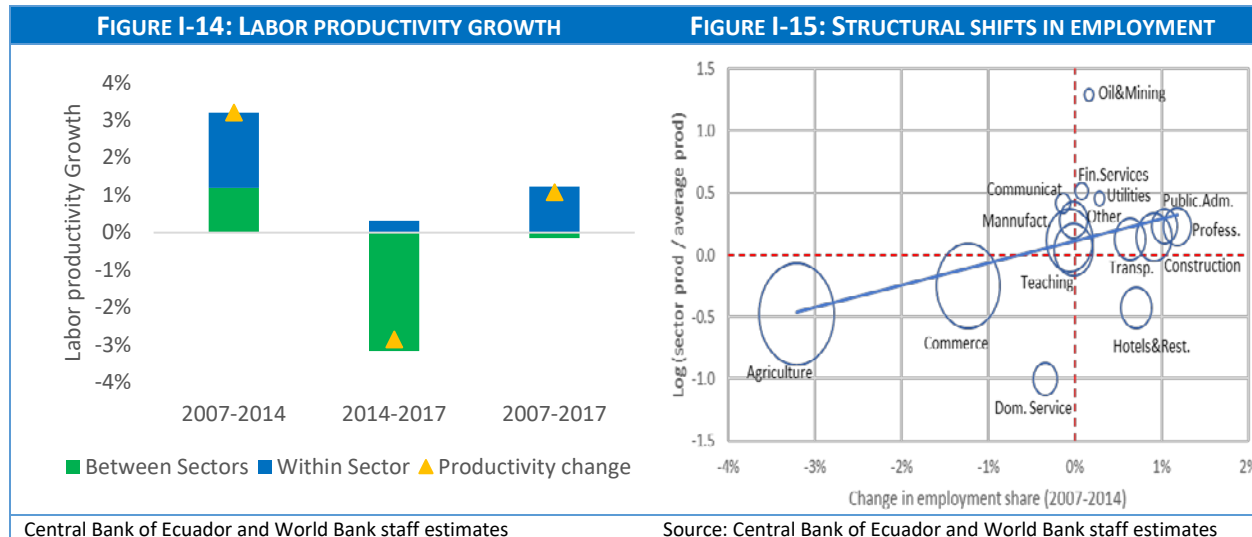
59. **Ecuador's ambitious public investment program fostered capital accumulation.** From 2007, Ecuador began addressing its deteriorating and limited transport infrastructure by investing in roads, ports, airports, logistics equipment, and railways. These investments expanded levels of service, but they also resulted in a decline of port utilization rates to 60 percent<sup>16</sup> and in most of the new airports being either not operational or underused. At the same time, investment in the country's main economic road corridors fell short.
60. **Ecuador's score for infrastructure quality peaked in 2012 and has declined since.** Ecuador now ranks 91<sup>st</sup> among 160 countries on the quality of trade and transport infrastructure, according to the Logistics Performance Index.<sup>17</sup> Meanwhile, large investments in the power sector shifted the generation matrix towards large hydro sources and improved services. On the flipside, they led to overcapacity and to high indebtedness, while projected tariff revenues will be unable to cover more than operating costs. As for those sectors that benefited from large investments, including transport, energy, water, education, and health, most are likely to suffer challenges when it comes to maintaining and operating their new infrastructure.
61. **Investments in education helped improve access and the quality of education outcomes but with limited impact on worker productivity.** Public expenditures on education increased steadily from 1.5 percent to 5.0 percent of GDP between 2000 and 2015. As a result, Ecuador has seen significant improvements in access to all levels of education. Between 2007 and 2017, the average years of education rose and illiteracy rates almost halved. The quality of education, measured by standardized tests, also improved from very low standards. Attainment outcomes improved even among the adult population. However, the impact of education investments on labor productivity has been small, in part due to the meaningful deficiencies that new entrants into the labor force continue to have in terms of cognitive skills.
62. **Labor productivity gains during the boom were mainly driven by the accumulation of physical capital within sectors, with small labor reallocation between sectors.** Between 2007 and 2014, labor productivity increased on average 3.1 percent per year. Around two-thirds of this improvement was

<sup>16</sup> Equatorial Ministry of Transport, 2012

<sup>17</sup> World Bank: <https://lpi.worldbank.org/>

due to higher output per worker within industries, while shifts of labor from lower to higher productivity sectors accounted for the remaining one third. The industries that experienced large productivity gains (notably, water and electricity, construction, and communications) were those that benefited from large physical capital investment. This suggests that labor productivity gains were mainly driven by capital accumulation. Cross-sector labor movements were relatively small, indicating that there are impediments for factors to migrate towards more productive uses. In general, productivity improved as a consequence of migration of jobs away from agriculture (a low productivity sector) and, to a lesser extent, from commerce. This trend can be seen in Ecuador between 2007 and 2014 (Figure I-15). Sectors that experienced the largest employment gains, such as professional services, public administration, and construction, are slightly above the average labor productivity in the economy. The share of employment in high productivity sectors has remained unchanged.

63. **Labor productivity declined sharply after 2014.** While productivity gains within sectors turned negative. This was mainly due to an increase in the participation of agriculture and, to a lesser extent, commerce in overall employment. This was linked to an increase in underemployment and informality which are prominent phenomena in these sectors.<sup>18</sup> (See BOX I-4 for an overview of informality).



<sup>18</sup> It is important to note that trends and conclusions are similar irrespective of the informality definition used. For example, under INEC's definition of informality, employees are defined as informal when the enterprise that employs them has no Single Registry of Taxpayers (Spanish acronym RUC) or does not have formal accounting. Domestic servants and workers without classification are excluded from this definition.

#### BOX I-4: Informality of jobs and firms poses a challenge to inclusive growth

**Rising underemployment and informality have undermined labor productivity growth since 2014.** The share of informal workers who earn less than the minimum wage has increased continuously, reaching almost three-fifths of the working population in 2017. The increase in informality after 2014 is attributed to rigidities in the labor market, namely high minimum wages and strong restrictions for hiring, firing, and reducing hours worked. Since 2014, as economic and labor market conditions deteriorated, more people re-entered the labor force than in the preceding years. However, most engaged in 'low quality' jobs, especially the young, the elderly, and women. These low-quality jobs offered fewer hours per week and/or lower salaries. Moreover, the proliferation of low-quality jobs since 2014 has disproportionately affected those in rural areas, as well as women, youth, and indigenous workers. Even though educational gaps are almost negligible between genders, women are still facing access constraints to better quality jobs than men. This is reflected in higher informality and underemployment rates, as well as in labor income.

**Firms are responding to labor market rigidity by adopting labor-saving technologies and by increasing their reliance on informal labor.** The net entry rate of workers in the social security registry has been falling since 2012 and became negative in 2015. This provides clear evidence of rising informality. In addition to greater use of informal labor, more firms are also choosing to be informal. This informality of firms has been driven by the time and costs involved in registering a new business, in addition to other burdensome regulations and policy uncertainties. Constraints on access to formal credit markets also weakens the incentives for informal firms to comply with tax, legal, and social security provisions. As a result, unfair competition from the informal sector is considered a major constraint to business, even for large companies. In response, firms are resorting to informality to adjust to economic cycles and remain competitive. By making operating costs unaffordable for many formal firms, restrictive labor markets impede the efficient allocation of labor across firms, which, in turn, constrains productivity gains.

64. **Under less favorable external conditions, accelerating growth will require a more prominent role for the private sector and greater reliance on productivity gains.** The framework of Syverson (2011) classifies the determinants of productivity into two broad categories. The first category involves factors that are directly related to the way a firm operates and to the levers that management or others might be able to use to affect productivity. Such levers include managerial practice or talent, general labor quality used, capital quality used, information technology capital, research and development, innovation, and learning-by-doing, among others. Syverson's second category involves elements that are external to the firm's decision, yet can shape its productivity levels. Examples include productivity spillovers, domestic and international competition, regulatory structure, and input market functioning and flexibility. Many of these external elements affect productivity by limiting the reallocation of resources towards more productive firms and uses.
65. **Key determinants of future productivity growth are likely to arise in areas where Ecuador lags behind and where the productivity dividends from closing this gap are substantial.** Almost no analysis exists regarding the productivity dividends of the above-mentioned drivers for Ecuador. From the little data that is available, it is possible to assess the extent to which Ecuador lags behind regional peers with respect to these drivers. Table I-1 lists typical productivity drivers. Where the available information allows, it also identifies those areas in which Ecuador underperforms, equally performs, or outperforms with respect to its regional peers. It is worth keeping in mind that such benchmarking exercises are only indicative and that, in some cases, they could be misleading as they do not control for other relevant factors, such as the structure of the economy. The following section discusses in more detail areas where large gaps exist with respect to regional peers. Further analysis and data collection is needed in order to draw up a more extensive list of drivers and to accurately estimate their potential impact.



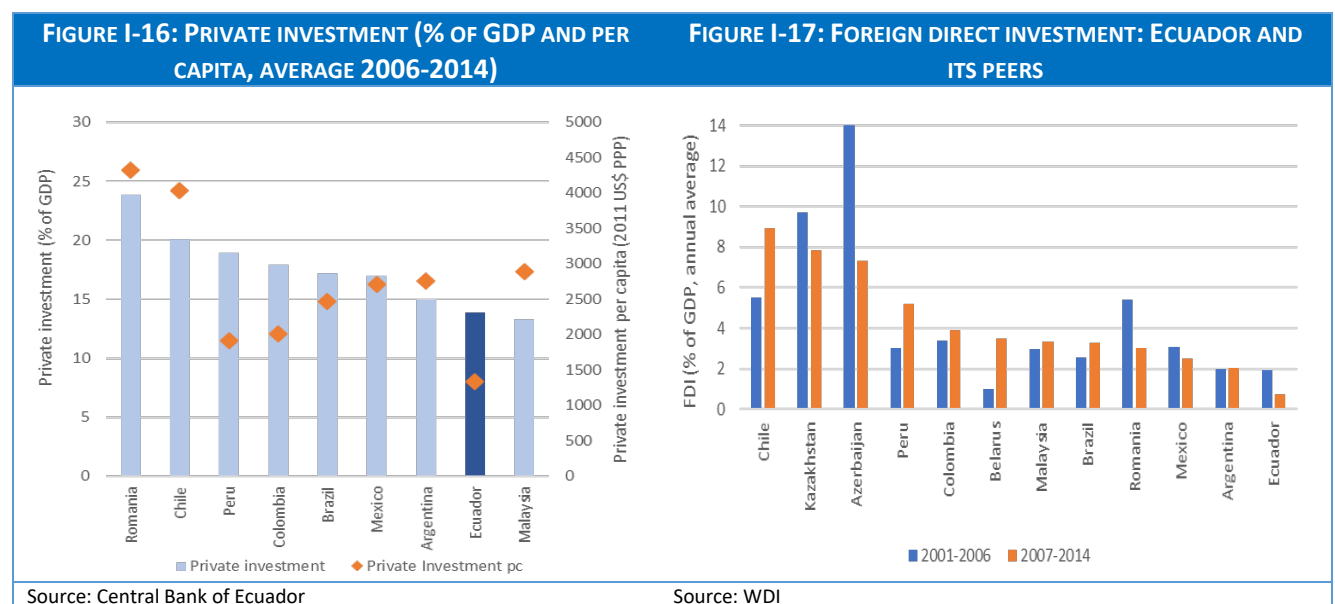
**TABLE I-1: PRODUCTIVITY DRIVERS**

Indicator	Assessment	Source
Productivity dispersion by sector	Underperform (high dispersion)	Ferro <i>et al.</i> , 2013
Firm turnover (entry/exit)	Underperform	Ferro <i>et al.</i> , 2013, World Bank (2012)
Management practices	not available	
Quality of human capital		
training	Outperform	Enterprise Survey
quality of education	not available	Internationally comparable tests not available
effective use of talent	Underperform	Global Competitiveness Index
workforce education	Equal	Enterprise Survey
Quality of physical capital		
transport infrastructure	Outperform	Global Competitiveness Index, Enterprise surveys
electricity and water services	Outperform	Global Competitiveness Index, Enterprise surveys
internet use	Underperform	WDI
technological readiness	Underperform	Global Competitiveness Index
Innovation		
R&D spending, total	Underperform	World Bank (2017)
Capacity to innovate	Underperform	Global Competitiveness Index
Patents	Underperform	World Bank (2017)
Learning-by-doing (technology adoption)	not available	
Competition		
Competition policy	Underperform	World Bank (2017), Global Competitiveness Index
Domestic Competition	Underperform	Global Competitiveness Index
Intensity of local competition	Equal	Global Competitiveness Index
Extent of market dominance	Underperform	Global Competitiveness Index
International Competition	Underperform (Significantly)	Global Competitiveness Index
Trade to GDP	Equal	
FDI-to-GDP	Underperform	FDI
Non-tariff barriers	Underperform (Significantly)	Global Competitiveness Index
Tariff barriers	Underperform	Global Competitiveness Index
Impact of business rules on FDI	Underperform (Significantly)	Global Competitiveness Index
Trading across borders	Underperform	Doing business
Logistics	Equal	Logistics Performance Index
Regulations/Institutions		
Starting a business	Underperform	Doing business
Property rights	Underperform	Global Competitiveness Index, Doing business
Paying taxes	Underperform (Significantly)	Doing business, Enterprise survey
Resolving insolvency	Underperform	Doing business
Input market flexibility		
Labor market efficiency/regulations	Underperform	Global Competitiveness Index
Labor market flexibility	Underperform (Significantly)	Global Competitiveness Index
Credit-to-GDP	Underperform	WDI
Financial market development/efficiency	Underperform	Global Competitiveness Index
Access to financing	Underperform	Global Competitiveness, Enterprise Survey



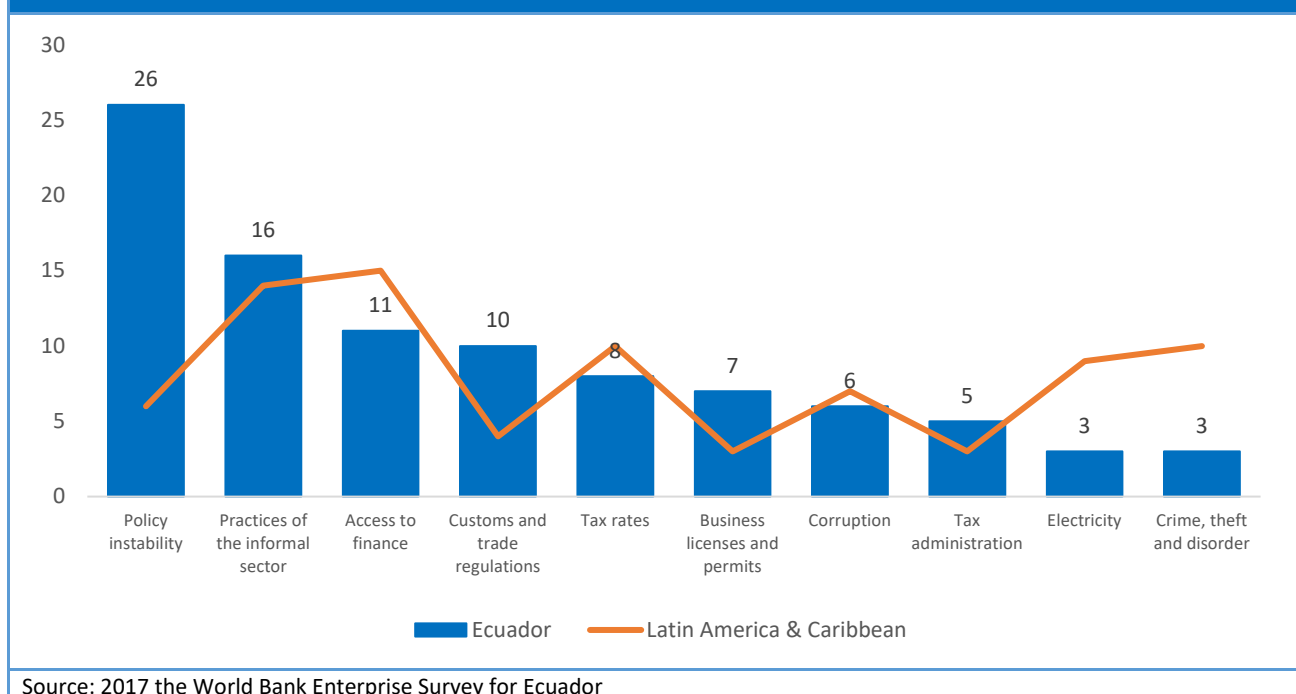
*c) Turning the private sector into a key engine of growth*

66. **The fall in oil prices uncovered structural vulnerabilities that have constrained private sector investment and productivity gains, especially after 2007.** In the period 2007-2014, private investment per capita and FDI as a share of GDP were the lowest among all of Ecuador's structural and regional peers (Figure I-16 and Figure I-17). As previously mentioned, relatively large and persistent differences in TFP between firms (within the same sector) suggest that constraints prevent factors of production from moving toward more productive uses, which limits productivity and competitiveness. Only 8 percent of Ecuadorian firms exported directly or indirectly in 2016, in contrast to 14 percent on average in Latin America. Ecuadorian firms are also not well integrated into global value chains relative to comparator countries. This pattern further restricts opportunities for productivity gains in the private sector. Fostering the development of a well-functioning and internationally integrated private sector would serve as a new engine to sustain growth and drive productivity gains going forward.



67. **Regulatory instability, firm informality, access to finance, and trade costs represent critical external constraints to business, affecting small and medium enterprises (SMEs) the most (Figure I-18).** Despite recent progress, regulations make it difficult to open and close a firm. The time and costs involved in registering a new business in Ecuador are high compared to regional peers. In addition, insolvency proceedings are slow, with higher than average costs and low recovery rates. Finally, continuous changes in tax rates, and cumbersome procedures for paying taxes have increased uncertainty. Importantly, constraints on access to formal credit markets weaken the incentives for informal firms to comply with tax, legal, and social security provisions. Access to credit, is particularly difficult for SMEs. While 23 percent of large firms finance their investments through banks, only 13 percent of SMEs are able to do so. Increased access to credit could positively affect productivity, not only by increasing investment in more productive technology, but also by reducing the incentives to informality.

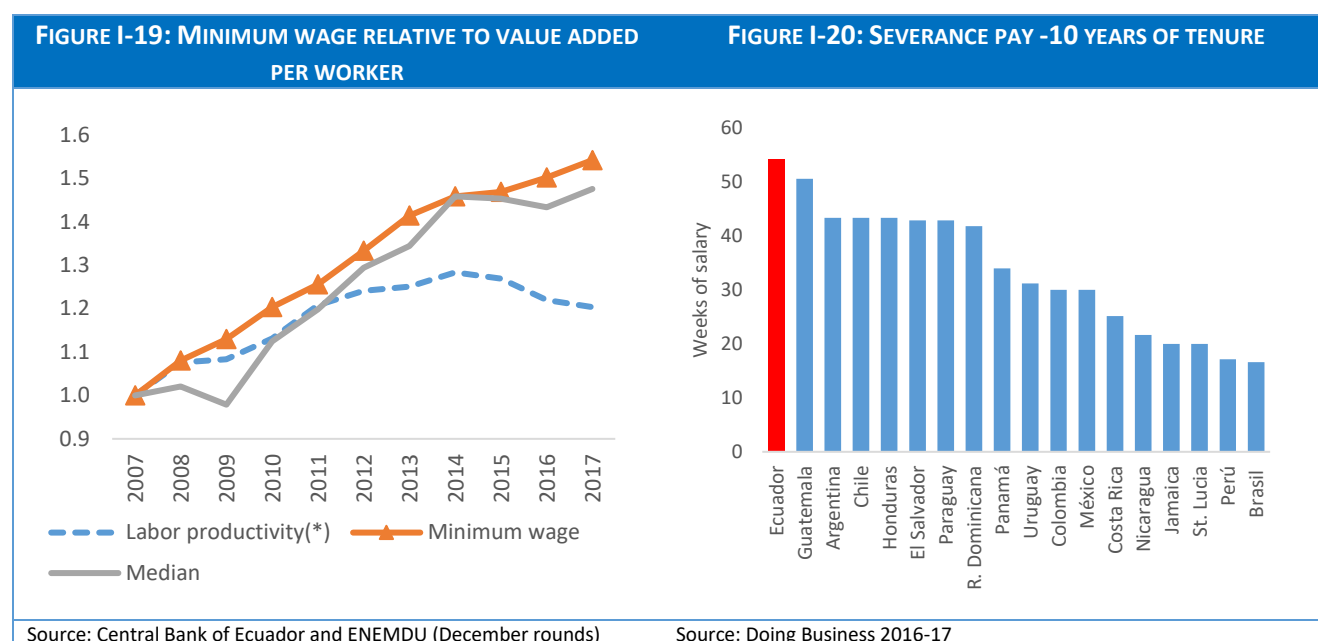
FIGURE I-18: BUSINESS ENVIRONMENT CONSTRAINTS IDENTIFIED BY ECUADORIAN FIRMS



68. **Introducing a consistent regulatory framework to support investment and addressing perceived risks could help unleash private, and especially foreign, investment, with positive productivity spillovers.** Over the past decade, private investment has stagnated and FDI has been extremely low by regional standards. The absence of bilateral investment and double taxation treaties with many FDI source countries reduce investor certainty and elevate costs for potential investors. The lack of a coherent policy framework for private investment is an important pitfall. Ecuador's Constitution restricts arbitration of a dispute between parties in an international court, which increases the perceived risks for the private sector. Moreover, limited liability ownership is not contemplated by Ecuadorian law. Finally, Ecuador's recent episodes of default and contract renegotiation add to the overall perception of risk among investors. In all these areas, Ecuador lags behind most regional peers. To turn Ecuador into a more attractive investment destination, these issues need to be addressed.
69. **Aligning labor costs with productivity would help firms remain competitive without resorting to informality.** Minimum wages in Ecuador are relatively high, which raises labor costs. The ratio of the minimum wage to value added per worker increased moderately to 0.6 percent in 2016, making it the third highest in the region. The minimum wage that was set at the median labor income in 2009 has grown approximately 8.5 percent in real terms since then. It now represents five poverty lines (Figure I-19). Public sector pressure on the labor market raises another challenge to create and maintain good quality jobs in the private sector. The average public sector wage is about 50 percent higher than that of the formal private sector for an individual with the same characteristics such as gender, education level, and experience. Furthermore, in 2012, Ecuador surpassed by 16 percentage points the average wage gap for Latin American countries.<sup>19</sup> This puts pressure on the private sector to match the wage offer. In addition, it possibly reduces the pool of workers willing to work in the private sector, as well as the number of potential entrepreneurs.

<sup>19</sup> Gluzmann, 2015.

- 70. Making labor regulations more flexible would further help private firms to adjust to economic conditions.** Non-wage costs are high and compliance is burdensome. Significant barriers to hourly hiring persist. The cost involved in dismissing personnel is higher in Ecuador than in any other Latin American country.<sup>20</sup> This hampers firms' ability to respond to economic slowdowns and delays hiring during recovery. Firms are responding to this labor market rigidity by adopting labor-saving technologies (as in the shrimp industry) and by increasing their reliance on informal labor. Indeed, the net entry rate of workers in the social security registry has been falling since 2012 and became negative in 2015. Unfair competition from the informal sector is considered a major constraint to business, affecting even large companies. By making operating costs unaffordable for many formal firms, restrictive labor markets impede the efficient allocation of labor across firms. This, in turn, constrains productivity gains.



- 71. Improved access to finance could benefit investment and innovation.** Access to finance is considered by business to represent an important obstacle to investment and innovation, as discussed further below. The use of banks by Ecuadorian firms to finance investments is lower than average for the region and for similar income country groups, while access to long-term finance is low even among large companies. Moreover, regulatory barriers limit financial sector performance. For example, banking regulations impose a ceiling on interest rates that private banks can charge on lending operations. This discourages lending to riskier borrowers, which are priced out of formal credit markets. Also, there are credit allocations mandated by the Central Bank for selected economic actors, particularly public corporations and firms in the mortgage sector. The private credit to GDP ratio is only 29 percent in Ecuador versus 47 percent in Colombia, 36 percent in Peru, and 49 percent on average for LAC. Finally, capital markets are underdeveloped compared to neighbors such as Peru and Colombia, with limited participation of institutional investors. This is particularly true for private pension funds, which allocate an important share of their portfolio to government bonds.
- 72. Strengthening regulation and institutions is critical to mitigate the impact of financial shocks on investment and growth.** Financial stability risks are moderate, and arise mainly from risks associated

<sup>20</sup> 2016-17 Global Competitiveness Report

with a decline in international reserves. Since 2015, capital outflows increased adding pressures to the balance of payments. Due to dollarization, these pressures could potentially translate into liquidity shortages in the financial sector. The banking system is profitable and well capitalized, except for two relatively small banks with limited systemic risks. In the cooperative segment, which is large by regional standards, a number of small institutions face challenges (BOX I-5). These small cooperatives have low systemic importance, but could have high social impacts as they serve the poorest segments of the population. Weaknesses in regulations and financial institutions could amplify the impact of financial shocks. Ecuador lacks a credible lender of the last resort. In addition, cumbersome insolvency regulations prevent entrepreneurs from closing businesses quickly, repaying creditors, and recovering assets so as to reallocate them to other parts of the economy. According to the Doing Business 2018 report<sup>21</sup>, insolvency proceedings take over five years in Ecuador compared to an average for LAC of just under three years. Moreover, the insolvency recovery rate in Ecuador averages just 17.4 cents on the U.S. dollar, almost half of the regional average. Finally, the movable collateral registry is outdated, and the collateral enforcement process remains slow.

#### BOX I-5: Financial cooperatives

**Ecuador's financial system is bank-centered, but cooperatives and microfinance institutions play an important role in the financial system and have helped expand financial services during recent years.** In 2017, there were 674 financial cooperatives entities with more than 6.1 million members which are part of the popular and solidarity economy. These cooperatives hold about \$12 billion in assets and \$9 billion in deposits (between one-fifth and one-third of the financial sector assets, depending on how it is measured). While information about assets and balance sheets of these institutions is scarce, preliminary estimates suggest that their assets accounted for more than one-fifth of all assets in the financial system in 2017.

**Despite its relatively large size, the cooperative sector is subject to laxer regulatory requirements.** Supervised by the Superintendence of Popular Economy and Solidarity (SEPS), these entities face significant challenges regarding prudential requirements, related to transparency, capital adequacy, and consumer protection, among other areas. Since 2012, almost 300 cooperatives have closed as consequence of mergers or liquidations. The impact of these liquidations on households' deposits has not been thoroughly studied, but there are reports of asset losses in remote and relatively poor areas. Strengthening the oversight of these institutions and their performance will be critical for promoting financial inclusion and preventing asset losses among the poorest segments of the population.

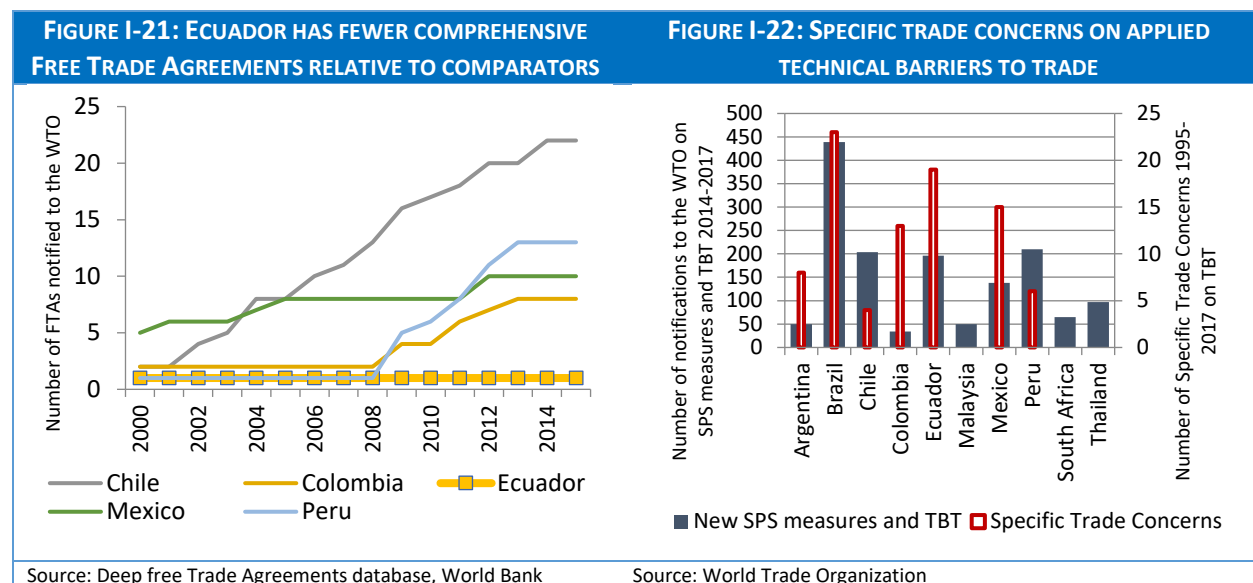
73. **Reducing barriers to competition in Ecuadorian markets would foster entrepreneurship and innovation, thus promoting productivity growth.** Ecuador ranks 120<sup>th</sup> out of 137 countries on the extent of market dominance and as 99<sup>th</sup> in terms of effectiveness of anti-monopoly policy, falling behind most structural and regional peers. However, it is perceived to have improved in the intensity of local competition in the past five years, ranking in 68<sup>th</sup> place in 2017.<sup>22</sup> Product market regulations are relatively restrictive to competition. Barriers to trade and investment are among the highest among its peers. This is despite Ecuador being open to FDI in most sectors, except for those sectors categorized as "strategic" or reserved for the State.
74. **The State is involved in many economic activities that could be typically provided by the private sector in an efficient manner.** As per constitutional mandate, Ecuador's counts a number of "strategic sectors" as well as other sectors reserved for state-owned or controlled enterprises. These are subject to the exclusive decision and control of the government. While state participation in some sectors (such as energy, non-renewable natural resources, transport, and water) is not unusual, competitive neutrality should be guaranteed. This is particularly the case if efficient private sector participation is

<sup>21</sup> World Bank. Doing Business 2018. [www.doingbusiness.org](http://www.doingbusiness.org)

<sup>22</sup> WEF Global Competitiveness Report, 2017

going to be viable. Barriers to entry and rivalry (entrepreneurship) in Ecuador are higher than in most of its regional and structural peers. This is due to two driven factors: first, complex regulatory procedures (notably, a system of licenses and permits for specific markets); and, second, rules in network sectors that prevent equally efficient or more efficient firms from entering and competing in segments where competition is otherwise viable.<sup>23</sup>

- 75. Stabilizing trade regulations and reducing tariff and non-tariff barriers to trade would foster international competition, improve access to inputs, and further strengthening competitiveness.** High and frequently changing trade costs represent the fourth primary constraint identified by the private sector. These raise production costs and generate uncertainty. Since 2007, Ecuador has been following an import substitution strategy that favors increased import tariffs. Ecuador's tariffs (both most-favored-nation and applied) are higher than in Chile or Mexico and more than triple those of Peru. Ecuador also has a lower number of comprehensive free trade agreements relative to its regional peers (Figure I-21). The temporary import tariff surcharges introduced in 2015 were removed in 2017, but an import tax based on merchandise weight has been recently introduced. Non-tariff barriers have also increased. As a result, Ecuador has found itself increasingly subject to specific trade concerns at the World Trade Organization's Technical Barriers to Trade Committee, especially since 2013 (Figure I-22). Inefficient port services, coupled with lack of efficiency on border management, transport, and logistics services, further increase trade costs.



- 76. Promoting innovation and enhancing the ability of firms to absorb new technologies would encourage productivity gains and diversification away from oil.** Firms in Ecuador have a low capacity to innovate. The Global Innovation Index ranks Ecuador in 100<sup>th</sup> place out of 128 countries, highlighting particular weaknesses with respect to business sophistication and knowledge outputs. Innovation determines the capacity of exporters to introduce new products in foreign markets and to win a higher share of export market. Public spending on research and development increased fivefold between 2003-2013, but this has not been followed by private spending. Firms in Ecuador also have insufficient capacity to absorb knowledge and technology. Lack of supply and demand of knowledge-intensive business services also explains firms' low innovation capabilities as they tend not to use

<sup>23</sup> Such firms are kept out by unduly favoring incumbents.

specialized services, either in-house or outsourced. Ecuador has historically ranked lowest in the region for quality certification, although its performance has improved over the last five years. High hiring and firing costs also raise the cost of innovation failures. Global value chains are key drivers of innovation, yet the share of Ecuadorian manufacturing firms involved in such chains is very small. This has negative implications for export diversification and quality upgrading.

## ii. Building the foundations for a sustainable and inclusive growth under the new normal

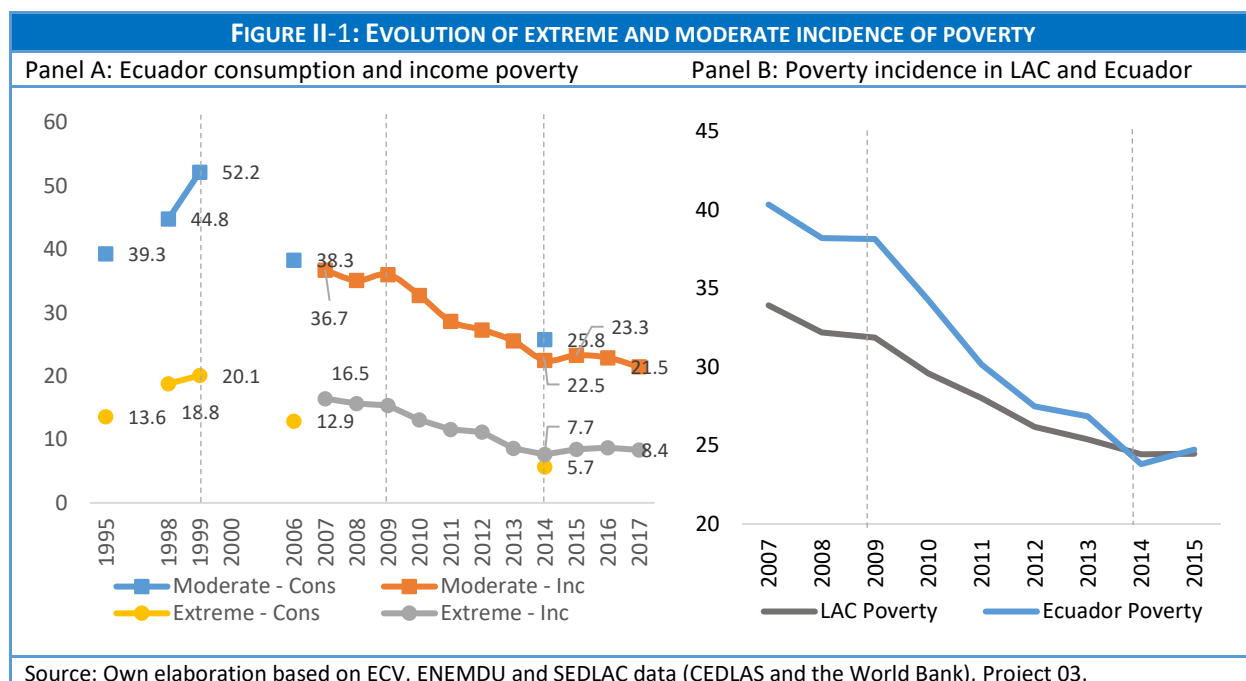
77. **Ecuador's state economic model led to high growth and social gains during most of the oil price boom, but created macroeconomic and structural imbalances that could not be sustained under low oil prices.** Ecuador's public sector did not save enough during the boom and had limited fiscal buffers to smooth its adjustment to lower oil revenues. The real exchange rate appreciated, driven by strong domestic demand and high labor costs. In addition, dollarization meant the economy could not quickly adjust to falling oil prices through nominal devaluations. Finally, distortions associated with rigid regulations, high operating costs, and frequent changes in taxes and tariffs depressed private investment and limited its efficiency and/or productivity. This constrained the private sector's ability to respond when the public sector was forced to adjust. As a result, economic growth declined sharply and poverty reduction stalled.
78. **Laying the foundations for sustained and inclusive growth will require addressing macroeconomic imbalances.** As discussed in more detail in section 3.2 on fiscal sustainability, bringing fiscal accounts to a sustainable position and rebuilding fiscal buffers is critical to protect the economy against the impacts of future shocks. At the same time, addressing external imbalances and rebuilding international reserves is vital to safeguarding the dollarization regime. As nominal currency depreciations are not a feasible option for Ecuador, reducing external pressures will entail adjusting the real effective exchange rate to regain competitiveness. This can be achieved by adjustments to domestic prices and costs, particularly labor costs, relative to the rest of the world.
79. **As external factors deteriorate, growth will rely on closing structural gaps that reduce the efficiency of the economy.** Araujo *et al.* (2015) perform a benchmarking exercise that estimates the counterfactual per capita income that a LAC nation could achieve by closing its gap with top performers in the region in several structural dimensions. In line with the analysis presented in this chapter, their research shows that Ecuador would have benefitted from improvements in financial development, trade openness, and reduced size of government. Ecuador would have seen an increase of about 10 percent in its GDP per capita through higher levels of credit to GDP. Likewise, a better performance in trade openness would have increased the GDP per capita by 7 percent if Ecuador's trade openness was equal to that of the region's top performers. Regarding the size of its government, Ecuador would have seen an increase of around 6 percent in its GDP per capita if it reduced its government footprint to the level of top performers. On the positive side, the results demonstrate that Ecuador did quite well in preventing a banking crisis and in increasing levels of schooling and infrastructure access given that the country's gains would have been quite small in these variables.
80. **In sum, bringing Ecuador to a sustainable and inclusive growth path will require:** i) bringing the fiscal accounts to a sustainable position and rebuilding fiscal buffers; ii) addressing external imbalances; iii) aligning labor costs to productivity and lifting regulatory restrictions to labor mobility; iv) fostering international trade and investment integration; v) addressing regulatory distortions that limit access to finance; and vi) reducing costs and uncertainties associated with the regulation and oversight of business.

## II. Poverty and Inclusion

### i. Performance on the twin goals

#### a) Poverty

81. **Ecuador has made notable improvements in reducing poverty over the last decade.** Income poverty decreased from 36.7 percent in 2007 to 21.5 percent in 2017.<sup>24</sup> In addition, the share of the population living in extreme poverty fell by more than half, from 16.5 percent in 2007 to 7.9 percent in 2017, representing an average annual drop of 0.9 percentage points (Figure II-1). In absolute numbers, these changes represent a total of 1.6 million individuals exiting poverty, and about one million exiting extreme poverty over the last decade. In comparison, the decade from 1995-2006 witnessed a more volatile poverty trend, with the financial breakdown of 1998 negatively affecting living standards.<sup>25</sup> Thereafter, Ecuador managed to recover well, and except for the negative welfare effects of the 2008 financial crisis, the country continued on a declining poverty trend up to 2014. In 2014, however, the oil price shock hit, which negatively affected the pace of poverty reduction. Between the years 2014 and 2016, the incidence of both extreme poverty and total poverty did not change much, remaining at around 8 and 20 percent, respectively. As a result, Ecuador's poverty rates began to diverge from the Latin American average.<sup>26</sup> That said, the most recent poverty estimates show a promising recovery, with the country back on a declining poverty trend.



82. **The progress on poverty reduction at the national level significantly narrowed the gap in poverty headcount with the LAC region.** Using international poverty lines and harmonized welfare aggregates

<sup>24</sup> Based on official poverty line (INEC, 2014).

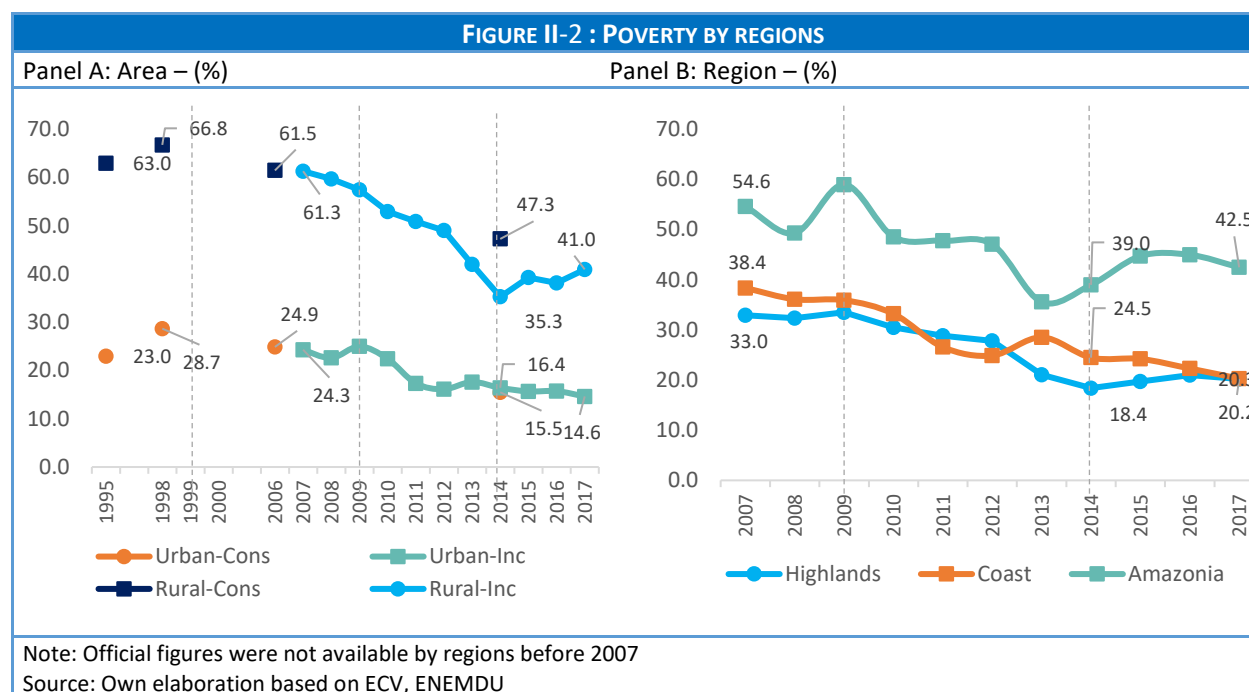
<sup>25</sup> Note that poverty numbers for the years 1995-2006 are based on consumption poverty (INEC, 2016).

<sup>26</sup> Using an international poverty line of US\$ 5.5 a-day (2011-PPP), Ecuador's poverty headcount increased from 29.4 to 30 percent for 2014 and 2015 respectively while the headcount for the LAC region was constant at 26.9 percentage points in both years. Source: SEDLAC data (CEDLAS and the World Bank), Project 02.



for the region, Ecuador's poverty rate was declining faster than the Latin American average (Figure II-1– Panel B). Between 2007 and 2015, Ecuador managed to reduce poverty headcount by 15 percentage points, followed closely by Peru and Brazil at 17 and 13 percentage points, respectively. Nevertheless, Ecuador remains one of the poorest countries relative to its regional and structural peers. Based on the international poverty line for middle income countries, set at US\$5.5 per person per day (2011 purchasing power parity), poverty headcount in Ecuador stood at 30 percent in 2015. This makes it the second highest in the region after Mexico, at 39 percent, and followed closely by Colombia, also at 30 percent.

83. **Ecuador displays large regional disparities in well-being, with poorer regions experiencing large gains during the boom years but being hit harder when the economy slowed down.** Between 2007 and 2014, the magnitude of poverty reduction in rural areas was twice as large as the reduction in urban areas; 26 percentage points for the former compared to 9 percentage points for the latter (Figure II-2 – Panel A). However, poverty in Ecuador continued to mostly be a rural phenomenon, as they are home to more than half of the country's poor (58 percent in 2017) and 70 percent of those classified as extremely poor. Owing to lower living standards, rural areas were also harder hit by the fall in oil prices. Rural Ecuador recorded an increase in poverty rates of about 6 percentage points between 2014 and 2017. Conversely, urban poverty continued to fall during this period, albeit at a slower pace. With respect to Ecuador's geographic regions, Amazonia (the poorest region in Ecuador) experienced a fast pace of poverty reduction during the boom years. The difference between the headcount rates for Amazonia and Highlands fell 7 percentage points between 2007 and 2014. After 2014, this difference started to widen and went back to 22 percentage points as in 2007 (Figure II-2 – Panel B). Despite high poverty rates, Amazonia accounts for the lowest 'number' of poor in the country, as it hosts only 5.4 percent of the country's population. Most of the poor are concentrated in Highlands and Coastal regions.

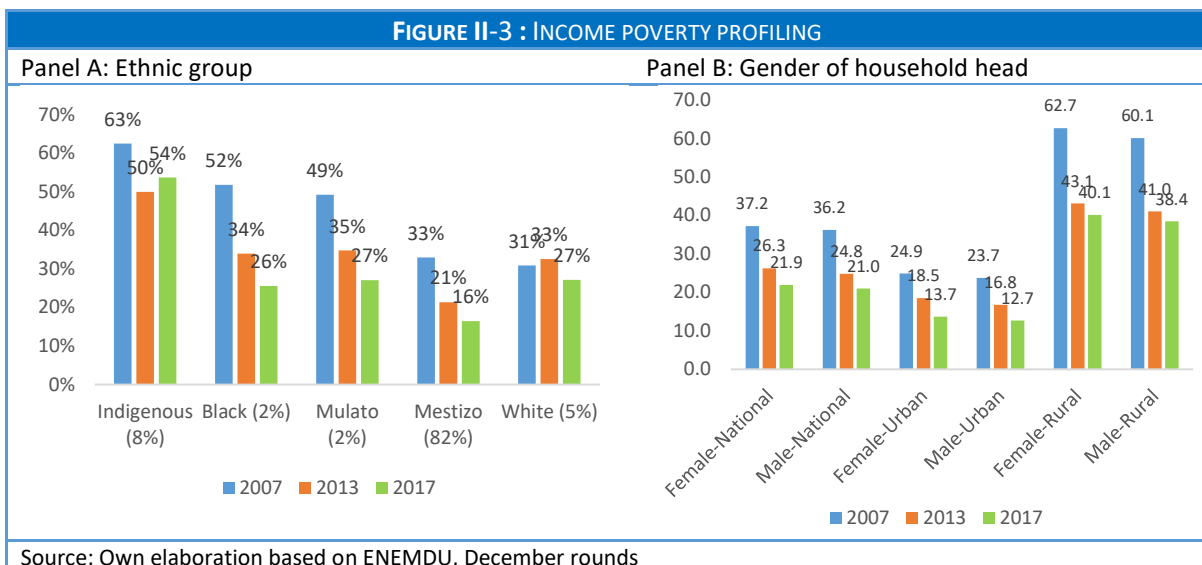


84. **Simple correlations between households' characteristics and poverty status in Ecuador show that, more educated, urban, non-indigenous and male headed households are less likely to be poor.** Although poverty rates rise with an increase in household size, this happens at a decreasing rate. In



addition, the probability of being poor reduces as more household members enter the labor market. Within the labor market, public sector employees are less likely to be poor. Moreover, poverty is highest among individuals employed in agriculture. In contrast, non-farm, and non-agricultural households tend to be better off, regardless of their sector of employment.

85. **As in most other Latin American countries, indigenous populations continue to suffer from high poverty rates in Ecuador.** In 2016, the national poverty headcount for indigenous people (IP) stood at 53 percent. This was almost three-times as high as the poverty headcount rate for Mestizos, the least poor ethnic group in the country (Figure II-3– Panel A). These ethnic disparities in well-being are shadowed in national poverty estimates due to there being a lower share of IP in the population (8 percent). Within Ecuador, the majority of IP live in the Sierra region and in rural areas (80 percent of the IP population is rural) (see BOX II-1). The deterioration of the rural-urban poverty gap over the last couple of years has particularly affected the indigenous population, who reside mainly in rural areas; almost 8 out of 10 indigenous live in rural areas. In 2017, almost 60 percent of rural indigenous households were poor relative to only 15 percent of urban poor indigenous households.



86. **Although Ecuador's IP suffer from one of the highest rates of poverty in the region, Ecuador has managed to reduce IP poverty at a faster pace than other Latin American countries.** Based on a poverty line of US\$ 4 per person per day in 2005 PPP terms, 75 percent of IP in Ecuador were poor in 2004. This was higher than IP poverty rates in Guatemala, Bolivia, Brazil, and Chile. However, by 2014, this fell by 29 percentage points, bringing the IP poverty headcount in Ecuador down to 46 percent. The result has been to close the gap with Bolivia (44 percent), Brazil (38 percent), and Chile (13 percent).
87. **Moreover, poverty rates are higher among female headed households, which experienced higher than average rates of poverty, especially those in rural areas.** For instance, 39 percent of rural female headed households were poor compared to 37 percent for rural male-headed households (Figure II-3– Panel B). Nonetheless, the pace of poverty reduction does not vary significantly by gender of the household head (see BOX II-2).

## BOX II-1: Ethnic Minorities<sup>27</sup>

**Ecuador has the sixth largest population of Indigenous Peoples (IP) and the fifth largest population of Afro-descendants (AD) in the Latin America region.** In Ecuador's 2010 Census, the IP population totaled 1,018,200 people, while the AD population was 1,041,559 people, representing 7 percent and 7.2 percent of Ecuador's population, respectively.<sup>28</sup> Based on the 2015 World Bank report 'Indigenous Latin America in the twenty-first century: the first decade', most IP in Latin America live in Mexico, followed by Peru, Guatemala, and Bolivia. Colombia and Ecuador follow next, with an IP population that is about a quarter of Bolivia's IP population. A forthcoming World Bank report on Afro-descendants in Latin America will show that the majority live in Brazil (more than three-quarters), followed by Venezuela, Colombia, Mexico, and Ecuador (around 1 percent).

**Almost 80 percent of Ecuador's IP live in rural areas, the highest in Latin America other than Honduras, while most AD live in urban areas.** In contrast, only 37 percent of Ecuador's overall population in the 2010 Census and only 34 percent of Ecuador's non-indigenous population live in rural areas. Out of the 5.4 million people living in rural areas, about 15 percent were IP. The transition of IP in other countries from rural to urban areas is the result of several factors: "dispossession of land, ecological depletion, displacement due to conflict and violence, and natural disasters" (World Bank 2015). Many of these have not affected Ecuador. On the other hand, the AD population is much more urban than the corresponding overall population, in contrast with the rest of Latin America where the AD population and overall population have similar urban shares. In Ecuador, around three-quarters of the AD population lives in urban areas, whereas 63 percent of the overall population is urban.

**Both ethnic minorities suffer not only from high rates of monetary poverty, they also tend to display inadequate access to basic services and lower living standards.** Ethnic groups also lagged in access to basic services, especially water and sanitation. For instance, even though Afro-Ecuadorians' access expanded substantially, closing the gap with indigenous groups at about 83 percent in 2014, it still remains 7 percentage points lower than coverage for the Mestizo group. Furthermore, stunting rates in children under 5 years old among IP almost doubles the national rate and access to health insurance is substantially lower relative to Mestizos (21 vs. 44 percent in 2014). IP's educational outcomes are also far worse. Regardless of gender, IP acquire three less years of education, are less likely to continue to higher education levels as compared to their white or Mestizo counterparts, and their illiteracy rate surpasses 26 percent for this group – almost four times the national level.

**However, differences in well-being between Ecuador's indigenous and non-indigenous population are lower in urban areas.** IP in urban Ecuador tend to have better dwelling conditions, almost commensurate to that of non-indigenous populations and even better than most other urban IP in LAC. A lower proportion of the urban IP and non-IP live in slums or in dwellings with dirt floors or without electricity, piped water or sanitation facilities. This implies that, in addition to targeting specific ethnic groups, policy makers in Ecuador need to have a more regional focus in achieving sustainable poverty reduction and social inclusion.

**Lower human capital tends to negatively impact IP and AD labor market outcomes.** Indigenous population have the highest employment rates among all ethnic groups for both men and women, albeit predominantly in the informal sector. Most of the IP resides in rural areas and are mainly engaged in agriculture, which has the highest rate of informality of all economic sectors. It is not surprising that, in 2014, around 81 percent of Ecuador's working age IP were engaged in informal jobs, much higher as compared to other countries in the region. This is around 30 percentage points above other groups and well above the national average of 44 and 41 percent for women and men respectively. Moreover, informal employment is more prevalent among indigenous women than for their male counterparts.

**Access to education is the main barrier, but location also plays a role.** IP and the AD have the lowest average hourly earnings and a persistent gender gap works against women across all ethnic groups. An indigenous person with the same level of education and household characteristics as a non-indigenous person typically earns less for the same type of work. In 2012, indigenous rural workers would likely earn 11.4 percent less than non-indigenous rural workers, controlling for education and household characteristics. Moreover, between a third and a half of the gap between Mestizos and ethnic minorities (i.e. IP and AD) is due to the latter's lack of access to executive or management positions. This is because IP and AD do not possess the educational qualifications required for such jobs (Gallardo and Ñopo, 2009).

<sup>27</sup> Based on Afro-Descendant report (2018)

<sup>28</sup> Indigenous peoples' organizations refer to higher estimates, but we cite official INEC figures.

**Violence remains a pending issue to be addressed, especially among the AD population.** In terms of intra-family violence, particularly violence against children and adolescents (aged 5-17 years old), the situation is particularly worrisome. In 2015, almost half of AD parents and caregivers beat their children when they were disobedient (47 percent), well above the (high) share of 38 percent nationwide. This represents an increase for the AD population, going up from 38 percent in 2010 and thus diverging from the downward national trend (a reduction of 6 percentage points). Conversely, shares for indigenous and Mestizo/white population decreased by 4 and 12 percentage points over the same period (Velasco *et al.*, 2016). Similarly, several indicators of school-based violence remained high for Ecuador, but particularly for the AD population. A recent survey of the Social Observatory of Ecuador revealed an increase in the presence of gangs within schools nationwide, from 13 to 21 percent over the 2010-2015 period, with a steeper rise for Afro-descendant children and adolescents, from 17 percent in 2010 to 32 percent in 2015 (Velasco *et al.*, 2016). Furthermore, all indicators of bullying also increase for the AD students. For instance, fights among students are the highest among this group (73 percent) as compared to Mestizos/white (63 percent) and indigenous children and adolescents (54 percent).

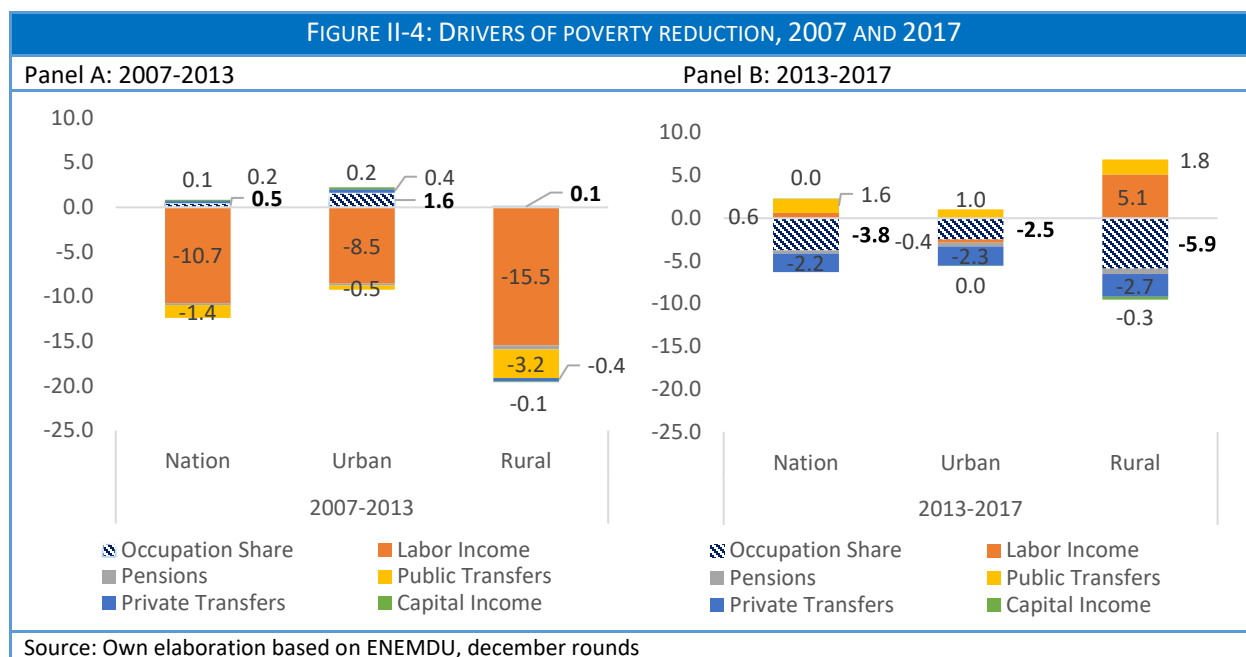
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### **b) Drivers of Poverty Reduction**

**88. Higher labor incomes, coupled with an increase in public transfers were the primary drivers of poverty reduction in Ecuador.** This was particularly true for the years prior to 2014. During this time, labor income alone accounted for a decline of 10.7 percentage points in national poverty headcount (out of a total 11 percentage points). This translated to a decline of 15.5 and 8.5 percentage points in rural and urban poverty, respectively (Figure II-4 – Panel A). In rural areas, government transfers also played a key role, accounting for more than 3 percentage points in total poverty reduction. Nonetheless, after the plunge in oil prices in 2014, labor market conditions deteriorated and social spending tightened. This stalled poverty reduction (Figure II-4 – Panel B). Ecuadorians responded to lower labor incomes and reduced public transfers by increasing their participation in low quality jobs, which commanded lower average wages. This was particularly true for females, and for younger and older cohorts. Ecuadorians also responded by relying more heavily on private transfers, which partially counterbalanced the reduction in government support and contributed to milder poverty reduction after 2013.<sup>29</sup>

<sup>29</sup> The decline in public transfers was also driven by stricter eligibility criteria which seems to have led to greater exclusion errors and an increase in poverty. (World Bank, 2017)



### c) Shared prosperity

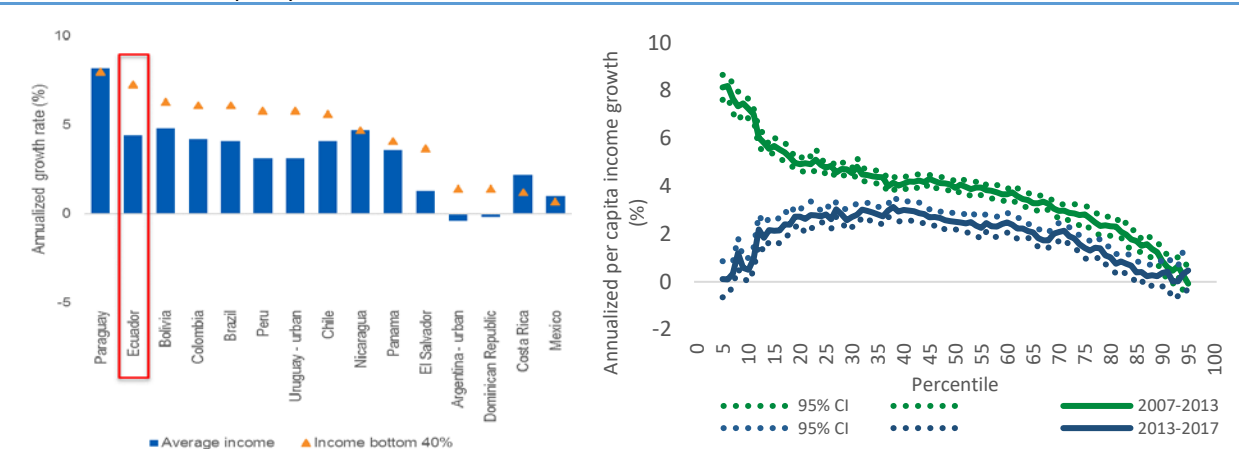
89. In Ecuador, the gains of poverty reduction were shared, with real income per capita for the bottom 40 growing at a faster pace than the national average. This helped Ecuador record the second highest shared prosperity index in the region, just behind Paraguay, and above countries with remarkable social gains such as Peru and Colombia (Figure II-5– Panel A). Improvements in shared prosperity throughout the decade were mainly driven by the socio-economic gains obtained prior to 2013. During 2007-2013, annual income growth was significantly higher for the lowest percentiles of the income distribution. The bottom percentiles grew between 7 and 9 percent annually, compared to an overall mean growth rate of 4 percent. Nonetheless, after oil prices dropped, income growth for both the bottom and the top percentiles stagnated (Figure II-5– Panel B).<sup>30</sup>

<sup>30</sup> Note that in the initial years, 1998-2006, the top percentile tended to grow faster than the bottom. That said, the magnitude of the gains at the top were more or less similar to those at the bottom. As income data is not available prior to the years 2007, the extent of pro-poor growth before this time is estimated using consumption data.

FIGURE II-5: SHARED PROSPERITY

Panel A: Shared Prosperity, 2009-2015

Panel B: Growth Income Curve



Source: Own elaboration based on SEDLAC data (CEDLAS and the World Bank), and ENEMDU, december rounds.

90. **The overall income growth by area followed the national trend, but as in line with higher poverty reduction, rural areas also experienced more inclusive income growth.** Income growth for the lowest percentiles in rural areas was twice or three times the growth in urban areas (10 to 18 percent for the former as compared to less than 6 percent for the latter).<sup>31</sup> Among the lowest earners in rural areas, income growth was mainly driven by increases in labor income, followed by public transfers. However, following the decline in labor income and, particularly, the drop in public transfers from 2014 onwards, income growth stopped being pro-poor and instead showed a higher annual growth for the top percentiles in rural areas. This trend was also reflected in the drivers of poverty reduction (see section on Drivers of Poverty Reduction).
91. **Remarkable pro-poor growth and the decline in poverty were accompanied by an important increase in Ecuador's middle-class and vulnerable populations.** Following the reduction in moderate and extreme poverty, the size of the middle-class (US\$10-50 2005 PPP per day) and vulnerable (US\$4-10 2005 PPP per day) population increased.<sup>32</sup> In 2015, the middle class outgrew the population living in poverty (30 vs. 24 percent, respectively). A decade ago, this difference was 25 percentage points in 'favor' of the poor. However, in 2015, 44 percent of the population was still at risk of falling back into poverty in the event of being exposed to a negative shock.
92. **Limited mobility makes poverty a chronic phenomenon.** A synthetic panel analysis of poverty dynamics between 2006 and 2014 shows that nearly 20 percent of Ecuadorians are chronically poor.<sup>33</sup> The same analysis estimates that about 13 percent of individuals exited poverty between 2006 and 2014. This compares to only 5 percent of the population who fell back into poverty during this period. Despite high economic growth over the past decade, only 1 out of 5 poor Ecuadorians succeeded in exiting poverty. From a geographical perspective, the probability of exiting poverty was higher for

<sup>31</sup> It is important to note that the income percentiles are defined with reference to each area (urban or rural). As urban areas are better off, on average as compared to rural areas, households in the kth percentile of income in urban areas will be better off as compared to the households in the kth percentile in rural areas, and these are not strictly comparable.

<sup>32</sup> Source: LAC Equity Lab tabulations of SEDLAC (CEDLAS and the World Bank)

<sup>33</sup> Cuevas, Atuesta and Jacome (2016)

urban households. Similarly, the likelihood of exiting poverty was higher for individuals living in the Coast. Households with more educated and older household heads were also more likely to exit poverty. The same was true for individuals with higher-than-average labor incomes.

#### BOX II-2: Gender Gaps in Ecuador<sup>34</sup>

**While there has been some progress in the past decade in tackling gender disparities, gaps remain in several monetary and non-monetary measures of well-being.** Whilst there are no gender gaps regarding human capital (education and health), women have systematically lower access to economic opportunities. Not only do women participate less in the labor market, but those who are employed usually do so in “lower quality” jobs (i.e. informal, longer working hours, unpaid work and underemployment). As a result, women’s earnings represent only 87 percent of men’s earnings. However, the share of female entrepreneurs in Ecuador is among the highest in the world despite their relative limited access to financial products compared to men. Political representation of women is also among the highest in LAC both in the executive and legislative power. Finally, violence against women remains a significant issue of concern: six out of ten women in the country were reported to be victims of psychological, physical or sexual violence (INEC). These gaps are exacerbated for indigenous, Afro-descendant and rural women – even in those dimensions where progress has been achieved on aggregate levels.

**First, female-headed households are more likely to be in poverty and to lack access to basic services.** For instance, 39.1 percent of rural female-headed households were poor in 2016, above the share of 37.3 percent for rural male-headed households. Even after considering important variables such as region, household size, education, and labor market characteristics, female-headed households still show a persistent higher probability of being in poverty relative to male-headed households. However, this gap almost halved between 2007 and 2017, going down from 6.5 to 3.5 percentage points. Similarly, access to basic services is lower for female-headed households, especially basic water and sanitation services.

**Gender gaps have narrowed and partially even closed with regards to endowments.** In fact, women tend to have higher educational outcomes relative to men. For instance, net enrollment rates are slightly higher for women in primary and secondary education, while the difference in tertiary education is negligible. Reverse gender gaps are observed in completion rates: while primary completion is almost universal, women’s educational attainment is higher in secondary and post-secondary education. However, gender gaps in favor of men emerge in these indicators among rural and indigenous populations. Regarding health indicators, maternal mortality rates have decreased substantially since 1996, almost closing the regional gap. Even so, they remain high among the indigenous population. The universal access to (maternal) health services fostered by the government is a likely driver of this reduction.

**However, teenage pregnancy and child marriage remain important issues in the country.** Not only is the adolescent fertility rate high compared to regional levels (76 births per 1,000 women aged 15-19, compared to 64 for LAC), but it also declines at much slower pace compared to the regional average. A study developed by the World Bank revealed that teenage pregnancy was positively related to living with one parent, to having friends who are also teen mothers, and to having a stereotyped view on gender roles – i.e. associating women predominantly with motherhood (World Bank 2012). Relatedly, child marriage is still common Ecuador, with 22 percent of girls under 18 married (or living in a union). This is a relevant issue as child marriage is associated with poor development outcomes: married children are more prone to poor health outcomes, high drop-out rates, lower earnings, and high exposure to partner violence. Altogether, these factors result in a higher probability of living in poverty (Wodon *et al.*, 2017).

**Furthermore, women have been consistently disadvantaged in terms of their labor market outcomes.** Women’s participation in the labor market is substantially below men’s participation (59 vs. 84 percent in 2017) and this gap is comparatively large among LAC countries, although it has been narrowing since the plummet of oil prices in 2014. Worryingly, young women are excessively present among those who are not in education, employment or training. More than 25 percent of women are in this situation, compared to just 10 percent of men. Moreover, those women who are active in the labor market are commonly found in lower quality jobs. Women feature more prominently than men in the informal sector. Half of working men are engaged in informal jobs compared to 62 percent of working women. The increased female participation in the labor force since 2014 not only introduced higher informality, but also usher in higher underemployment rates, especially in rural areas. In addition, there is a marked gender segregation regarding sectors of employment. Women dominate in low-skilled services and their participation is the lowest in the construction, mining and transport sectors which are traditionally dominated by men. Relatedly, women

<sup>34</sup> This box builds on a diagnostic note on gender issues in the country conducted by the Poverty team.

still have lower earnings than men in Ecuador and the gap does not seem to be closing. In 2010, men's hourly wages were, on average, 6 percent more than those of women. This is below the gender wage gap recorded in 2017, when the difference in monthly income went up to 8 percent. However, these gender gaps in labor income might be reflecting the substantial difference in types of occupation and sectors of employment between men and women. For instance, women clearly dominate in service sectors such as education services, healthcare, hotels and restaurants. In professional occupations, however, they perform in fewer numbers as technicians and managers.

**Female entrepreneurship in Ecuador is among the highest in the world even though access to financial services seems to be more constrained for women.** According to the Global Entrepreneurship Monitor data, 31.9 percent of women were entrepreneurs in 2014 and the gap with men was relatively small. However, women's access to financial products is seemingly more constrained than that of men. In 2014, only 43.7 percent of women had an account at a financial institution compared to 58.4 percent among men, though both shares increased in 10 percentage points since 2011. These shares were not among the lowest in the region; Colombia, Mexico and Peru had a lower proportion of men and women with an account at a financial institution. However, access to credit cards remains an important constraint for both men and women. Only 6 percent of Ecuadorians have a credit card, one of the lowest shares in the region.

**Importantly, political representation of women in Ecuador is among the highest across Latin America and the Caribbean.** The share of women represented in the national parliament escalated from 3.7 percent in 1998 to almost 40 percent in 2017. Ecuador has the highest share of female parliamentarians, with the exception of Bolivia (53.1 percent). An important factor in driving this change was the introduction of quotas to candidate's lists. Women's representation as head of ministries is also important, hovering at around 30 percent. Similarly, female representation in local institutions and top courts has risen considerably over time. Nevertheless, minority women – particularly indigenous – have traditionally been left behind concerning political or leadership activities, although this situation has started to change in recent years.

**Finally, violence against women is a widespread and very concerning phenomenon in Ecuador.** According to the last National Survey on Gender-Based Violence (INEC 2011), 35 percent of women reported that they had been victims of physical violence by a partner. Meanwhile, 43 percent of women have been exposed to psychological violence and 14.5 percent have experienced sexual violence by a partner. Indigenous and Afro-descendant women are of higher risk of intimate-partner violence, with 59.3 percent of indigenous women and 55.3 percent of Afro-descendant women reporting some form of intimate-partner violence (Camacho 2014). Exposure to abuse in childhood is an important driver, both on the side of the abuser and the victim: over 79 percent of the perpetrators experienced frequent physical maltreatment during childhood, while 75 percent of the victims did. Worryingly, only 20 percent of victims sought institutional support and only half of these women initiated a legal procedure (Camacho 2014).

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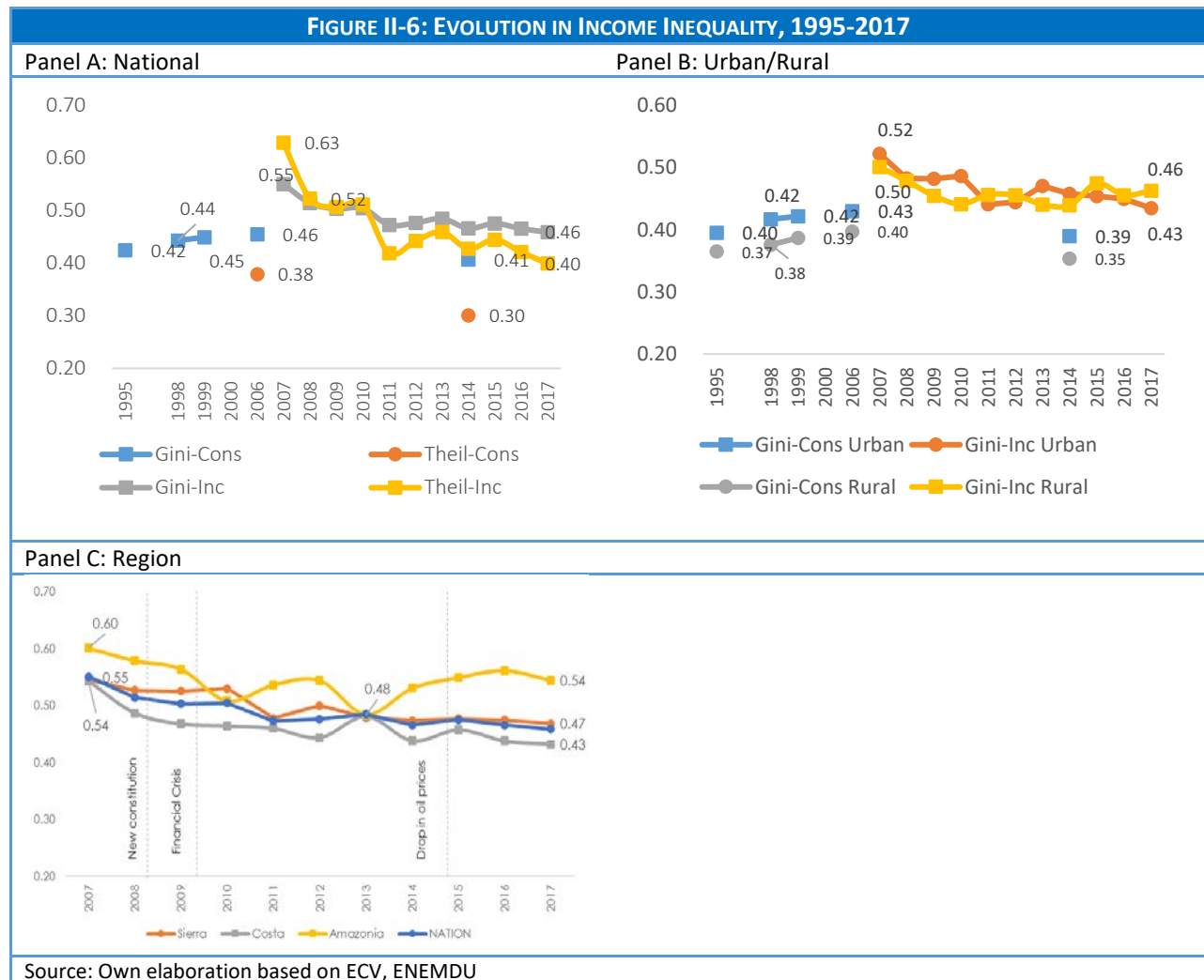
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#### **d) Inequality**

93. **Owing to sustained pro-poor growth over the 2007-2017 period, Ecuador made significant strides in reducing income inequality.** The Theil index reduced by 23 percentage points in 10 years, from a high of 0.63 in 2007 to 0.40 in 2017. Similarly, the Gini index, which tends to display more rigidity compared to the Theil index, also registered a substantial decline over the same period, going down 9 percentage points to reach 0.46 in 2017 (Figure II-6-Panel A).
94. **However, performance on inequality reduction has been geographically uneven.** In urban areas, the Gini coefficient fell by 9 percentage points in the last ten years: from 0.52 in 2007 to 0.43 in 2017 (Figure II-6– Panel B). In contrast, rural inequality has proven to be slightly harder to reduce, falling by a moderate 4 percentage points over time. From the regional viewpoint, the Coast and Highlands, which account for 95 percent of the population, were the least unequal regions. These two regions



recorded a reduction of around 10 percentage points in their Gini index over the last decade, at 0.43 and 0.47 in 2017 respectively (Figure II-6– Panel C). Despite remarkable progress over the past decade, Amazonia remained as the poorest and most unequal region in Ecuador. After the plunge in oil prices, inequality started to increase back toward 2007 levels.



#### e) Multi-dimensional measures of welfare

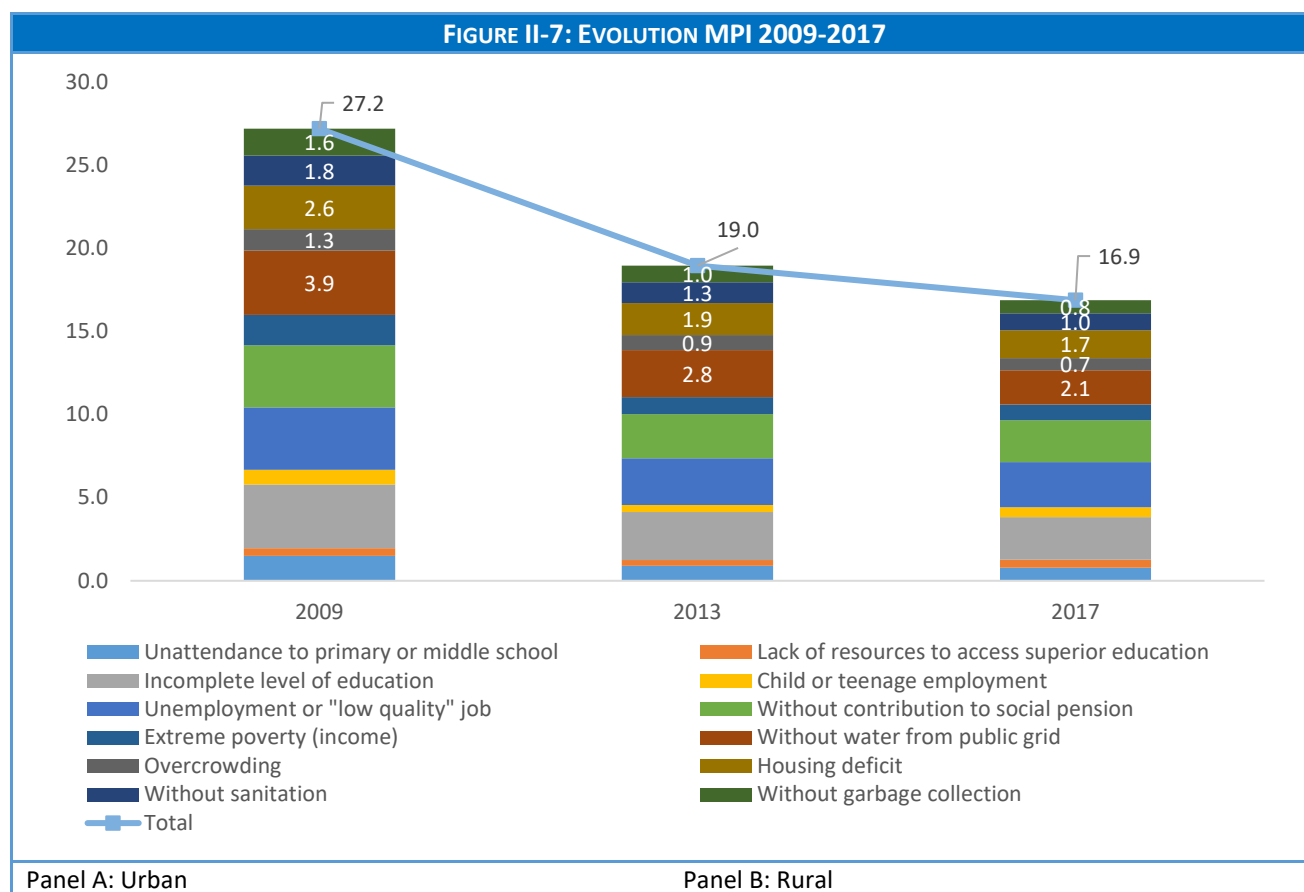
**95. Improvements in living standards over the last decade were also reflected in multi-dimensional measures of welfare.** In 2016, the government adopted a multi-dimensional measure of poverty (MPI), based on four categories: (i) education; (ii) employment and social security; (iii) health, water and food security; and (iv) dwelling and living conditions.<sup>35</sup> Ecuador's MPI declined from 27 percent in 2009 to almost 17 percent in 2017 (Figure II-7). In absolute numbers, the number of people in multi-dimensional poverty declined by 1.8 million during this time, from 7.6 million in 2009 to 5.8 million in

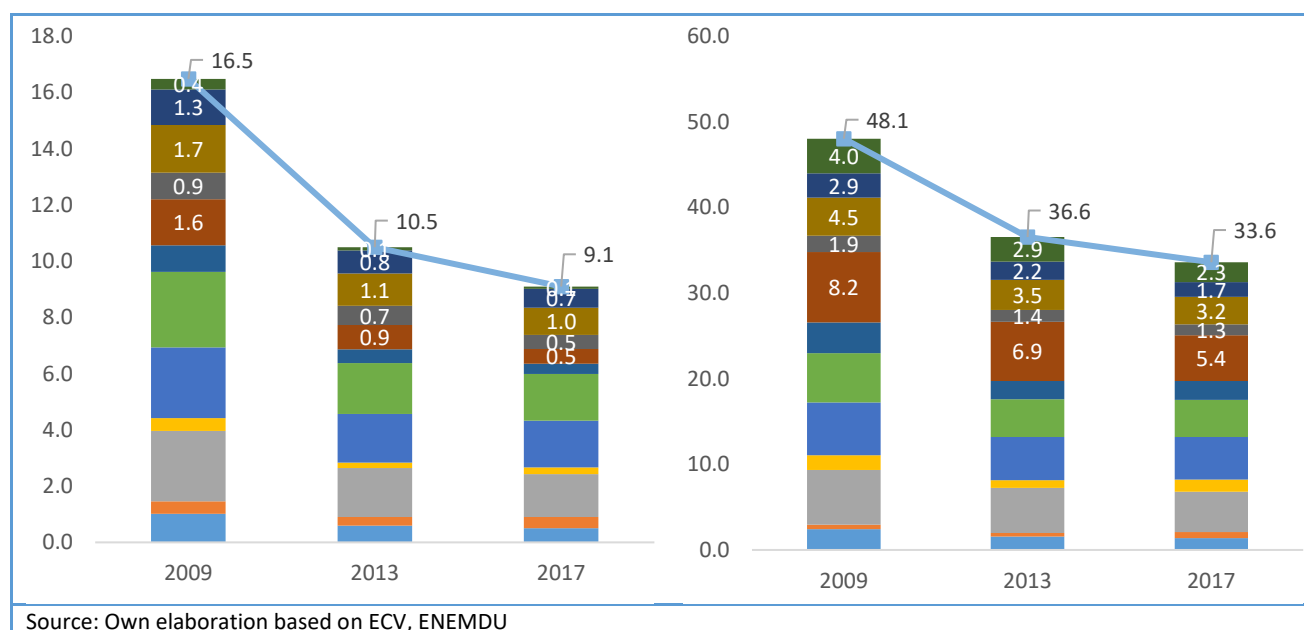
<sup>35</sup> INEC considers a household to be multi-dimensional poor if it is deprived in more than a third of the indicators used to build the Index and to be extreme multi-dimensional poor if it is deprived in more than half of these indicators. The Multi-dimensional Poverty Index (MPI) uses both the share of households who are multi-dimensional poor and the household average percentage of simultaneous deprivations; thus, reflecting not only the number of multi-dimensional poor, but its intensity as well.



2017. Regional trends in MPI closely follow the national trend. Both urban and rural areas registered progress in the MPI. In rural areas, MPI declined from 48 percent in 2009 to 34 percent in 2017. Similarly, urban areas managed to reduce the MPI from 17 percent to about 9 percent during this time.

96. **The reduction in MPI was primarily driven by improvements in publicly provided access to water, higher levels of education and better quality of employment.** Overall, five indicators account for just over two-thirds of the index; unemployment or inadequate employment (16 percent), incomplete educational achievement (15 percent), non-contribution to the pension system (15 percent), no access to water through public network (12 percent), and dwelling deficits (10 percent). The relative contribution of these indicators has remained stable over the years, suggesting that the reduction in multi-dimensional poverty has been driven by an overall decline in these dimensions (Figure II-7). However, it is important to note that over the 2009-2017 period, the largest improvements were experienced in three dimensions; access to water through public network, educational achievement, and contributions to the pension system. Drivers in urban and rural areas are broadly similar, although more intensified in the latter (Figure II-7– Panel B). However, there is a higher relative importance of labor outcomes over access to basic services (i.e. water) in urban areas (Figure II-7 – Panel A).





### BOX II-3: Water and Sanitation

**Overall access to improved water and sanitation services (as defined by the Millennium Development Goals) in Ecuador showed a remarkable increase between 2006 and 2015, reaching 87 and 85 percent, respectively.** Despite this, they remained below the average for the region, which stood at 95 and 83 percent, respectively. The progress in rural areas has been noteworthy. Over the same period, coverage of improved sanitation in rural areas increased by 26 percentage points, up to 81 percent in 2015, while access to improved water expanded to 76 percent. In urban areas, coverage of improved water and sanitation stood at 93 and 79 percent, respectively. However, in urban areas improvements were more modest as access to services were already high in 2006. As a result, rural areas have taken important steps towards converging with urban areas, although gaps still remain.

**Despite this progress, overall coverage increased at a decreasing rate over the past decade.** Even though the government increased its focus on policies aimed at expanding access to water and sanitation services, coverage gains decelerated in the last decade. For instance, improved water in rural areas expanded at an annual rate of 1 percent between 1990 and 1995, compared to 0.8 percent per year in the 2010-2015 period. Likewise, progress in improved sanitation in rural areas also decelerated, from 4.9 percent per year between 1990 and 1995 to 2.2 percent between 2010 and 2015. Urban areas showed a similar trend. The rate of expansion of improved water access declined from 2.4 percent in 1990-95 to 1.1 percent in 2010-15, whereas the pace in improved sanitation reduced from 4.1 to 2.4 percent over the same periods. This slowdown reflects the increasing marginal costs of closing the gaps as access increases, mostly because the remaining households tend to be more isolated and/or face other access barriers.

**Moreover, access levels vary substantially among socio-economic groups, with coverage being clearly regressive.** While access to improved water and sanitation has increased significantly and more rapidly for the bottom 40, substantial gaps remain compared to the top 60. In spite of the remarkable expansion of 11 and 23 percentage points in water and sanitation access for the bottom 40 since 2006, only 77 and 58 percent had access to improved services in 2014. This is well behind the coverage for the top 60, which stood at 92 and 83 percent, respectively.

**From the regional viewpoint, coverage is still uneven throughout the country, showing marked geographical disparities.** Quito reached almost universal water coverage during the 2004-2016 period, while other urban cities range at 90 percent and some rural areas at 46 percent. There were larger increases in improved water coverage along the Amazonia and Coast regions. There was also a higher increase in improved sanitation among parishes in the Highlands. In fact, water and sanitation deficits in improved coverage remain comparatively high across the Coast and Amazon regions, reaching up to 36 percent and 70 percent, respectively. Furthermore, there seems to be a positive correlation between the gaps in coverage and poverty at the parish levels. For example, in Esmeraldas and Manabí provinces, the poorest parishes also have the highest deficits, although some provinces (such as Guayas) showed more mixed results. Interestingly, the expansion of septic tank solutions – more than sewerage expansion – was the

main driver of the increase in improved sanitation among rural and smaller urban areas, as well as for poorest households.

**While the access gap is still significant, the service quality gap is even more important.** When quality of services is factored in, as per the access definition set forth for the Sustainable Development Goals, just 71 and 77 percent of Ecuadorians have access to safely managed water and sanitation services, respectively<sup>36</sup>; and 14 percent of the population (24 percent in rural areas) drinks water that is contaminated with fecal matter. Moreover, the level and quality of water and sanitation services enjoyed by poor households is significantly lower than for services received by the non-poor.

**Expanding access to improved water and sanitation services can make important contributions to poverty alleviation, can increase economic productivity, and can bring important positive health outcomes.** According to the National Planning Secretariat (SENPLADES, in its Spanish acronym), reaching the water and sanitation (WSS) access targets established in the Poverty Eradication Strategy<sup>37</sup> would decrease the levels of poverty and extreme poverty (as measured using the unsatisfied basic needs index) by 3.8 percentage points (down to 29.9 percent) and 1.6 percentage points (down to 9.1), respectively. On the other hand, the burden of enteric diseases associated with inadequate services is 2,596 disability-adjusted life years per 100,000 children per year, which is approximately 66 percent of the total burden of enteric diseases in the country (Wash Poverty Diagnostic, 2017). Nationally, the burden of WSS-related enteric diseases for the lowest quintile is about 30 times greater than the burden suffered by the highest quintile. Moreover, recent studies suggest that malnutrition (which has only slightly declined in the past decade and is related to cognitive impairment and lower productivity) could be significantly reduced through WSS investments, particularly when combined with interventions in other sectors.

**Reference:**

World Bank (2017) Pipe(d) dreams. Water Supply, Sanitation, and Hygiene Progress and Remaining Challenges in Ecuador

## ii. Inclusion mechanisms

97. **Ecuador's performance on the twin goals of reducing poverty and enhancing shared prosperity relies substantially, if not fully, on growth in labor incomes.** In this sense, the importance of identifying the main constraints that less well-off Ecuadorians face in improving their capabilities to access better labor market opportunities is key to supporting their transition out of poverty and vulnerability, and ultimately to moving them up the income ladder. Two interlinked factors play a fundamental role in climbing the income ladder (i.e. raising potential labor incomes). The first factor is the overall increase in the level of acquired human capital, primarily driven by better health and education outcomes. The second factor is the efficiency with which a given level of human capital is utilized, mostly through the labor market. The following section explores these two mechanisms of inclusion, while the remaining chapter addresses the second major driver of poverty reduction; namely, public and private transfers, primarily in the form of social assistance, government subsidies, and pensions.

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<sup>36</sup> As per Sustainable Development Goals' definitions, drinking water sources are considered safely managed if: (i) it can be classified as improved per Millennium Development Goals definitions; (ii) is free of fecal contamination; (iii) it takes less than 30 minutes for the household to fetch the water; and (iv) it is available when needed (continuity). Likewise, sanitation facilities are considered safely managed if: (i) they can be classified as improved; (ii) they are not public nor shared with other households; and (iii) fecal waste is properly transported away from the household.

<sup>37</sup> Under the Poverty Eradication Strategy, Ecuador aimed to have 83 percent of the population connected to a public water distribution system and 75 percent to a sewer network by 2017.

#### *a) Raising human capital: health and education*

**98. Ecuador undertook two complementary steps to enhance the level and efficacy of human capital.**

First, major reforms were introduced over the last decade in the health and education sectors. These were aimed at increasing access and improving service delivery. At the same time, significant investments were made by setting aside higher government budgets for these two sectors. Consequently, improvements in outcomes were observed in both sectors, although challenges both old and new remain. For instance, issues of chronic malnutrition, teenage pregnancy, and low postnatal care continue to threaten the health sector and broader development outcomes. Similarly, stagnation in learning outcomes and high dropout rates in secondary education are some of the persisting issues in the education sector. Other emerging problems include decreasing immunization rates, a lower rate of utilization of newly established health and education infrastructure, and high dropout rates in tertiary education. This happens against the backdrop of significant health and education investments in the past decade. Most importantly, regional and demographic disparities in terms of both access and outcomes continue to affect the two sectors. In order to experience sustained and inclusive growth, these issues need to be tackled in a systematic way such that human capital development is not compromised in the long run.

#### *v. Health*

**99. Over the last decade, Ecuador has implemented important health sector reforms aimed at achieving universal access to health services and improving public service delivery.**

As a start, the 2008 Constitution recognized the right to health protection as a basic human right and established the gratuity of health services (including diagnostics, treatment, medicines and rehabilitation) in the public health sector. In line with the 2008 Constitution, the government started to reshape how the public and private health systems functioned. In 2013, the Integral Health Service Model was created, which was aimed at reorienting health services towards promotion of the service, and disease prevention, as well as strengthening curative care (Espinoza et al., 2017). In addition, the public health services were reorganized in nine new health zones. In 2016, the Prepaid Medicine Law was introduced, which required private health insurance companies to reimburse for health services received in the public sector.<sup>38</sup> In addition, the Ministry of Health created the Integrated Public Health Network, whereby public-sector health providers were bound to provide free-of-charge services to patients regardless of their insurance.

**100. These reforms were accompanied by a substantial increase in public health spending after 2007.**

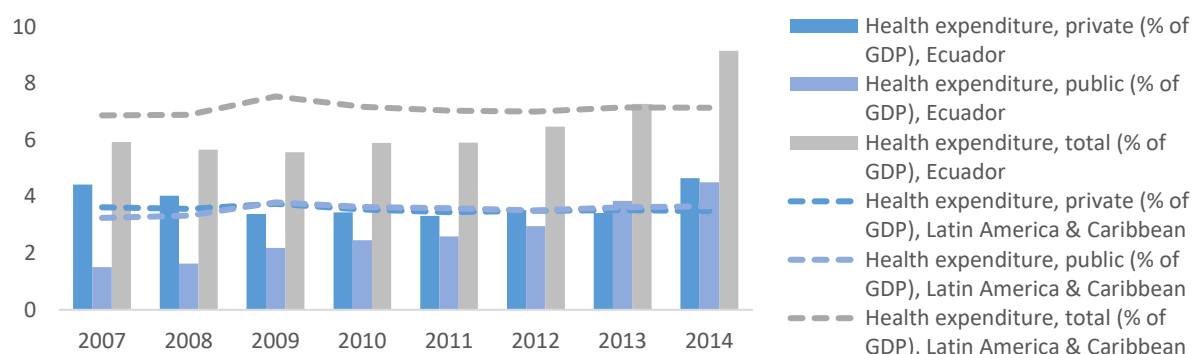
This increase was prompted by the establishment of gratuity for public health services, higher capital investments, and a commitment to set the health budget at a minimum of 4 percent of GDP per year. Public health expenditures actually exceeded this minimum target, increasing from 1.5 percent of GDP per year in 2007 to 4.5 percent in 2014 (Figure II-8). As of 2014, Ecuador spent about 2 percentage points more on its health budget as compared to the overall regional average (9 percent for Ecuador versus 7 percent for LAC). Most of this increase was driven by a twofold increase in personnel spending—both salary levels and staff numbers increased—and a four-fold increase in purchases of goods and services (Figure II-8 – Panel B).<sup>39</sup> Moreover, total investments in health infrastructure between 2013 and 2018 were estimated at around US\$1.4 billion.

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<sup>38</sup> In 2001, the Social Security Law introduced the General Obligatory Insurance scheme, which became compulsory for dependent and independent workers as well as for small and large business owners.

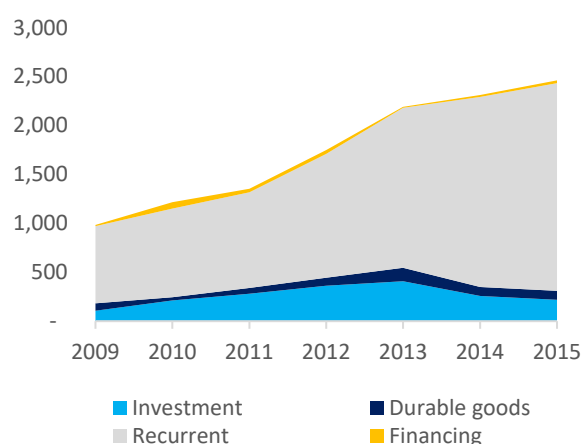
<sup>39</sup> Includes new and renovated hospitals (Source: own calculations)

**FIGURE II-8: HEALTH EXPENDITURE: PUBLIC, PRIVATE AND TOTAL (% OF GDP)**

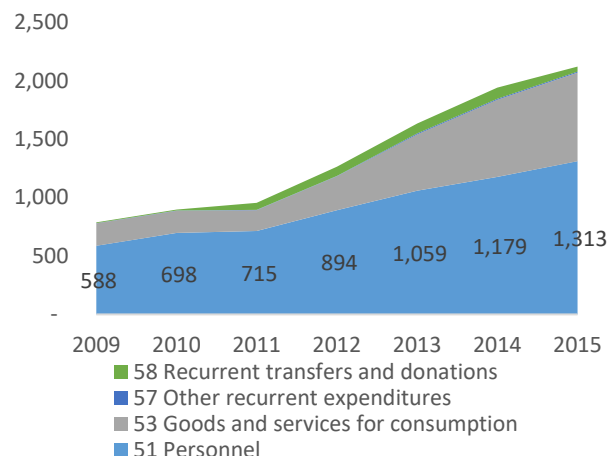


Source: World Bank staff elaboration based on World Development Indicators. 2018

**Panel A: Composition of total expenditures**



**Panel B: Composition of recurrent expenditures**

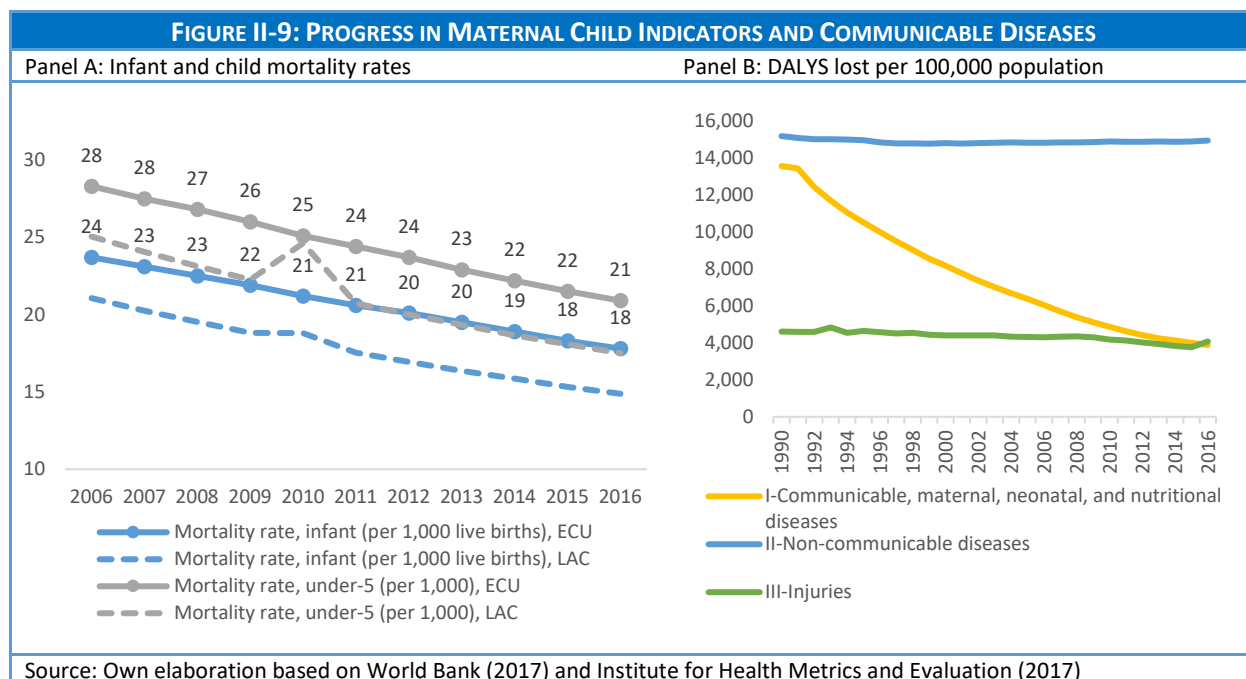


Source: World Bank Staff elaboration based on MEF

101. **In conjunction with higher public spending, the government decided to expand access to health services through a dual system of social health insurance, and increase public service provision for the uninsured.** As a result, access to public health insurance increased from 28 percent in 2006 to 41 percent in 2014 (ECV data). Despite these changes, access remains highly unequal among socio-economic quintiles and ethnic groups. For instance, in 2014, health insurance coverage in the top quintile was three-times as high as that in the bottom quintile (66 vs. 23 percent). Similar gaps in coverage exist across ethnic groups. Mestizos, for instance, have 44 percent insurance coverage, while the IP are covered at a rate of 21 percent. In addition, the less well-off display substantial disparities in access to health services: 64 percent for the bottom quintile versus 83 percent for the top quintile. In terms of ethnicity, access to health services is recorded at 59 percent for IP versus 74 percent for Mestizos.

102. **Government efforts to increase access to health services and coverage of health insurance led to improvements in a range of health outcomes.** Between 2006 and 2016, the infant mortality rate decreased from 24 to 18 per 1,000 live births, and the under-5 mortality rate decreased from 28 to 21 per 1,000 live births (Figure II-9– Panel A). Reported diarrheal disease among under-5s fell from 25 to 17 percent between 2006 and 2014. This improvement was partially attributed to the remarkable progress in access to water and sanitation services between 2006 and 2015, especially in rural areas

and among the bottom 40 percent.<sup>40</sup> Additionally, the incidence of respiratory illnesses dropped from 56 to 46 percent between 2006 and 2016 (INEC). Moreover, the incidence of communicable diseases has been particularly controlled. The leading burden of disease, as measured by the loss in Disability Adjusted Life Years (DALYs), is now accounted for by non-communicable diseases such as cardiovascular illnesses, mental and substance abuse issues, cancer, diabetes, and musculoskeletal conditions (Figure II-9 – Panel B). In contrast, neonatal disorders, diarrhea, and respiratory infections account for lower Disability Adjusted Life Years lost per 100,000 persons.

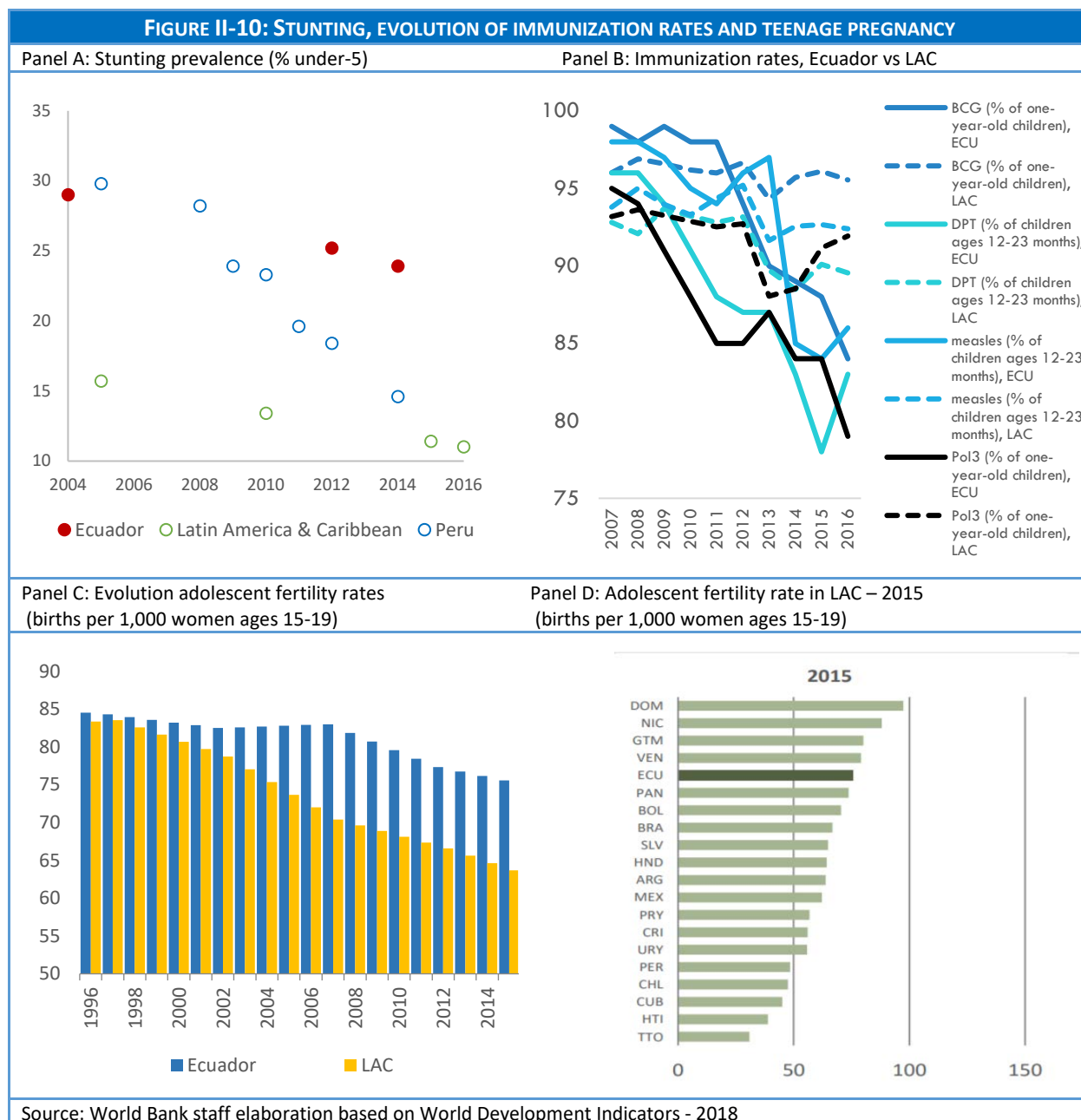


**103. Nonetheless, an important agenda for child and maternal health remains.** Stunting rates in Ecuador, for instance, continue to be worryingly high. In 2014, almost one in four children (age 5+) were chronically malnourished (Figure II-10- Panel A). Moreover, the incidence of malnutrition is higher among poorer people. In the bottom quintile, for instance, one in three children are stunted. This leaves Ecuador with the second highest stunting rate in LAC, behind Guatemala, and with at rate comparable to that of sub-Saharan Africa (Botswana at 23 percent, Ghana at 26 percent, and South Africa at 23 percent).<sup>41</sup> It is well-established that high levels of stunting are particularly correlated with worse water supply, sanitation and hygiene (WASH) outcomes and WASH infrastructure. In Ecuador, improvements in WASH infrastructure have not fully translated into better WASH outcomes. Hygiene practices continue to be substandard, and water quality remains distressingly low. More than one fifth of the population in Ecuador drinks e-coli contaminated water. The burden is especially high for poor Ecuadorians and those living in rural areas, one third of whom lack access to safe drinking water and are increasingly vulnerable to water-borne diseases. Even more troubling is the reduction in immunization rates in the country over the last decade. Immunization rates dropped by as much as 18 percentage points between 2007 and 2016 (Figure II-10– Panel B). As for maternal health, only 28 percent of women received postpartum care. As a result, many countries in the region are outperforming Ecuador on the broader health-related Sustainable Development Goals index (The

<sup>40</sup> See BOX on Water, Sanitation and Hygiene.

<sup>41</sup> WASH Poverty Diagnostic, 2017

Lancet, 2017). More importantly, teenage pregnancy continues to be a critical issue in Ecuador. Although adolescent fertility rates have been decreasing since 2007, they remain significantly above the regional average (Figure II-10– Panel C). Ecuador records the fifth highest adolescent fertility rate in the region, only behind Dominican Republic, Nicaragua, Guatemala, and Venezuela (Figure II-10– Panel D).



**104. Inefficiencies and lack of effectiveness in the provision of health services limit further improvements in health outcomes.** The implementation of the Integrated Health Service Model has been incomplete and may have had unintended negative consequences. For instance, the vertical organization of the vaccination program was partially dismantled and it was not compensated through a horizontal approach. The reorganization of public health services in health zones has strained health service delivery as it does not seem to accommodate geographic constraints well. The relationship



between public and private systems has also started to show signs of strain, as both the Ecuadorian Institute of Social Security and the Ministry of Health have accumulated substantial debt with the private sector for the provided services.

105. **More importantly, productivity of health sector inputs, especially human resources, did not keep up as public spending in the sector increased.** Administrative records show that the number of contracted doctor hours doubled in ambulatory care facilities and nearly doubled in hospitals, between 2010 and 2016. However, the number of services provided per doctor hour substantially decreased. Notably, in public health institutions, the number of outpatients per doctor hour reduced from 2.34 to 1.42 between 2010 and 2016, while the number of hospital discharges per doctor declined from 0.066 to 0.036 over the same period. These numbers suggest that the increase in the sector's resources is not being accompanied by commensurate increases in the level of service provision, indicating inefficiencies in the sector. Alternative explanations are a poor fit between the deployment of doctors and the location of demand for public services, depressed demand due to poor-quality, poor management, and/or the lack of accountability of human resources. Finally, rural Ecuador is becoming increasingly devoid of basic health staff in primary care facilities. This might have happened due to an expansion of health infrastructure in urban areas, which is drawing nurses and nursing assistants towards urban hospitals.
106. **Going forward, health issues can represent a serious threat to human capital development.** Chronic malnutrition (stunting) is positively associated with a reduced capacity to learn (Grantham-McGregor *et al.* 2007). The reduction in immunization rates further adds to the problem. Given that these children are also exposed to low-quality water at an early age and are not immunized against preventable diseases, a whole generation is at risk of lower human capital. To make matters worse, females who could have possibly enrolled in school or entered the labor market are dealing with teenage pregnancy, the effects of which extend far beyond the mother and her child. In addition, limited prenatal and postnatal care can delay the entry or re-entry of female workers into the labor market or limit their productivity even when they do manage to get back to work.

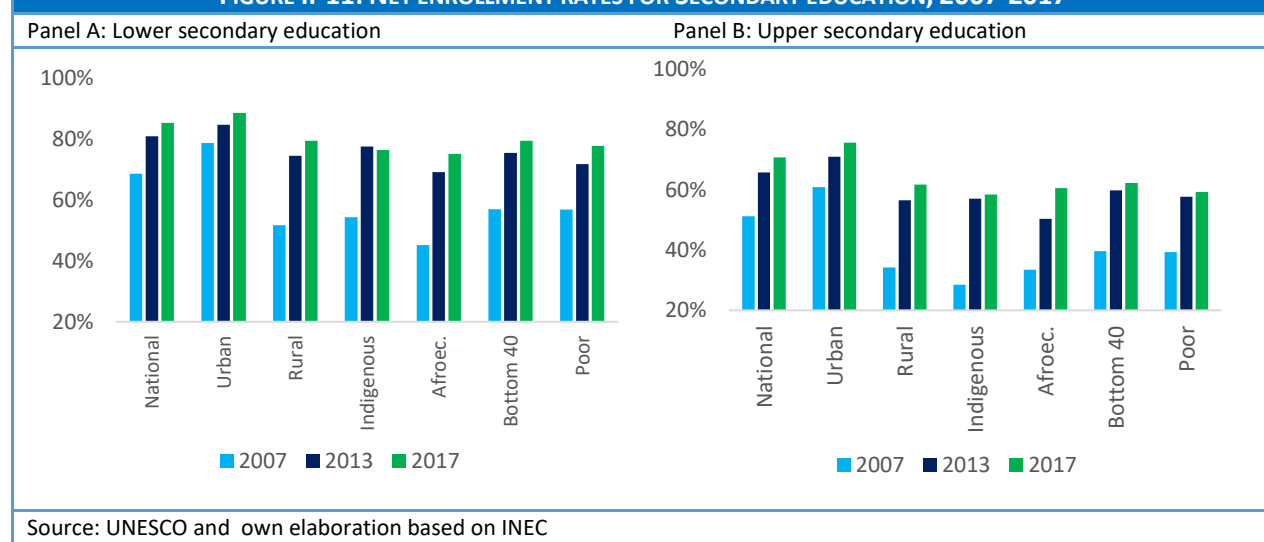
#### *vi. Education*

107. **Ecuador's education sector has been characterized by major reforms over the last decade.** Since 2006, Ecuador has approved the Ten-Year Education Sector Plan 2006-15, the 2009-13 Plan of Good Living (*Plan del Buen Vivir*), and the Education Organic Law of 2011 (*Ley Orgánica de Educación Intercultural*, LOEI). These have collectively initiated a deep reform of basic and higher education. In the case of basic education, three major reforms were introduced. These included: (i) the reorganization of school supply through the development of new schools and the consolidation of existing ones into hubs, known as Millennium Schools; (ii) the establishment of a national system of performance evaluation for students, teachers, and institutions through the National Institute of Educational Evaluation (*Instituto Nacional de Evaluación Educativa*, INEVAL); and (iii) the development of a new system of teacher training and development. Reforms in higher education centered on the: (i) provision of free tertiary education for all; (ii) reform of governance structures in higher education institutions; (iii) creation of new institutions particularly focused on technical education; and (iv) improvement of quality assurance procedures within higher education. These changes have not only substantiated the government's commitment to improve the quality and quantity of higher education (through higher expenditures on scholarships, new infrastructure, equipment facilities, and the regularization of full-time professors), but they have also led Ecuador to surpass its structural and regional peers in terms of the proportion of overall education budget spent on higher education.



108. **These reforms have commanded substantial education sector investments.** Between 2000 and 2015, education expenditures as a percentage of GDP increased from 1.5 to 5 percent. Overall education spending in Ecuador now exceeds that of its structural and regional peers. Going forward, the government aims to increase it even further, to about 6 percent of GDP. While multiple factors have contributed to this increase, some of the main drivers have been higher expenditures in teacher salaries, recent capital investments, student subsidies, and the *Gratuidad* policy in higher education.<sup>42</sup> For instance, teacher salaries increased in nominal terms from US\$396 to US\$817 per month between 2006 and 2012 on average. In addition, a total of 17,000 new teaching positions were created between 2011 to 2013 (Harvey, 2016). In 2016, 90.6 percent of the teachers were regularized with open-ended appointments and 29.4 percent (or about 479,000 teachers) benefited from a salary increase due to the “*Re-Categorización*” program. In recent years, the government also prioritized investments in teacher training. By 2017, about 3 percent of all teachers (approximately 4,200 teachers) received scholarships to obtain international master’s degrees (Senplades, 2017). Notably, a major share of spending comes from investments in education infrastructure, such as the construction of a series of new schools (known as Millennium Schools) and universities (known as Universities of Excellence). Provision of higher student support has also contributed to the increase in education spending. This support has been both in-cash and in-kind, such as the provision of uniforms and textbooks, school feeding programs, and fee waivers. One important missing step in this ambitious investment program was the modernization of the academic curriculum, which constrains the returns of these investments. Moreover, the cost-effectiveness of most of these interventions and reforms remains unassessed.<sup>43</sup>

**FIGURE II-11: NET ENROLLMENT RATES FOR SECONDARY EDUCATION, 2007-2017**



<sup>42</sup> In the 2008 Constitution, Ecuador implemented the *Gratuidad* policy in higher education, which assures free access to public education (tuition plus other student subsidies) to individuals who enter public higher education institutions. This policy has led Ecuador to proportionally spend a higher share of its education budget on tertiary education compared to its structural and regional peers (Ferreira *et al.*, 2017).

<sup>43</sup> Even though the Ecuadorian government has promoted education-support programs to increase enrollment in recent years, the evidence is neither sufficiently ample or current to assess their effectiveness. Ponce (2010) studies the performance of Ecuador’s Bono de Desarrollo Humano (BDH) which indicates that there is a significant difference across BDH beneficiaries and non-beneficiaries in terms of educational consumption and spending. Nevertheless, such differences do not affect enrolment rates. The government is currently planning to evaluate some other education support programs with support from UNDP and the World Bank.

109. **Consequently, significant improvements in educational outcomes have ensued over the last decade.** The country has almost reached universal access to basic education, with net enrollment rates increasing from 91 percent in 2007 to 96 percent in 2017. More importantly, net enrollment rates in upper-secondary education increased by 20 percentage points in 10 years, from 51 percent in 2007 to 71 percent in 2017 (Figure II-11). Moreover, for the population aged 30 years or more, illiteracy rates dropped from 10 to 7 percent, and average years of completed education increased by almost one year, between 2007-2017 (ENEMDU). In addition, learning outcomes (as proxied by performance on 3<sup>rd</sup> and 6<sup>th</sup> grade standardized tests) improved significantly, reaching levels commensurate to that of the regional average. In 2006, Ecuador's performance in reading and mathematics was well below the regional average (Table II-1). By 2013, however, performance in both subjects increased by about 10 to 12 percent, bringing student performance in Ecuador at par with the average for LAC (UNESCO: SERCE 2006, TERCE 2013).

TABLE II-1 STANDARDIZED TESTS IN READING AND MATHEMATICS (ECUADOR VS LAC), 2006 AND 2013						
	ECUADOR			LAC AVERAGE		
	2006	2013	% Change	2006	2013	% Change
<b>MATHEMATICS</b>						
<b>Third grade</b>	473.09	524.16	10.8%	494.62	524.82	6.1%
<b>Sixth grade</b>	459.53	513.10	11.7%	493.80	515.36	4.4%
<b>READING</b>						
<b>Third grade</b>	452.41	508.43	12.4%	493.18	511.57	3.7%
<b>Sixth grade</b>	447.45	490.66	9.7%	494.55	507.59	2.6%

Source: UNESCO. SERCE (2006) and TERCE (2013)

110. **Regional disparities in educational achievement also decreased and the educational system became more inclusive over time.** Between 2007 and 2017, the increase in completed years of education (population 30+) in rural areas, reached 1.4 years, growing faster than the 0.6 years rise in urban areas. Similarly, secondary school net enrollment rates increased by 27 to 28 percentage points in rural areas. Rate rises were particularly high in lower and upper secondary, jumping from 52 to 79 percent and 34 to 62 percent, respectively. This increase was much lower in urban Ecuador, where net enrollment rates increased by 10 to 15 percentage points for lower and upper secondary education. Moreover, less fortunate Ecuadorians registered higher improvements in enrollment and literacy rates. For instance, upper secondary school net enrollment rates increased from 29 to 58 percent for IP, 33 to 61 percent for the AD population, and 40 to 62 percent for the bottom 40 from 2007 to 2017. Years of completed education (population 30+) went up by 1.5 years for IP, two years for the AD population and 1.1 for the bottom 40 percent, all higher than the national average. At the same time, illiteracy rates decreased more rapidly for these groups (Table II-2).

**TABLE II-2: TRENDS IN NUMBER OF YEARS OF COMPLETED EDUCATION AND ILLITERACY RATES, 2007-2017**

Population (30 +) who is illiterate (%)										
	All adults	Urban	Rural	Sierra	Costa	Amazonia	Indigenous	Afro-Ecuadorian	Bottom 40	Poor
2007	9.7%	4.8%	20.0%	11.0%	8.6%	8.7%	37.6%	10.3%	17.1%	17.6%
2013	7.4%	4.1%	14.5%	8.0%	7.0%	5.1%	28.5%	7.1%	12.3%	13.7%
2017	6.7%	3.7%	13.8%	7.5%	6.1%	5.3%	26.3%	6.0%	11.8%	13.8%
Years of completed education										
2007	7.9	9.4	4.7	8.0	7.8	6.8	3.6	6.7	5.3	5.2
2013	8.4	9.7	5.5	8.6	8.2	8.0	4.6	7.6	6.0	5.6
2017	8.8	10.0	6.1	8.9	8.7	8.7	5.1	8.6	6.4	6.0

Source: World Bank based on ENEMDU

111. **Nevertheless, rural and indigenous populations still display significant differences in educational outcomes.** At 27.1 percent, the illiteracy rate among IP is four times higher than that of non-IP, which stands at 6.1 percent. Similarly, illiteracy rates in rural areas are four times as high as those in urban areas. Moreover, completed years of education for the indigenous and rural populations are 3.7 and 2.7 years lower than the national average, respectively. Substantial gaps in net enrollment rates also persist at the upper and lower secondary level. Net enrollment rates for secondary education for the rural population are 10 percentage points below those for urban areas. For IP (Afro-Ecuadorians), these rates are 7.3 (9) percentage points lower than for non-IP (non-Afro-Ecuadorians). Secondary school net enrollment rates also differ significantly by poverty status. The rates for poor Ecuadorians are 9.8 percentage points below the rates for non-poor Ecuadorians. The country's disadvantaged populations also fare worse in learning outcomes. Results from the Third Regional Comparative and Explanatory Study (TERCE) 2013 show that sixth grade test scores in Reading and Mathematics among indigenous students were 3 to 7 percentage points lower, than the national average respectively. This gap remained almost unchanged between 2006 and 2013.
112. **More importantly, the surge in public investments and progress in educational outcomes have not translated into higher levels or quality of human capital.** Despite higher scores on standardized tests, labor market entrants continue to display important deficiencies in key cognitive skills. Results from TERCE (2013) show that in Ecuador only 36 percent of sixth grade students could infer, deduct, and analyze information from a written text. In the case of numeracy skills, most of the sixth graders were found incapable of solving simple math problems. They also found it difficult to solve analytical problems involving geometry, equations, and interpretation of charts and figures. Moreover, only half of the sixth graders could perform simple arithmetic operations (i.e. addition, multiplication, subtraction, and division). This is because higher educational attainment is not translating into higher learning. These statistics are particularly troubling as seven out of every ten individuals in Ecuador only attain basic education prior to entering the labor force (ENEMDU, 2017). Those individuals who manage to continue to tertiary education face additional constraints of lower cognitive development. The situation is worsened by limited access to early childhood development programs and to opportunities for pre-primary schooling in the country.
113. **High dropout rates in tertiary education further decelerate human capital accumulation.** In Ecuador, less than half of all individuals who enroll in higher education manage to complete their degree. Between 2007 and 2017, only 11 percent of the total population older than 25 years of age completed a higher education degree. This is lower than in other LAC countries such as Mexico (16

percent), Chile (21 percent) and Colombia (23 percent) (UNESCO 2015-2017). This is explained by the fact that academic readiness for higher education in the country is low and programs are generally long (over 5 years). The high level of student dropout rates in higher education is also significant and this undermines individuals' long-life income opportunities. Also, in light of the recent *Gratuidad* policy to subsidize higher education for students, every individual who drops out of the system constitutes a loss of important investments made by the state.

#### ***b) Labor markets as mechanisms of inclusion***

- 114. The labor market in Ecuador has been characterized by an abundance of changes in labor regulations over time.** The Labor Code has undergone multiple modifications since 2006, primarily related to employment protection legislation. Starting in 2006, restrictions to outsource workers were introduced. In 2008, outsourcing and labor-hour contracts were prohibited. In 2010, social security and economic benefits provisions were made mandatory for all workers. In 2011, the failure to affiliate workers to social security became a criminal act.<sup>44</sup> In 2012, affiliation to the Social Security Institute also became compulsory for domestic servants. In 2013, a new labor code was introduced that involved putting certain restrictions on overtime work and further extending social security access. That said, certain restrictions came with some flexibilities. The 2010 law, for instance, aided the employment of workers with temporary contracts. In 2013, meanwhile, employment costs were reduced by eliminating the obligatory provision of daycare, cafeterias, and medical services within the workplace. In 2016, the Labor Code was amended again to introduce further flexibility in employment. In 2018, the Ministry of Labor signed labor agreements regarding the modality of contracts for temporary workers in specific sectors such as flowers, bananas, tourism, agriculture and livestock.<sup>45</sup>
- 115. Labor market dynamics in Ecuador were strongly correlated with changes in living standards.** The 2007-13 interval was characterized by a reduction in poverty, an increase in labor incomes, and a gradual improvement in other labor market outcomes. The employment rate of good-quality jobs, for instance, increased from 43 percent in 2007 to 48 percent in 2013.<sup>46</sup> Meanwhile, the unemployment rate decreased from 5 percent to 4 percent over the same period (Figure II-12– Panel A). Ecuador now registers one of the lowest unemployment rates in Latin America. Higher labor incomes allowed for a decline in labor force participation, especially among the youngest cohorts, who were able to go back to school. For workers between 15 and 19 years old, the labor force participation rate shrank more than 16 percentage points (i.e., from 39.6 percent to 23 percent) within this time interval. In addition, informality levels reduced, reaching their historical minimum by the end of 2013 (Figure II-12– Panel B).<sup>47</sup>

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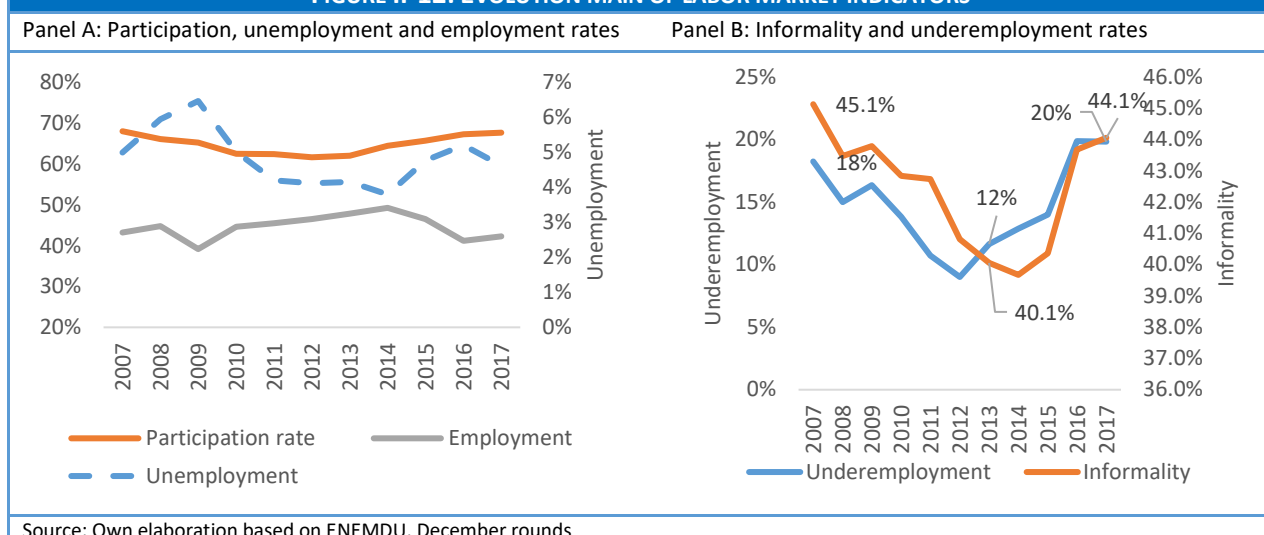
<sup>44</sup> The law was implemented in 2014.

<sup>45</sup> Ministry of Labor. Agreements 73,74,75,96, and 97, Government of Ecuador (2018).

<sup>46</sup> The National Institute of Statistics and Census (acronym in Spanish INEC) defines employment rate of good-quality jobs (i.e. *tasa de empleo adecuado*) as those employees who work more than 40 hours per week and receive a labor income greater than the minimum wage.

<sup>47</sup> This document uses INEC's definition of informality: employees are defined informal when the enterprise that employs them has no Taxpayer Registry (Registro Unico de Contribuyentes, RUC) or does not have formal accounting. Domestic Servants and workers without classification are excluded from this definition. It is important to note that trends and conclusions are similar irrespective of the informality definition used.

**FIGURE II-12: EVOLUTION MAIN OF LABOR MARKET INDICATORS**



116. **Since the mid-2014 oil price shock, economic and labor market conditions have deteriorated, and almost 130,000 good-quality jobs have been lost.** Employment became a dual problem, where workers in good-quality jobs had to reduce hours worked per week and/or accept lower salaries (i.e., lower quality jobs) and most of those who were inactive. In the case of the former, one quarter of total workers with good-quality jobs switched to those with lower quality. As for the latter, around a fifth of total inactive workers could only secure a lower quality job.<sup>48</sup> These changes gave way to higher levels of informality, which in turn fed lower job quality.

117. **The proliferation of lower quality jobs has disproportionately affected women and indigenous workers.** As a consequence of being in lower quality jobs, these groups have persistently commanded lower earnings. For example, in 2010, men's hourly wages were, on average, 6 percent more than those of women. This was below the gender wage gap recorded in 2017 when the difference went up to 9 percent.<sup>49</sup> Differences in individuals and job characteristics explained only about 20 percent and 48 percent of 2010 and 2017 of the gender wage gaps, respectively; these gaps remain largely unexplained. Moreover, an important occupation segregation prevails. Women account for the majority of low skill service workers, but are largely absent from mining, construction, transport and utilities.<sup>50</sup> Concerning ethnic gaps, Ecuador's IP and AD populations have the lowest hourly earnings. In the former group, education is key to understanding wage differentials. Between a third and a half of this gap is due to the limited access they have to executive and management positions, owing to the lack of relevant educational qualifications.<sup>51</sup> A persistent gender gap also exists against women across IP and AD. Female workers of these groups also show higher underemployment rates.

118. **Informality is a generalized phenomenon as a consequence of rigidities, but not all can be attributed to the institutional setting.** Informality is tied to the work life-cycle and clearly related to education.<sup>52</sup> This finding is not surprising, given that youth and elderly workers have the highest levels

<sup>48</sup> These variations are between 2015-2016. INEC, (2017) "Panorama laboral y empresarial del Ecuador 2017"

<sup>49</sup> Own estimations based on Ñopo (2008) decomposition technique.

<sup>50</sup> See BOX II - 2: Gender Gaps in Ecuador.

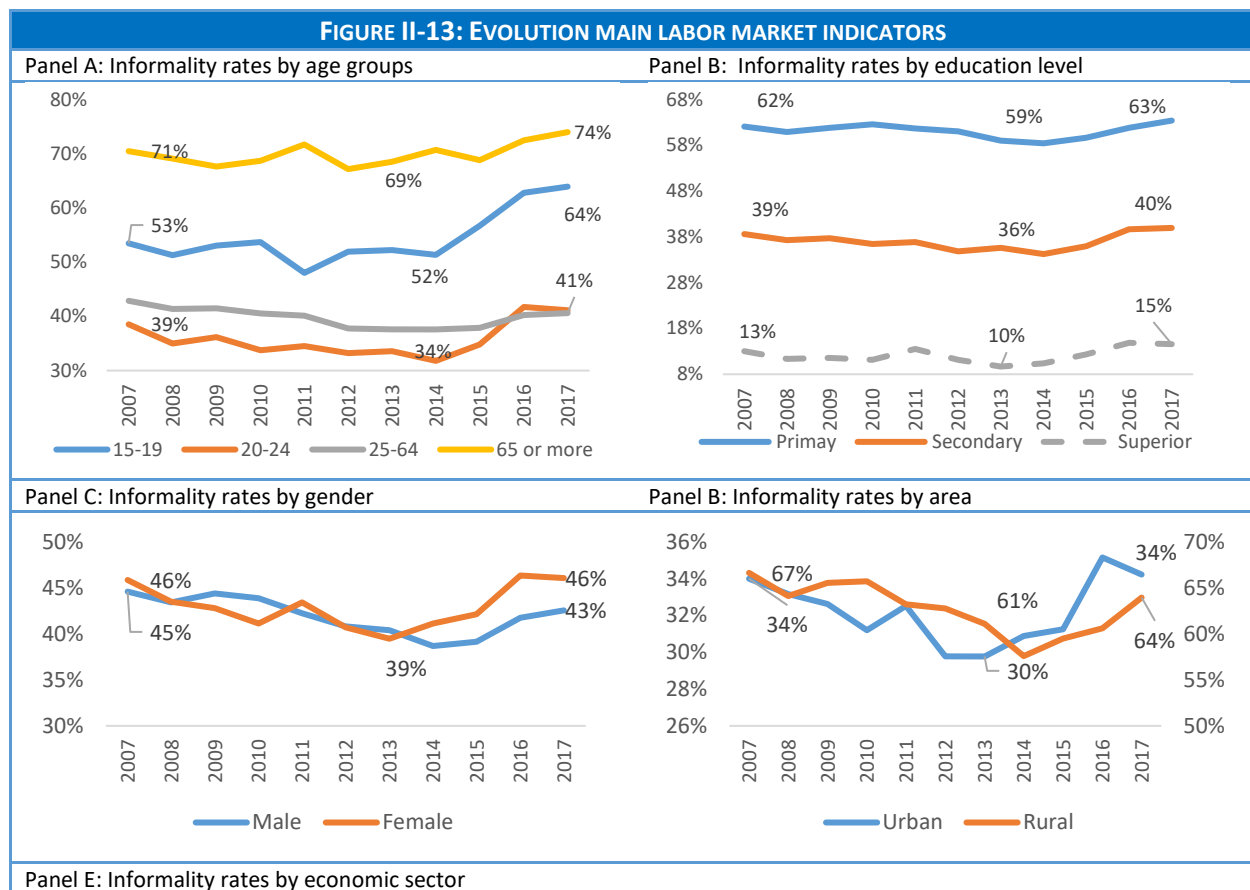
<sup>51</sup> Gallardo and Ñopo (2009) in IDB (2012).

<sup>52</sup> While young people may use informal employment as an entry to the labor market, the elderly may use informal employment as a source of income when savings or pension benefits are insufficient. (World Bank, 2014)

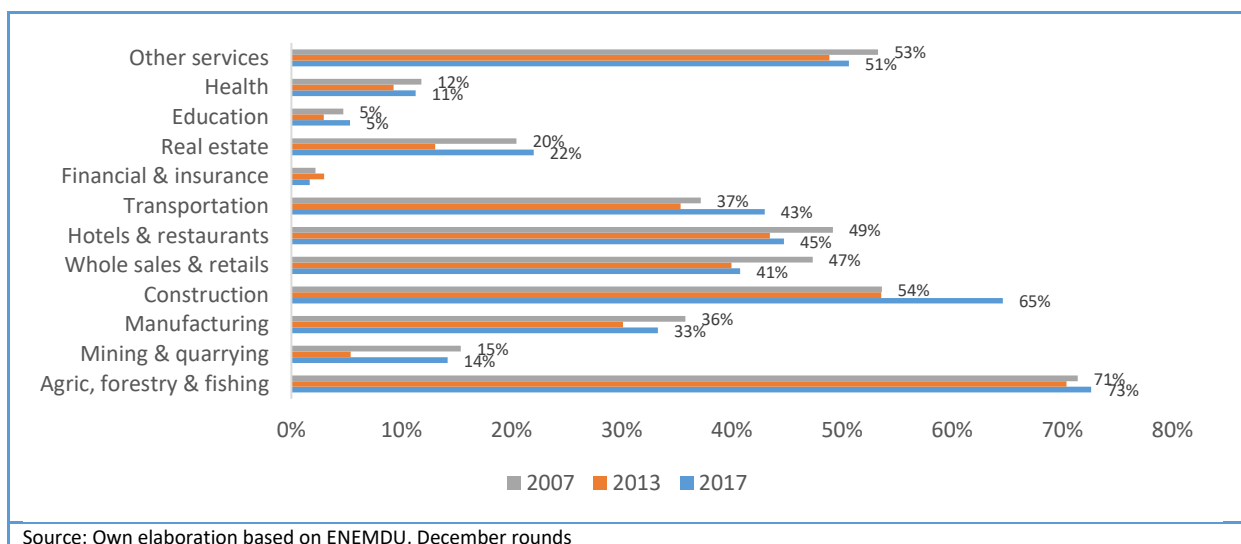
of informality. Lower levels of informality, meanwhile, are due to higher education levels (Figure II-13 - Panel A & B). However, since the oil price shock, the informality status of youth and elderly individuals has been exacerbated relative to the middle-age group and has reached and surpassed 2007 levels. Even though workers with superior education are generally less likely to be employed in the informal sector, Ecuadorians in this category have suffered the most since 2014 in terms of becoming informal.

**119. Although informality behaves similarly by gender, it has increased faster for women since 2014 and now exceeds initial levels of the decade** (Figure II-13 - Panel C). Because of the reduction of household income, women entered a deteriorated labor market with lower quality jobs.

**120. In the case of indigenous groups, location and access to education play a special role.** Informality rates in rural areas were double those of urban areas throughout the 2007-2017 decade (Figure II-13 - Panel D). This happened despite the fact that informality levels increased more rapidly for the latter. Most IP reside in rural areas and are mainly engaged in agricultural activities, which present the highest informality rate among all economic sectors. In addition, education levels for IP are significantly lower relative to Mestizos. It is not surprising that more than half of employed IP are engaged in informal jobs, which is around 30 percentage points higher than informality for other groups, and well above the national average of 44 and 41 percent for women and men, respectively. Moreover, informal employment is accentuated among indigenous women more than among their male counterparts.<sup>53</sup>

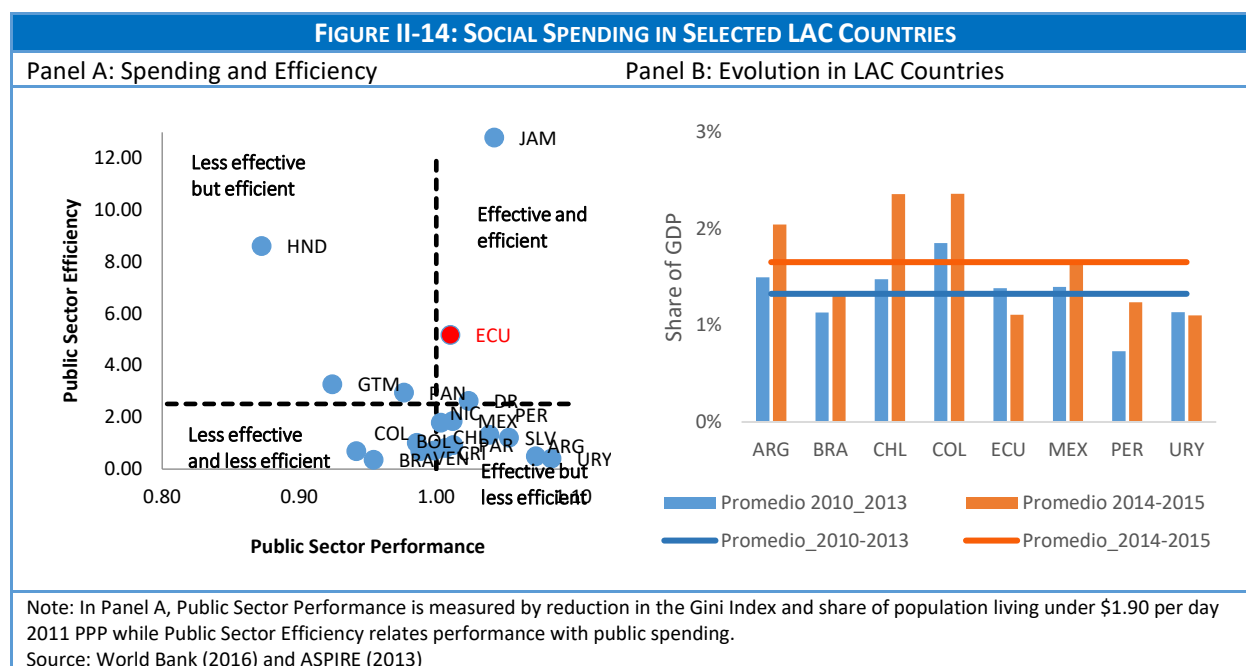


<sup>53</sup> Own estimations based on ENEMDU (December rounds)



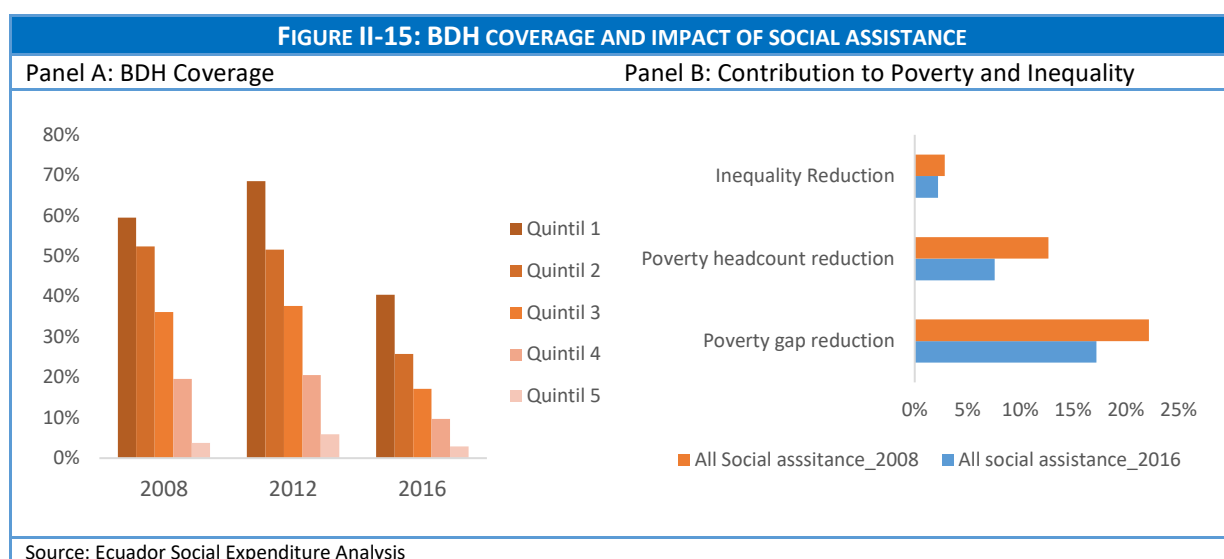
### c) Social protection system

121. **Together with labor income, the social protection system also played a leading role in the social gains obtained throughout the past decade, particularly prior to 2014.** Social assistance programs contributed 12 percent to the reduction of poverty, 24 percent to the decline of the poverty gap, and 3.5 percent to the fall in inequality between 2007 and 2014. Impacts were highest in rural areas, where, for instance, the contribution of social assistance programs to poverty reduction increased to 17 percent. This depicts a similar performance to that of Chile, but with slightly less than half the expenditure: only 1.3 percent of GDP in Ecuador. This ranked Ecuador as one of the most efficient social assistance spenders in the region (Figure II-14).





122. **Over the last decade, the social protection system has mainly taken three forms: social assistance, subsidies (particularly fuel and electricity) and pensions.** Public transfers have been the most prominent form of social assistance, accounting for more than half of spending. They contributed substantially to poverty and inequality reduction, especially prior to 2014. The largest public transfer program is the *Bono de Desarrollo Humano* (BDH), a conditional cash transfer (CCT) program that provides monetary funds to poor households contingent upon the fulfillment of education and health co-responsibilities. The other relevant transfer program in Ecuador is the *Bono Joaquín Gallegos Lara*, which provides (unconditional) transfers to vulnerable households and those with disabled members. These two programs broadly have accounted for more than 50 percent of spending in social assistance since 2006, although this share substantially decreased after 2014. For example, spending on the *Bono de Desarrollo Humano* hovered at around 0.55 and 0.67 percent of GDP between 2007 and 2013, but then fell to 0.43 percent in 2014. In 2015, it dropped further, to 0.26 percent of GDP, accounting for only 24 percent of total social spending in that year.
123. **Lower fiscal resources triggered by the fall in oil prices together with changes in eligibility conditions for *Bono de Desarrollo Humano* beneficiaries increased the progressivity of social assistance programs, but significantly reduced their coverage.** In 2014, stricter eligibility conditions were introduced to the *Bono de Desarrollo Humano* program in order to increase its efficiency. This move also had effect of improving its progressivity. Between 2008 and 2016, coverage among the highest income quintiles reduced, while the share of beneficiary households belonging to the lowest quintiles increased. However, overall coverage reduced sizably. In 2008, coverage for the *Bono de Desarrollo Humano* program in the bottom quintiles, Q1 and Q2, stood at more than 60 and 50 percent, respectively. Yet, by 2016, the share for these two quintiles had dropped to 40 percent and 26 percent, respectively. The decline for Q2 can be explained by changes in eligibility conditions (Figure II-15– Panel A). Even so, the impact of public transfers on poverty and inequality reduction over the past three years has been severely limited. For instance, the contribution of social assistance programs to poverty reduction declined by 5 percentage points between 2008 and 2016, and by 0.5 percentage points in the case of inequality reduction over the same period (Figure II-15– Panel B).

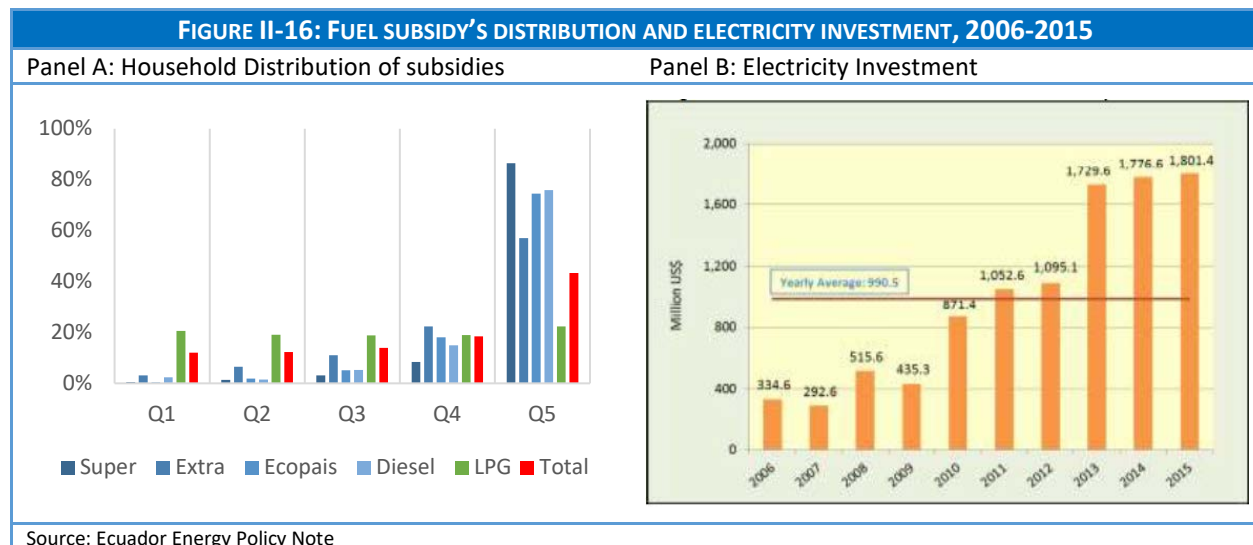


124. **The reduced coverage of social assistance programs has been partially compensated by private transfers, in conjunction with an increase in labor force participation rates, mainly in the informal sector.** After leaving the *Bono de Desarrollo Humano* program due to the change in the eligibility criteria, former beneficiaries partially substituted their lost income with national remittances. In the



2013-2014 period, for instance, income from private transfers for former beneficiaries was 35 percent higher on average compared to current beneficiaries (Ecuador Social Expenditure Analysis, 2017). Hence, national remittances acted as an alternative income source for these families. This substitution explains why the impact of private transfers on poverty and inequality reduction increased after 2014, especially among poorer households.

- 125. Subsidy schemes, especially fuel and electricity subsidies, are regressive and costly.** The bulk of gasoline and diesel subsidies only benefit households in the richest quintile. Data from the most recent household income and expenditure survey (ENIGHUR 2012) shows that only 24 percent of households owned a vehicle or motorcycle in 2012. Of these, 82 percent were owned by the top 60 percent of households. As a result, the top 60 percent received between 92 to 99 percent of the gasoline and diesel subsidies in 2012 (Figure II-16– Panel A). In contrast, subsidies for liquefied petroleum gas are less regressive. Liquefied petroleum gas is the main cooking fuel for 94 percent of all households, and for 76 percent of the poorest 10 percent of households. Even though low oil prices have reduced the size of the subsidy for liquid fuels, expenditure on fuel subsidies remains close to other social spending. In 2014, Ecuador spent US\$367 per capita on untargeted universal fuel price subsidies. This compares to a per capita expenditure of US\$299 and US\$137 for education and health, respectively for 2014 (ENIGHUR and BCE data).



- 126. Improvements in access to electricity helped reduce the regressive effect of electricity subsidies.** The government has devoted important resources to increase access to electricity. This has led to higher coverage and better-quality levels, especially in rural areas. Since 2008, the government has implemented new laws and regulations that give the State greater control over the operation of, and investment in, the country's energy sector. Over the 2006-2015 period, public investments in the sector soared, totaling US\$9,905 billion (Figure II-16– Panel B). As a result, access to electricity reached 97.2 percent in 2015, an increase of 4.3 percentage points from 2006. New investments expanded the grid for rural areas, benefiting many poor households.
- 127. Despite the introduction of a reduced tariff to help protect Ecuador's vulnerable populations, a large share of resources for electricity subsidies still benefit the most well-off.** The so-called 'dignity tariff', established in 2007, sets a tariff of US\$0.04 per kilowatt-hour for poor households. The tariff is available to residential users whose monthly consumption does not exceed 110 kWh in the Sierra, and 130 kWh in the Coast, Amazon and Insular Regions. The tariff was followed in July 2014 by the

introduction of the Program of Energy Efficiency for Induction Cooking and Heating of Water with Electricity (PEC program). The goal of this program was to replace the use of liquefied petroleum gas in the residential sector. The PEC program provides 80 kWh of electricity per month for cooking, with induction cookers offered free of charge. It also covers an additional 20 kWh if an electric water heater is used. However, the PEC subsidy is available to all users who apply to the program. The result is that it has a regressive nature. Similarly, the dignity tariff has less than full coverage. The PEC subsidy benefited 269,812 people, while the dignity tariff reached 2.5 million residential customers (out of 4.1 million). The capital city of Quito registered the largest number of beneficiaries in both programs.

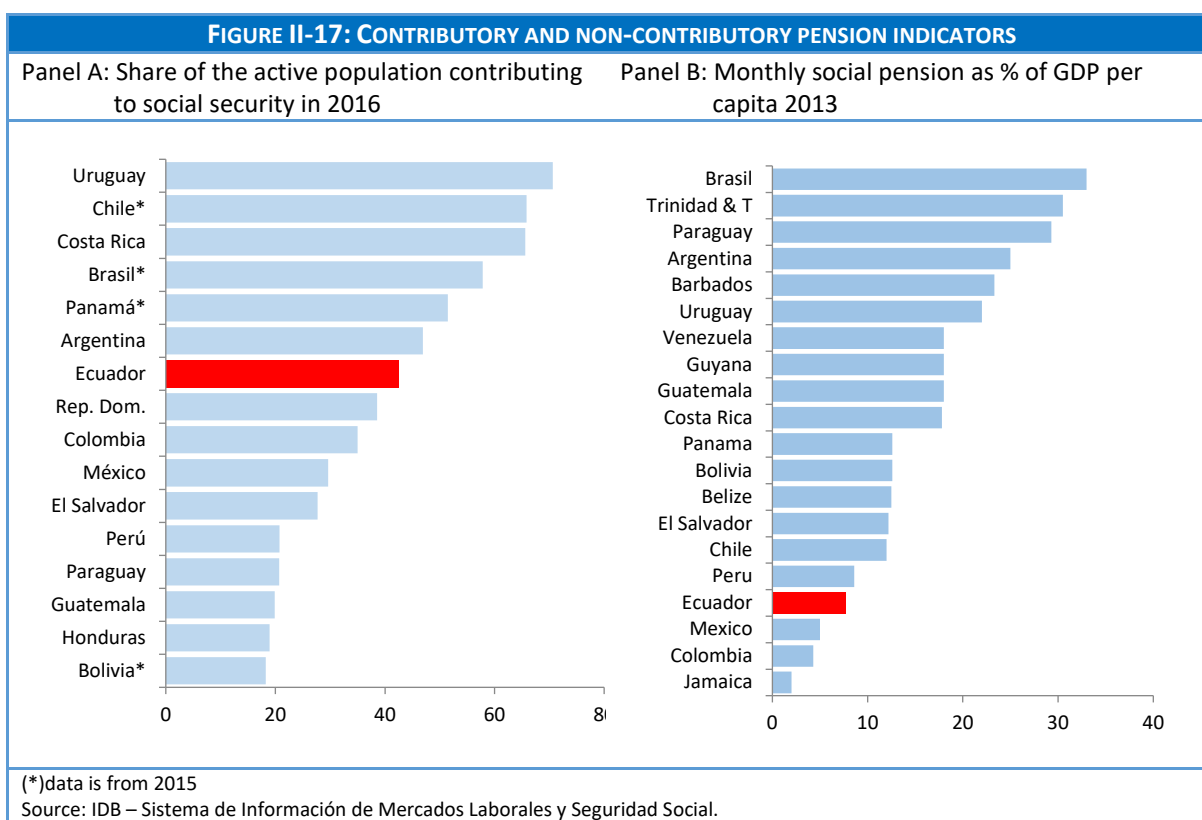
- 128. Ecuador's pension system comprises a small and relatively regressive contributory regime and a progressive non-contributory scheme that has been gradually expanding.** Ecuador has few individuals of working age contributing to its pension system. This raises the probability of future financial difficulties. In 2016, around 42.5 percent of the active population (15-64 years old) was contributing to the mandatory social security system. This is around the average LAC, but significantly below the average for Uruguay, Chile or Brazil (Figure II-17– Panel A). Contributory pensions are clearly regressive. Generous benefits are accrued by higher-income pensioners, whereas less than 10 percent of elderly people in the lowest quintile are covered by the pension scheme. The ratio of workers who contribute to social security per actual person aged 65 or above amounts to 1.7 (IDB). This is below the regional average ratio of 3 and the OECD average of 2.9. Such difference is akin to a 'premature aging' process, where the needs of pension coverage grow faster than the contributing base. The non-contributory scheme, a subsidiary program of the *Bono de Desarrollo Humano*, was created in 2006. This program has been expanding its coverage progressively following the 2008 constitutional mandate, and has helped to reduce old age poverty.<sup>54</sup> Between 2000 and 2012, non-contributory pensions appear to explain 46.4 percent of the reduction in extreme poverty.<sup>55</sup> Therefore, they seem to operate as an important tool for redistribution. Nonetheless, at US\$50 per month, the benefit is low by regional standards (Figure II-17– Panel B). However, the doubling of the benefit rate announced in December 2017 (to US\$100) will make the Ecuadorian social pension comparatively more generous.<sup>56</sup> Levels are now above those of Panama and Bolivia, although still below those observed in many other countries in the region.

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<sup>54</sup> While in 2009 only poor elderly individuals were eligible, the entire elderly population of the Social Registry was eligible by 2012. The condition was that these individuals were not part of the contributory scheme.

<sup>55</sup> Oliveri, 2016

<sup>56</sup> This transfer is conditioned on being older than 65 years-old, being extreme poor and not registered in Social Security System. <http://www.elcomercio.com/tendencias/decreto-leninmoreno-incremento-bono-desarrollhumano.html>



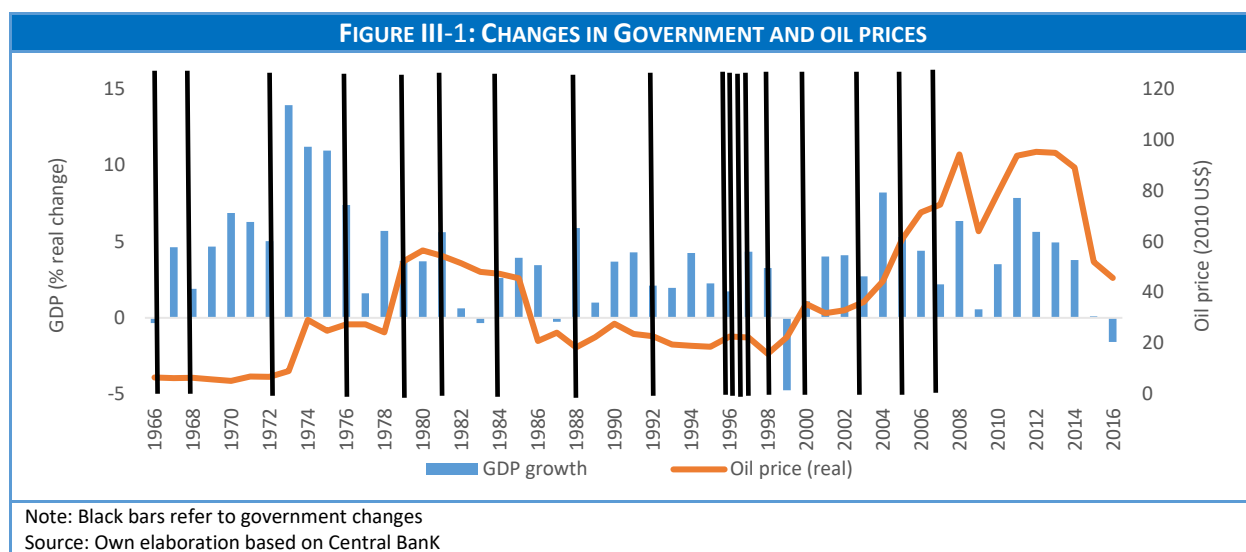
### iii. Identifying binding constraints

129. **From the previous analysis, there appear to be a set of obstacles to eradicate poverty and boost shared prosperity through the main channels that affect individuals and households.** These include the development of human capital, labor market opportunities, and social protection systems. Without implying order of importance, the following steps are identified. First, efforts to reduce chronic malnutrition and increase immunization rates are crucial for developing human capital. Furthermore, reducing teenage pregnancy and improving prenatal and postnatal care will give younger women an option to continue developing their human capital and will provide women who are slightly older a faster entry and/or re-entry into the labor market. Second, access to better quality education, particularly in higher levels of education, is a critical driver to poverty reduction and reducing inequality. Third, promotion of equality of opportunities in the labor market is also needed. Women are systematically less likely to receive the same payment for the same job and qualifications. Moreover, ethnic minorities such as IP and Afro-Ecuadorians face limited access to education or wage differentials or a combination of both. Fourth, reducing inefficiencies in both health and education services is critical to improving outcomes in each sector and consequently in human capital. Fifth, further reconsideration is needed regarding labor market regulations, such as a criteria for setting minimum wages and the costs of hiring and firing. This will help increase flexibility, sectoral reallocation of workers, and ease of access to unemployment benefits so as to reduce high informality rates. Sixth, the social protection network and the subsidies schemes should be revisited to reduce their inefficiencies and improve their coverage by focusing benefits more among the poorest population.

### III. Social, Fiscal and Environmental Sustainability

#### i. Social sustainability

130. Between 1996 and 2006, Ecuador faced three major presidential crises, a military/civil coup, and one interim president, all of them rooted in short-term political cooperation, as well as deep-seated social, regional, and ethnic divisions (Figure III-1). Political parties in Ecuador have tended to represent regional interests rather than epitomize country-wide movements.<sup>57</sup> Congress was highly fragmented during this period. Together, the five main political parties held an average of 65 percent of the seats. Additionally, the CONAIE (an Indigenous Peoples' organization) and other social movements, such as labor unions, greatly increased their influence. These strong voices, at times, constrained the government's initiatives and, in some cases, forced a reversal of policies. In 1996, President Abdalá Bucaram took power but was ousted from office after only 120 days due to Congressional resistance to a fiscal austerity package. An interim government ruled until 1998, whereupon President Jamil Mahuad was elected with a minority coalition. Mahuad's administration fell apart after 18 months when the government pushed for an increase in the Value Added Tax (VAT) to compensate for the fiscal impact of falling oil prices. Faced with street rioting, a section of the military took power in January 2000. Lucio Gutierrez, the army officer who led the coup, assumed presidential authority in 2003 with the support of a leftist coalition. This arrangement disintegrated eight months later when Gutierrez adopted a market-oriented economic program at odds with his electoral promises. In 2005, Alfredo Palacio, the Vice President, was appointed to finish the presidential term.



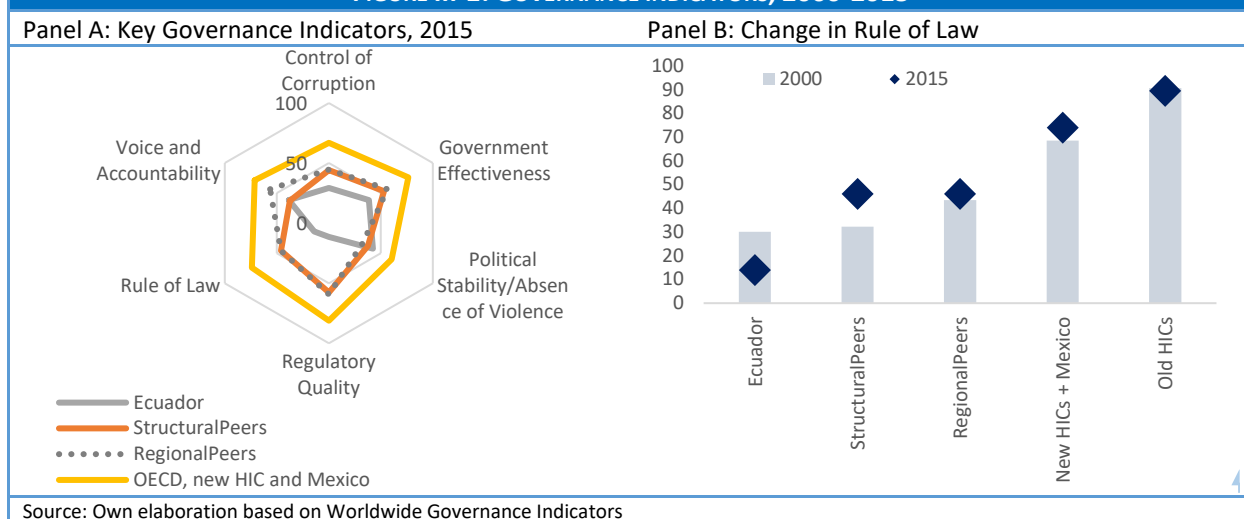
<sup>57</sup>In the Guayaquil and coastal regions, the right-wing Social Christian Party (SCP) and the Ecuadorian Rodolista Party (ERP) were the main political forces, while in Quito and the Amazonia areas, the Christian Democratic Party (CDP) and the Social Democratic Party (SDP) were the main forces, followed by Pachakutik, which concentrated its electoral base among the indigenous peoples on the jungle and mountain regions.

131. **The frequency of presidential turnovers reduced with the elections of 2006, which saw Rafael Correa become President, and with the promulgation of new constitution which changed the institutional setting of the country.** His political party, *Alianza PAIS*, was perceived as challenging the existing political establishment (Freidenberg 2009). After the election, President Correa promulgated a new Constitution in 2008 that enabled the State to implement certain difficult reforms (Bowen 2015). These included, for example, the imposition of new taxes and financial regulations, and introduction of mandatory evaluation of teachers. These reforms occurred despite some social opposition, particularly from a weakened teachers' union. The centralized institutional arrangements that enabled such strong reform momentum led in many cases to weaker checks and balances. Beyond the government, civil institutions, such as unions, civil society and the media, were also constrained, further reducing citizen voice and accountability. For instance, the 2013 Communication Law considers information as a public service and imposes sanctions on those who violate these objectives. The law creates two states authorities to control the release of information which led to decline of freedom of press. Moreover, more than 400 communications outlets and journalists were sanctioned between 2007 and 2017.<sup>58</sup>
132. **Several of the challenges that Ecuador now faces, including limited private sector participation, might be associated with these changes in institutional arrangements.** Ecuador lacks mechanisms and institutions to address challenges typical to resource-dependent countries, such as revenue volatility and 'boom and bust cycles', the scale of public investment in relation to the size of the economy – which can create crowding out effects - and the rapid scaling up and cutting back of capital spending, which increases volatility. Private sector representatives indicate that the struggle for institutionality that marks Ecuador's recent history directly affects their capacity to invest. Shortfalls highlighted by these representatives and backed by recent research on how institutions affect investments include: (i) excessively complex, lack of clarity and cumbersome regulation; (ii) the involvement of too many agencies in the regulatory process, and (iii) the lack of transparency and predictability in the implementation of regulation (World Bank 2017). A challenge, going forward, is thus to rebuild effective and transparent institutions.
133. **However, it is worth recognizing that the commodity boom enabled far-reaching economic and social interventions; indicators of government effectiveness and political stability increased, despite a deterioration in regulatory quality and the rule of law (Figure III-2).** Overall public expenditure almost doubled between 2006 and 2016. A larger state presence in social sectors and infrastructure led to important social gains, increasing the perceived effectiveness of the State and maintaining political support to the President. In contrast, as previously discussed, distortive and frequent regulatory changes represented a critical constraint to businesses. In this context, Ecuador's institutions now represent a historic paradox, whereby the country's reputation for regulatory quality and rule of law is very low, but its reputation for government effectiveness is high. (Figure III-2).

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<sup>58</sup>ABC International, June 2015, and El Economista, febrero 2017.

FIGURE III-2: GOVERNANCE INDICATORS, 2000-2015



134. **During the boom, the government of Ecuador was perceived as the most trusted in Latin America, with the country's citizens registering high levels of satisfaction with public services.**<sup>59</sup> Access to services and transfers improved during this period from a low base, especially for segments of the population that have traditionally lagged behind. This correlated with strong public satisfaction with education and public health services—public satisfaction in these services was among the highest in Latin America at the time.<sup>60</sup>

### BOX III-1: Political challenges and influence of the indigenous movement

The Ecuadorian indigenous movement is one of the most organized in the region. Its rise to political prominence began in the 1990s. Over the last two decades or so, the movement has succeeded in expanding the legal rights of Ecuador's indigenous peoples (IP) considerably. That said, IP continue to lag in social and economic indicators.

#### Evolution of the Indigenous Movement and Inclusion Policies

Ecuador's IP began to organize politically in the 1960s and 1970s in an attempt to prohibit the sale of indigenous lands to private individuals. Gradually, an educated indigenous elite emerged who were successful in engaging government policymakers. Their activities were mostly coordinated under the banner of the *Confederación de Nacionalidades Indígenas del Ecuador* (CONAIE), an advocacy body for IP set up in 1986 (Freidenberg and Pachano 2016). The movement came to national prominence after the indigenous revolt of Inti Raymi in 1990, when ten indigenous nationalities held coordinated protests and blocked key transport links across the country for a number of days. The 1998 reform of the National Constitution saw a number of indigenous rights enshrined in law. Most notably, these included collective rights over indigenous land and the right to bilingual education (Coignet, 2011).

The movement enjoys strong representation at a grassroots level: by 2000, it counted an estimated 2,500 community-based organizations nationwide (*comunas*, centers, and cooperatives). These are grouped together in second-tier organizations known as *Organizaciones de Segundo Grado*, which are, in turn, affiliated to provincial and national organizations such as CONAIE and others (e.g. FEINE, FENOCIN).

The indigenous movements' early support for President Rafael Correa waned after his administration authorized a number of major oil, gas and mining projects in indigenous territories. Reductions in funding for bilingual education also led to political disagreement. Even so, the 2008 constitutional reform incorporated numerous benefits for Ecuador's IP.

<sup>59</sup> Latinobarometer and LAPOP several rounds (2007,2013,2016)

<sup>60</sup> Latinobarometer and LAPOP several rounds (2007,2013,2016)

### Political Representation

Ecuador's indigenous movement has had a significant impact on policy and politics. It set up its own party in the 1990s called the *Movimiento de Unidad Plurinacional Pachakutik - Nuevo País* (MUPP-NP) – or Pachakutik, for short – which first won representation in Congress in 1996. However, it has never been able to achieve a secure footing in Congress nor has succeeded in producing a competitive presidential candidate (van Cott 2005). In the four congressional elections between 1996 and 2006, it never won more than 8 percent of parliamentary seats.

As well as being hindered by internal divisions, Pachakutik has seen its efforts to increase its political representation at a national level fall foul of a growing centralization of political power in Ecuador. This began with the election of 2007 and was reinforced by constitutional reforms in 2008. While helping reduce levels of political fragmentation in Ecuador, this centralist turn has made the country's party system more nationalized and more polarized (Roberts 2015). As a result, provincial and municipal governments – located in areas where the indigenous movement is strong – have become more dependent on national government transfers and more constrained by the National System of Competences (Jones 2017). Given its difficulties in breaking into representative politics on the national stage, the indigenous movement continues to use public protest and direct action as a means of exerting influence and making its voice heard.

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135. **Gains in service delivery during the boom were achieved by spending more, rather than spending resources more efficiently; this model should be revised now that the boom has ended.** In some cases, the efficiency of public spending declined. For instance, own estimations in investment in new or renovated hospitals between 2013 and 2018 are around US\$1.36 billion, but this hospital construction has not yet resulted in an increase in availability of hospital beds nor in a rise in hospital discharges. The government has evidenced notable weaknesses in budget transparency and oversight (International Budget Partnership, 2016). Problems include: (i) the government's failure to produce a pre-budget statement and to publish the mid-year review in a timely manner; (ii) poor oversight by the legislature; and (iii) delays in establishing credible and effective mechanisms for public feedback on budgetary matters. This lack of contestability contributed to the inefficient allocation of resources without appropriate scrutiny. For instance, between 2006-2014, public money spent on reducing malnutrition was significantly lower in Highlands and Amazonia (where stunting rates were double the national rate) than in the rest of the country (World Bank, 2018).
136. **Low levels of social mobility add to the challenge of maintaining social cohesion under limited public resources.** Ecuador has one of lowest rates of intergenerational mobility in the world. Low relative mobility implies that poverty and privilege remain highly persistent across generations (World Bank, 2018). In most countries in the world, the income gap between two individuals who are currently of working age is expected to be lower than the income gap between their parents. Only in countries like Ecuador and Colombia is this gap expected to increase across generations reflecting

limited opportunities for the poor to ascend socially. In addition, low relative intergenerational mobility is shown to worsen inequality, threatening social cohesion and stability.<sup>61</sup>

- 137. However, marked improvements in access to basic services reduces inequality of opportunities among younger cohorts and can help increase mobility and ultimately social cohesion.** The Human Opportunity Index (HOI) for Ecuador in 2016 shows almost universal coverage in children's school enrollment and access to electricity. On the other hand, equitable access to improved sanitation (67 percent) and the completion of primary school on time (77 percent) are lagging.<sup>62</sup> The child's place of residence tends to be the most critical component explaining the inequality among groups, generally followed by the parents' education and per capita household income. Holding those characteristics constant (including presence of the parents and number of siblings), the gender of the child does not contribute much to inequality component of the HOI. Characteristics such as the ethnicity or gender of the household head are not especially significant either. The inequality in access among circumstance groups is highest for the dimensions of improved sanitation and improved water. In terms of progress, the most marked improvements during this period occurred in access to improved sanitation (up 42 percent), the completion of primary school on time (up 17 percent), and access to improved water (up 15 percent). Important improvements can also be seen for school enrollment. Most of these improvements to the HOI occurred during the 2006-2013 period as compared to the 2013-2016 period.
- 138. Gaps in access to services across and within subnational regions of Ecuador limit the full realization of these gains.** Although improvements are in evidence, the Amazonia Rural and Costa Rural sub-regions still lag far behind the country's other regions in all dimensions analyzed. The HOI for improved access to water (40 percent for Costa Rural and 52 percent for Amazonia Rural) is far below the 93 percent average for the country's other regions. The HOI of 39 percent for improved sanitation in Amazonia Rural, even when using a less strict definition than for urban areas, is far below the 73 percent estimated (using a stricter definition) for Amazonia Urbana. As for access to electricity, this averages 75 percent in Amazonia Rural as compared to the almost universal access in the other regions. This HOI of 75 percent is based on a coverage rate of 82 percent and an inequality penalty of 7 percent. Amazonia Rural and Costa Rural not only tend to have the lowest coverage rates, but also the highest within-region inequality among its circumstance groups. On the other hand, the Sierra Rural region has shown the most impressive improvements in the HOI over time, reaching levels seen in urban parts of the country.

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<sup>61</sup> World Bank (2018) Fair Progress?

<sup>62</sup> The HOI measures how individual circumstances (i.e., characteristics that are outside a child's control) can affect a child's access to basic opportunities such as water, education, electricity and sanitation. It combines both coverage rates and equality in a single measure. The HOI for Ecuador, based on SEDLAC data (CEDLAS and The World Bank), focuses on opportunities grouped into three dimensions: (1) housing; (2) education; and (3) information and communication technologies (ICT). "Housing" includes access to electricity, water, and sanitation; "education" includes school attendance and timely completion of the sixth grade; and "ICT" includes access to cell phones and the internet. The analysis focuses on seven personal circumstances considered beyond a child's individual control: parents' education, family income, number of siblings, the presence of both parents in the house, Indigenous household head, Afro-descendant household head, and location of residence. For most opportunities, coverage and HOI are calculated for children between the ages of 0 and 16. For 'school attendance' these indicators are calculated for children between 10 to 14 years, and for 'finished primary school' for children aged between, 12 to 16 years. (See Molinas *et al.* 2010 for details on the HOI).



### *Identifying binding constraints*

139. **Going forward, Ecuador's challenge is to strengthen its institutions under significant constraints in resources.** This will entail rebuilding critical institutions and reassigning key government functions, while at the same time creating clear and transparent processes that will be effectively communicated to civil society and the private sector. The results of the 2018 referendum on restructuring the "*Consejo de Participación Ciudadana y Control Social*" is one of the first steps in this direction. At the same time, this should be accompanied by a more efficient allocation of resources that focuses on reducing structural gaps along the geographic and the demographic divide, as well as on enhancing economic opportunity and mobility to promote social cohesion. Under the right conditions, private sector development can also help fill the space left by a declining public sector in non-priority areas.

## ii. Fiscal sustainability

*Ecuador's current fiscal stance is likely to be unsustainable without credible reforms. Widening fiscal deficits (driven by the expansion of public spending during the boom and exacerbated by the fall in revenues afterwards) resulted in growing levels of internal and external debt. Moderate adjustments have taken place in recent years, but gross financing needs are expected to continue to be high and domestic demand continues to pressure the external accounts. Key challenges to address this situation include the preparation and implementation of a credible medium-term fiscal consolidation plan that balances well the trade-off between making the necessary adjustments, and preserving growth and safeguard the country's social achievements.*

- 140. Ecuador's public spending doubled between 2006 and 2014.** Fiscal spending, measured by spending of the non-financial public sector (NFPS), remained stable at around 20 percent of GDP during the first half of the 2000s, but expanded quickly after 2006. The non-financial public sector doubled its size<sup>63</sup>, increasing from 21 percent of GDP in 2006 to 43 percent by 2014. Such expansion in public spending has no precedent worldwide, other than during periods of reconstruction after a natural disaster (e.g. Haiti), or after a period of conflict (as in Afghanistan, Eritrea, Democratic Republic of Congo, Liberia, Togo, or Sudan).
- 141. The expansion in public spending was mainly driven by investment, wages, social transfers, and subsidies.** Public investment tripled, increasing from 4.2 percent of GDP in 2006 to 13.9 percent in 2014.<sup>64</sup> This reflects investments in oil extraction as well as an ambitious expansion of core (e.g., hydropower, air and road transport) and social infrastructure (e.g., education and health). Re-current expenditures increased from 17.1 percent to a peak of 28.7 percent between 2006 and 2014, well above the 16 percent of Peru and the 22 percent of Colombia. The public wage bill increased by 2.6 percentage points during this period, despite measures aimed at freezing public wages. Social security spending increased 2.5 to 3.6 percent of GDP, while subsidies to the consumption of energy (including forgone VAT) increased from 5.8 percent to 6.4 percent of GDP between 2007 and 2014. The reminder of the increase was driven by other spending items such as oil imports and goods and services.
- 142. Fiscal resources also expanded, in part due to significant improvements in non-oil revenue collection and increased revenues from the oil sector.** Between 2008 and 2014, tax reform measures added an additional 3 percent to Ecuador's GDP. Improved collection of the value-added tax and income taxes, coupled with new taxes (such as the external capital outflows or ISD tax), accounted for most of this increase. However, at 15 percent of GDP in 2015, tax revenues remain relatively low compared to Ecuador's regional and structural peers. Renegotiations of oil contracts with the private sector contributed to an increase in oil revenues of almost 4 percent of GDP between 2006 and 2014, with a peak in 2011, the year of the renegotiation.<sup>65</sup> Additional revenues were due to more favorable contractual terms and to the fact that Petroecuador and Petroamazonas (both SOEs) took over the oil fields in those cases where no renegotiation agreement was reached.

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<sup>63</sup> This includes central and subnational government spending and the balance of state-owned enterprises

<sup>64</sup> This refers to the gross fixed capital increase of the Non-Financial Public Sector

<sup>65</sup> In January 2011, Ecuador started to renegotiate oil contracts aiming at replacing the previous production-sharing agreements with a fixed per-barrel fee for exploration and production activities. The Government estimated that an additional US\$2.8 billion of oil revenue during 2011 and 2012 materialized due to these contract modality changes.

143. **The spending boost was also financed by one-off measures such as the depletion of assets and debt default.** In 2008, the government started using savings previously accumulated in the Stabilization Oil Fund to finance budgetary expenditures (BOX III-2).<sup>66</sup> This same year, Ecuador selectively defaulted on its public debt.<sup>67</sup> The government declared US\$3.2 billion of external debt as illegitimate and bought it back at 30 cents per dollar.

### BOX III-2: Ecuador Experience with Oil-Related Funds

**Although Ecuador has created five oil-related funds since 1998, these have had limited capacity to cushion oil price volatility due to frequent reforms, increased earmarking, and unclear governance rules.** Between 1998 and 2006, Ecuador created a variety of oil-related funds, including: The Oil Stabilization Fund (FEP, 1999); the Fund for Stabilization, Social and Productive Investments, and Debt Reduction (FEIREP, 2002); the Special Account for Social and Productive Investment, Scientific Development, and Fiscal Stabilization (CEREPS, 2005), and the Fund for Savings and Contingencies (FAC, 2005). The oil-related funds combined the revenue stabilization function with other goals, including project financing, buyback of public debt, and emergency management. Despite many reforms, the FEP proved unable to stabilize revenues or accumulate assets because it needed to be liquidated every year and the resources to stabilize revenues were transferred to other funds. The FEIREP and CEREPS became vehicles to earmark oil revenues to different sectors, investment projects, and debt buyback. In the end, only the FAC could build up buffers for revenue stabilization. Yet, even in this case, the government withdrew resources after declaring frequent states of emergency.

**These funds had little success in accumulating macroeconomic buffers for the stabilization function.** The balance of the oil-related funds increased from US\$5.0 million in 2003 to US\$1.4 billion (2.7 percent of GDP) in 2007 (Cuevas, 2013) due to the unexpected increase in oil prices. However, the amount available for the revenue stabilization function was low, as the FAC had accumulated only US\$411 million (0.8 percent of GDP) by the end of 2006 (Cuevas 2008, Artola and Pazmiño 2007). This was far below the goal of accumulating 2.5 percent of GDP and was too low to provide full insurance for a period of low oil prices or for the effects of a natural catastrophe (World Bank 2005).

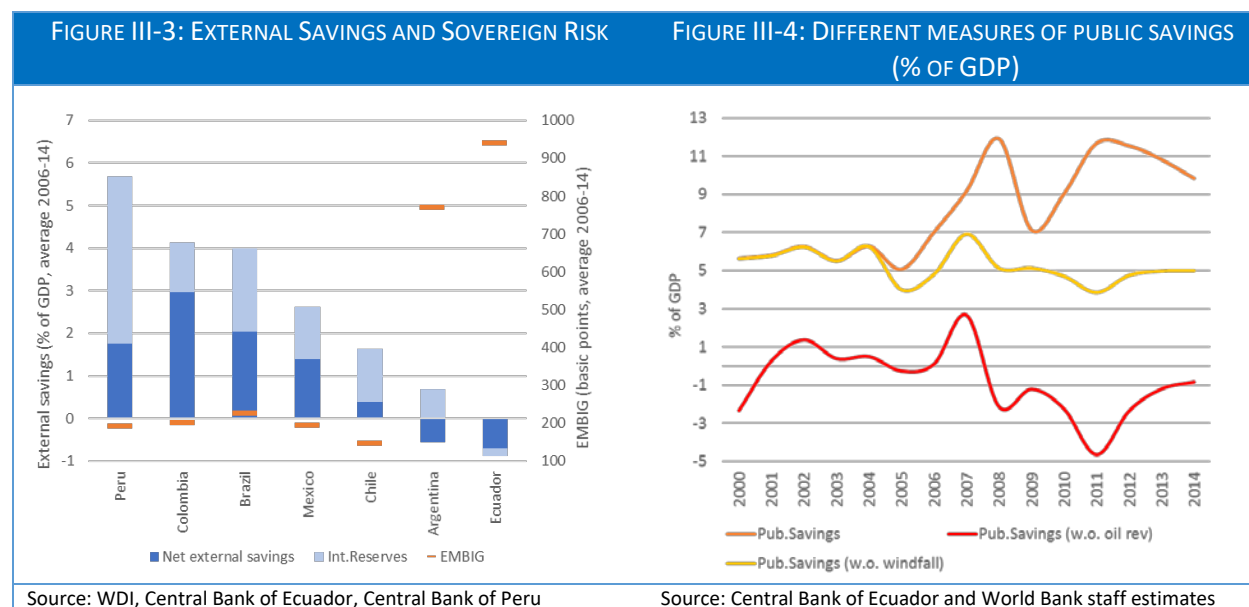
**The government dismantled the oil funds in 2008.** The Organic Law for the Recovery of the State Oil Resources eliminated the FEP, FAC, CEREPS, and FEIREP in 2008 and transferred their assets to the central government. The political argument for suppressing oil funds was that they channeled public revenues for debt payments instead of social investments (Cuevas, 2013). Additionally, the oil-related funds were criticized because they made the budget process cumbersome and less transparent, as well as making cash management more rigid (Ruiz 2009). Regarding the stabilization function, the authorities believed that public investment projects would yield higher social returns than liquidity accumulation. On the positive side, these reforms allowed the authorities to gain budget flexibility, finance some investment projects, and maintain expenditures during the financial crises and the aftermath of voluntary debt default. Less positively, however, they prevented Ecuador from accumulating macroeconomic buffers to deal with the plunge in international oil prices.

144. **The debt default and the subsequent buyback generated higher fiscal resources, but this came at significantly higher medium-term costs.** The default and buyback, which occurred between November 2008 and February 2009, generated fiscal space immediately. The external public debt declined from 22 percent of GDP in 2007 to around 16 percent in the end of 2008, while interest payments on external debt as a share of GDP declined from 1.5 percent in 2007 to 1.1 percent in 2008, before dropping to a low of 0.5 percent in 2009. However, these operations significantly raised borrowing costs. By 2015, Ecuador's spread on the Emerging Markets Bond Index was the highest among its structural peers and among the highest in the region (Figure III-3). Today, Ecuador's debt risk rating (B- by Fitch and Standard and Poors) is among the worse in the region, comparable to countries with significantly higher public debt, such as Argentina and Jamaica. As a consequence, the country's access to international capital markets is severely constrained.

<sup>66</sup> On August 2008, the government redirected about US\$2.8 billion of the Oil Stabilization Fund.

<sup>67</sup> On November 2008 and February 2009, Ecuador defaulted on two of three tranches of its 2012 and 2030 global bonds.

145. **The public sector did not save enough during the boom.** Public savings, measured as current revenues minus current expenditure, increased during the boom. However, if the revenues associated with the commodity windfall are subtracted, the “non-oil savings” started to decline already in 2007. Furthermore, current spending has surpassed non-oil revenues since 2008; that is to say, current expenses were being partially financed by oil revenues (Figure III-4). Between 2001 and 2007, fiscal balances were positive and stable. This contrasts with the period 2008-2014, when they were mostly falling. In addition to the financing resources mentioned above, Ecuador tapped into quasi-fiscal sources, such as assets of the central government and the social security system, to finance the public debt. International reserves increased from US\$1 billion in 2000 to US\$4.5 billion in 2008, yet declined to less than half of this level (US\$ 2.2 billion) by early 2015.



146. **The fiscal balance and public debt started to deteriorate even before the fall in oil prices.** Due to higher fiscal revenues—oil and non-oil—the fiscal balance (which turned into a deficit in 2009) was kept at a relatively low level through 2012 (-0.9 percent of GDP), with the primary deficit in near balance (0.2 percent of GDP) (Figure III-5- Panel A). Still, this behavior sharply contrasts with the fiscal management of other countries in the region, such as Chile, Peru, and Bolivia. These countries followed a countercyclical fiscal policy, saving part of the windfall by generating fiscal surpluses. Additionally, Ecuador’s fiscal deficit widened in 2013 and 2014 to around 5 percent of GDP per year on the back of ambitious investment plans financed mostly by China and some multilaterals. Public debt started to climb as the fiscal deficit worsened. The default on international bonds pushed up the aggregated public-sector debt as a share of GDP to 16 percent of GDP by early 2010. The debt almost doubled by the end of 2014, reaching 30 percent of GDP (the definition of public debt, and its trend, are elaborated in paragraphs below).

### BOX III-3: Alternative public debt definitions

**There has been significant controversy about how to accurately measure the public debt in Ecuador** Until 2015, the government used the “aggregated public debt” (column ii in the table below), which measures external debt of the Non-Financial Public-Sector (NFPS) and the Central Government internal debt (the latter with the private sector, social security, central bank and development banks). Subsequently, the government reported the consolidated debt (column iii) that includes the NFPS external debt and the domestic debt of central government with the private sector. This measure of debt “nets out” debt flows within the public sector, i.e. the central government debt with the social security and the financial public institutions. In a recent report on the countries’ debt management, the Comptroller’s Office used a more comprehensive measure of public sector liabilities (column iv) that adds advanced oil sales, arrears with the private sector, and explicit contingent liabilities to the aggregated public debt. Finally, the debt sustainability analysis and fiscal forecasts discussed below consider NFPS debt (column i). The NFPS debt is the definition most commonly used by countries in the world, particularly on debt sustainability discussions. The NFPS debt estimates are different from official definitions and from the definition recently proposed by the Comptroller, as it consolidates the central government debt with the social security and excludes arrears and contingent liabilities.

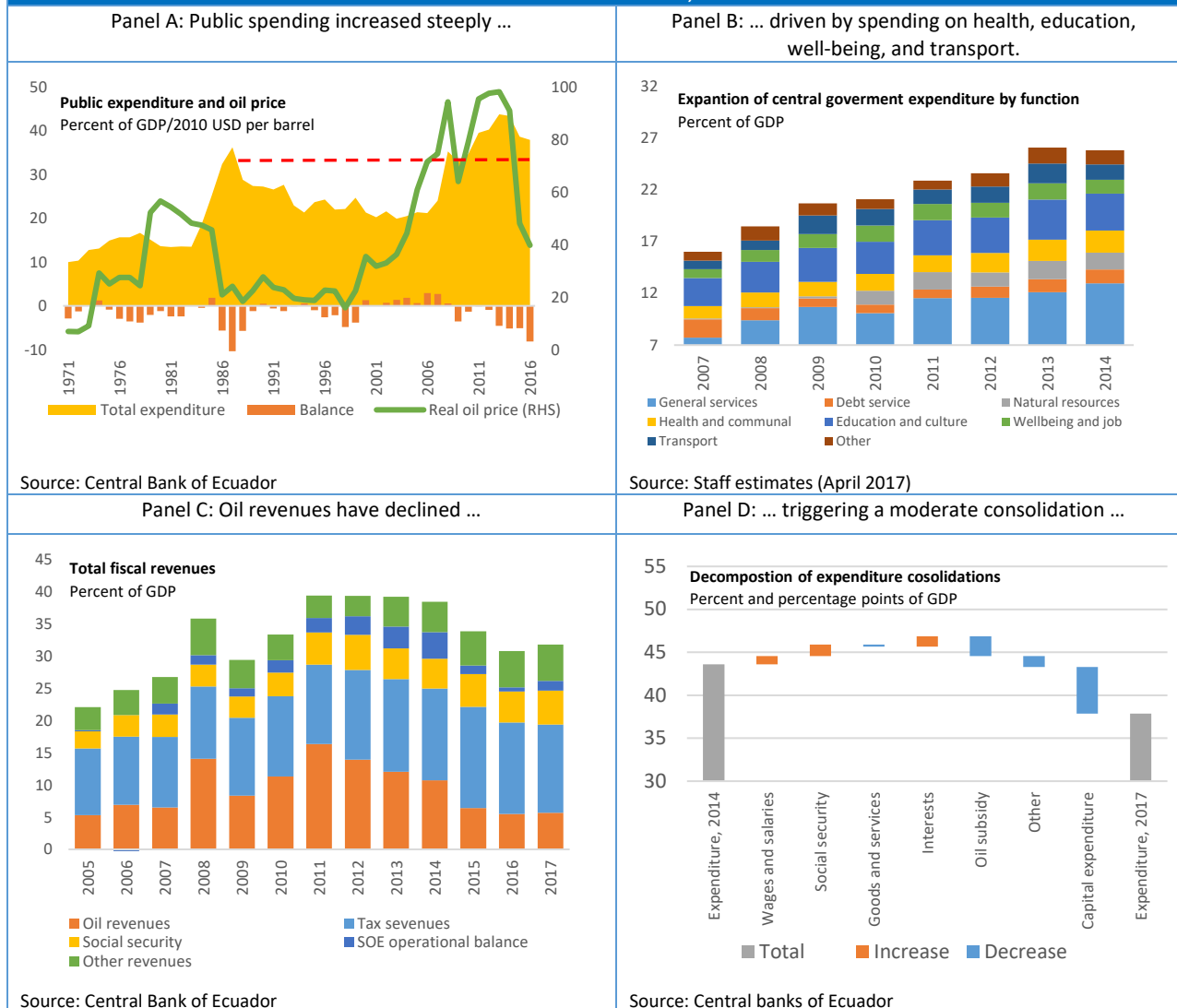
	Non-Financial Public-Sector debt	Aggregated public debt	Consolidated public debt	General comptroller measures
NFPS External debt	X	X	X	X
Advances oil sales	X			X
Central government domestic debt (aggregated domestic debt)		X		X
With the private sector (consolidated domestic debt)	X	X	X	X
With the social security		X		X
With public banks (*)	X	X		X
With the Central Bank (*)	X	X		X
Public banks loans for public investment	X			
Treasury certificates hold by the Central Bank	X			X
Arrears with the private sector				X
Contingent liabilities				X

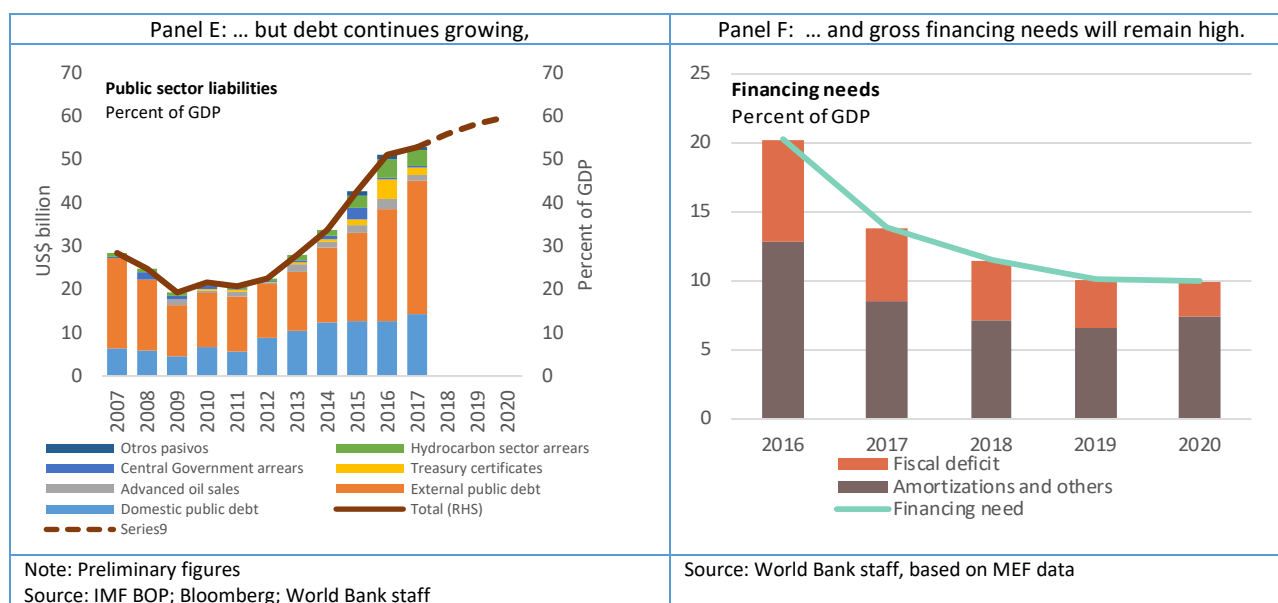
\*Often referred to as quasi-fiscal deficits. Note: There is no information available about the domestic debt of SOEs and subnational government with the private sector. This debt is not included in any of the above measures.

a) *Fiscal Sustainability Issues*

147. **The end of the commodity price boom further widened fiscal deficits and financing needs, which, when coupled with high borrowing costs, raise concerns about the government's fiscal sustainability.** The fall in oil prices reduced hydrocarbon revenues by around 65 percent and cut the operational balance of SOEs from 4 percent in 2014 to 1.6 percent in 2017. Compounded by economic recession, total revenues fell from 38 percent of GDP in 2014 to about 32 percent of GDP in 2017 (Figure III-5- Panel C). This was in spite of measures, such as a tax amnesty, import surcharges, and a temporary increase in the VAT to finance earthquake reconstruction efforts. The government cut spending by postponing public investment and, to a lesser extent, by controlling current spending (Figure III-5 - Panel D). Yet, by 2017, the fiscal deficit still remained at 5.4 percent of GDP. The moderate recovery in oil price, improved investor's confidence and allowed Ecuador to issue bonds in external markets at improved terms. After peaking at 20 percent of GDP in 2016, gross financing needs declined to 14 percent of GDP in 2017. These are expected to stay above 10 percent of GDP through 2020 (Figure III-5 - Panel F). Ecuador's financing needs are projected to reach around 20 percent of GDP if the country clears its outstanding arrears and short-term treasury certificates.

FIGURE III-5: FISCAL INDICATORS, 2000-2015





**148. Public sector liabilities have increased beyond the recorded public debt, threatening fiscal sustainability.** Ecuador's fiscal rule imposes a limit of 40 percent of GDP on the public debt. Since 2016, the reference measure for the fiscal rule is the consolidated public debt.<sup>68</sup> This measure does not take into account the debt position between public sector institutions, including the Central Bank, public banks and social security. It also excludes other liabilities of the public sector, such as short-term debt, arrears, and advanced payments on future oil sales, which are instruments that Ecuador increasingly relied upon after 2008. The country's fiscal deterioration led to an increase in its consolidated public debt from 18 percent in 2014 to 32 percent in 2017. However, overall public sector liabilities increased from 34 percent in 2014 to an estimated 53 percent in 2017. This was mostly because of advances on future oil sales to China and Thailand, arrears in the hydrocarbon sector, and Central Bank financing (Figure III-5 – Panel E). This level of public sector liabilities is already above the gross public debt of Ecuador's structural and regional peers. Efforts to mobilize financing resources for the government have also started to deplete assets of the social security system (BOX III-4), which currently runs a deficit of approximately 2 percent of GDP.

**149. Stabilizing the public sector's debt under a "low-oil prices low-growth" scenario will be challenging.** Debt sustainability depends not just on the pace of borrowing by the public sector. Other key parameters include expected economic growth and key international variables, such as oil prices and international interest rates. For example, if GDP growth were to be around 1.5 percent on average between 2018 and 2021, Ecuador would need to generate a primary surplus of about 2.1 percent of GDP to stabilize the ratio of public liabilities to GDP over the medium term – an adjustment of more than five percentage points relative to 2017. But in addition to stabilizing debt levels, Ecuador also needs to build fiscal and international buffers. The magnitude of savings would therefore need to be larger than the one illustrated above. Ideally, buffers would be accompanied by sound institutional arrangements tailored to mitigate volatile commodity exporting, such as well-designed sovereign funds.

<sup>68</sup> Decree 1218 published in October 20, 2016

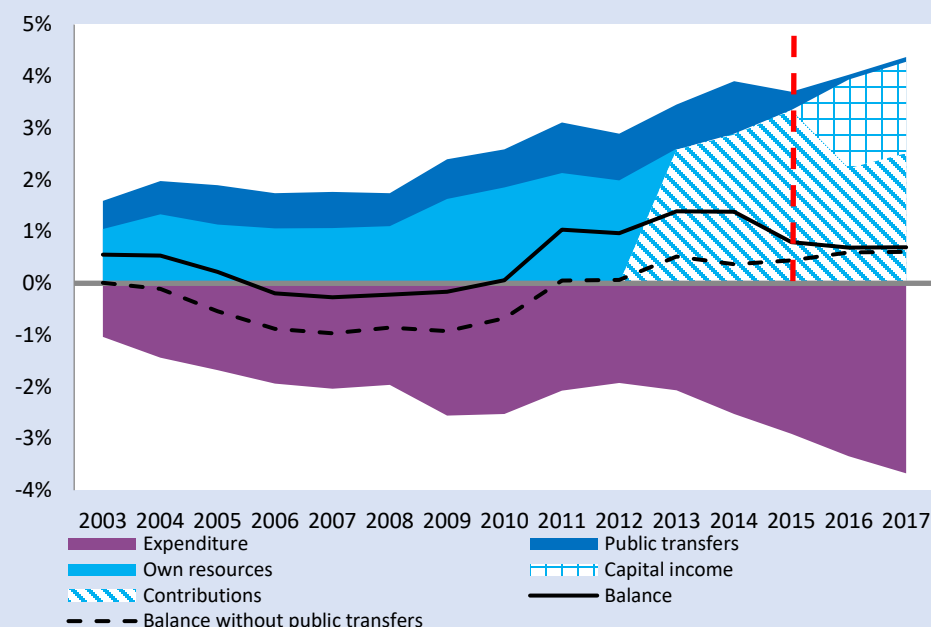
### BOX III-4: Sustainability of Ecuador's Social Security System

**Ecuador's social security system remained fiscally balanced for most of the oil boom.** The system was financed by relatively high payroll taxes (based on contributions from both workers and employers) and additional general revenues provided by the State. Within the contributory system, traditional contributions amount to 6.6 percent and 8.6 percent of gross earnings for employees in the private and public sectors, respectively. Gross earnings for voluntary contributions, meanwhile, amount to 9.7 percent. Ecuadorian employers contribute 3.1 percent and 1.1 percent of gross payroll for private and public-sector employees, respectively. Regarding the financing of the public sector, the Mandatory Social Security Law (1942) requires that 40 percent of pensions be paid by the State<sup>69</sup>. Between 2003 and 2015, both current income and public transfers maintained a growing trend, with a variation of 220 percent between these two years, while the level of expenditures registered a slightly lower rate of increase (181 percent). Between 2010 and 2014, the financial result was significantly positive, reaching its maximum level in 2014 (1.3 percent of GDP). The positive results reflected in Figure B III-4 exhibit a significant degree of dependency on public transfers, equivalent to 40 percent of pensions' expenditure. Without them, the Ecuadorian Institute of Social Security (IESS) would have maintained a sustained deficit (equivalent to -0.15 percent of GDP on average).

**However, reforms introduced in 2015 depleted revenue sources while maintaining the level of benefits.** In 2015, two important reforms were implemented regarding the sources of financing for the mandatory social security system. On the one hand, the contribution of the government (i.e., the 40 percent of pension expenditure) was eliminated. On the other hand, there was a temporary decrease (for 5 years) in the contribution rate, dropping to 5.8 percent and 7.8 percent for private and public employees, respectively, and to 0.1 percent for employers. The pension contribution rate will gradually increase to reach 10.4 percent in 2021 and the government's contribution will be reinstated in 2019.

**As a result, the system has been running a deficit, financed by depleting technical reserves.** The changes introduced in 2015 implied a significant reduction of both sources of income, current resources, basically contributions, and the public transfers, as shown in Figure B III-4. To handle pension obligations, IEES had to use capital income as a new source of financing, which allowed a positive financial result to be maintained. However, this implies a significant decrease in the system's technical reserves from US\$9 billion in 2015 to approximately US\$7 billion in 2017. While the funds' position is expected to improve as the 2015 reform is gradually reverted, the sharp reduction in technical reserves during this six-year transition could put the system into stress.

**Figure B III-4: Income, Expenditure and Financial Result of the Contributory Pensions Scheme**  
As percentage of GDP



Source: Rofman, 2012, from 2003 to 2012 and own elaboration based on IEES from 2012 to 2017



## b) *The path forward*

150. **Finding the right pace of adjustment is a difficult balancing act.** On one hand, adjusting too quickly could place the country in a recession as the government has been the primary engine of growth. The fact that the private sector may not be ready to fill the government's place increases this risk. On the other hand, adjusting too slowly will not build the credibility that is needed with markets and could expose the economy to shocks that could threaten the sustainability of the dollarization regime. On the external front, risks stem from changes in external financing conditions that limit Ecuador's access to financing resources. Internally, meanwhile, Ecuador is vulnerable to natural disasters, which present potentially high contingent liabilities for the public sector. Despite having some instruments for post-disaster financing, Ecuador has not developed a comprehensive risk financing strategy to deal with contingent liabilities, which puts the country into a vulnerable position. Finally, any fiscal stabilization plan must safeguard the country's social gains, not so much in terms of preventing labor reallocations, but rather in terms of strengthening key social programs.

### BOX III-5: Sustainability impacts of public investment

**Since 2007, Ecuador has been implementing an ambitious public investment agenda that has helped increase access to key public services.** From 2006 to 2014, the government pursued an ambitious program to invest in social infrastructure, mainly in the oil, energy, water, transport, education, and health sectors. Consequently, public investment spending as a share of GDP nearly tripled during this period, becoming the largest among Ecuador's regional and structural peers. Significant socio-economic gains ensued. In the energy sector, for instance, investments in hydro-power reduced dependence on thermal generation, increased access to nearly universal levels, and cut interruptions and losses in half.

**However, many sectors are facing the challenges of concluding planned or needed investments, maintaining and operating new assets, and managing indebtedness as government resources decline:**

- ✓ **Oil Sector:** With increasingly constrained capital budgets due to low oil prices, Petroamazonas faces trade-offs between investing in new fields and efficiently operating its existing fields. On the one hand, lower exploration threatens an overall reduction in production and in financing resources in the future. On the other hand, reducing investments in oil fields that are currently producing could further tighten available resources. Evidence suggests that both these eventualities could occur. Petroamazonas may slow down the development of new fields (such as the Ishpingo-Tambococha-Tiputini (ITT) fields in the Yasuní National Park) and/or cut capital spending on its existing mature fields. In either case, the outlook for future oil revenues is not promising in the short to medium term. Assuming a decline of 5 percent in production between 2015 and 2019 and a rise of 25 percent in oil prices, oil revenues are expected to rise only marginally from 2015 levels. At the same time, payments to service contract operators and imports are expected to grow steadily. In this scenario, net inflows will barely cover capital investments and operating costs for Petroamazonas and Petroecuador, leaving a net profit of only about \$1 billion for the central government, well below the \$5.6 billion received in 2012.
- ✓ **Power sector:** Investments in distribution infrastructure and commercial operations management, as well as massive investments in eight emblematic power generation plants, have transformed Ecuador's power generation matrix. These investments are expected to increase sector indebtedness significantly, however. The current demand and tariff structure covers only variable costs and cannot contribute to the repayment of investments. Practically all investment for sector expansion in the last ten years has come from the government, financed mostly through external loans (estimated at about US\$10 billion). With no contribution to investment costs built into the tariff, the power sector is not contributing to the repayment of these loans. In fact, tariff levels have remained almost constant during the last decade and remain very low compared to regional countries. The sector is therefore relying almost entirely on the availability of fiscal support to repay the large loans that it has

<sup>69</sup> The Czechoslovakian actuary Mr. Schoenbaum, hired by the International Labor Office, designed the technical system on which the 1942 Law, as well as the Statutes of the Pension Funds in 1944 and the Statute of the National Institute of Pensions in 1945 was established (Mantilla and Abad 1984)

contracted. The lack of a full cost-recovery tariff, together with high uncertainty, makes the sector unattractive to private investors, who could potentially share the generation and investment burden.

- ✓ *Education sector:* Ecuador's education spending has increased rapidly in the last decade and now stands at around 5 percent of GDP, exceeding that of the country's structural and regional peers. This increase in investment has focused primarily on significant infrastructure spending, hiring and wages of teachers, and a larger budget commitment for scholarships for higher and secondary education. Sustaining investments in education will pose important pressures for the country's budget in a context of more limited fiscal resources. Although capital expenditures will slow down in the years to come, maintaining and operating new schools will be costly.
- ✓ *Health sector:* In contrast to other sectors, public spending in the health sector increased primarily due to recurrent costs. Between 2009 and 2015, investments ranged between 10 and 25 percent of total annual spending. In terms of health infrastructure, the Ministry of Health (MoH) invested heavily in new and renovated hospitals. This is equivalent to 2,966 new hospital beds at an estimated cost of US\$1,361 million between 2013 and 2018. The IESS has also constructed several new and large hospitals despite large deficits in its health insurance scheme. The new MoH and IESS hospitals are expected to put further pressure on recurrent spending. Yearly recurrent costs associated with running the new hospitals have been put at around US\$435 million (although alternative estimates range from US\$207 million to US\$662 million). The US\$435 million figure represents 20 percent of total spending in 2015. The number of hospital beds per 10,000 inhabitants can be expected to increase from 14 to 16 as the new infrastructure is taken into service. This leaves Ecuador still substantially below the regional average of 20 beds per 10,000 people.
- ✓ *Water and Sanitation sector:* Investments in the water sector have gained momentum in recent years, especially since the 2013-2017 National Development Plan (NDP) was introduced. However, water and sanitation revenues still fall far short of what is required to finance these investments or even cover operation and maintenance costs for that matter. Although the Water Resources Law requires the establishment of services' tariffs to cover both operation and capital expenditure, the U.S. dollar amount collected by municipal WSS service providers in 2012 and 2013 accounted for just 10 percent of the investments made during this time. Moreover, in 2009, a mere 92 municipalities (out of a total of 221) managed to cover at least half of their WSS services' operation and maintenance costs with the revenues generated through WSS tariffs. There are multiple reasons for this shortfall. On the one hand, municipal service providers lack the institutional and financial capacity to become self-sustainable. Moreover, they do not keep their own books and thus lack the updated records needed to recover their expenditures. For instance, only 26 percent of urban service providers have an updated client cadaster and on average 65 percent of the water supplied is unaccounted. Low collection complicates WSS services' financial management and the ability to regulate tariffs. The average price charged in medium and small municipalities, for example, is only US\$4 per 15 cubic meters. In this context, the government is looking for ways to attract private investment in water and other strategic sectors. This promises to be a lengthy process, however, since the legal framework for public-private partnerships is still under development. In addition, the Constitution and the Water Law explicitly establish important limitations for the participation of private firms in the provision of water services.

**While in some countries private-sector participation helps fill the gaps in public financing, this is not an immediate option for Ecuador.** The country lacks appropriate regulation on public-private partnerships that would foster a competitive and efficient implementation of projects. It also lacks the capacity and instruments to assess and mitigate the fiscal risks associated with these partnerships. Moreover, Ecuador lacks capacity to design, evaluate, and manage projects. Finally, the constitutional mandate restricts arbitration of a dispute between parties in an international court, which increases the perceived risks for potential private investors. Going forward, Ecuador needs to revise its legal framework for public-private partnerships in order to align it with international best practices. Moreover, Ecuador's history of government intervention has undermined its attractiveness for private participation in infrastructure and energy projects. As such, the country will need to resolve all pending settlement cases related to prior nationalizations and expropriations in order to recover its credibility with foreign investors.

- 151. A fiscal adjustment that is more gradual than the one currently planned, especially as external financing conditions get tighter, could lead to an unsustainable debt.** The government has announced a plan to consolidate the fiscal deficit by about 4 percentage points of GDP between 2017 and 2021. A simple debt sustainability exercise suggests that if the plan is met the Non-Financial Public-Sector (NFPS) debt will increase from 39 percent of GDP in 2017 to a peak of 44 percent in 2021. Afterwards, however, it would decrease gradually to 38.1 percent in 2031 as moderate nominal GDP growth and primary surpluses are expected to offset the effect of high financing costs.<sup>70</sup> The normalization of monetary policy in the United States and Europe is likely to worsen financing terms and further reduce access to external bond markets. If the fiscal deficit declined by only 2.0 percentage points of GDP by 2021, instead of the 4 percentage points contemplated by the plan, the public debt would continue increasing over the projection period. In such a scenario, NFPS debt would increase to 70 percent of GDP by 2031, assuming that the government has access to sufficient credit over this period.<sup>71</sup>
- 152. A balanced fiscal adjustment should contemplate efficiency gains on spending and revenues collection.** Having a public investment management strategy that carefully prioritizes new investment and ensures that recently built infrastructure obtains positive rates of return (BOX III-5) is a necessary condition for a successful adjustment. But this is not sufficient and should be complemented by measures to rationalize spending. Ecuador's sharp increase in public spending during the boom was associated with increased inefficiencies leading to underutilized infrastructure, costly staffing decisions, and expensive and poorly targeted social programs. Addressing these inefficiencies is critical to achieve the desired fiscal savings, while also safeguarding the social progress achieved during the last decade. Finally, there is room for raising non-oil revenues and increasing the efficiency of the tax system. Ecuador has improved revenue collection significantly over the last decade, achieving relatively high standards compared to regional peers. However, at around 15 percent of GDP, non-oil revenues are still relatively low. It is critical to improve the design and efficiency of Ecuador's tax system by reducing exemptions and reexamining highly distortive taxes, such as import tariffs and taxes on capital outflows.
- 153. The implementation of a credible fiscal plan requires the strengthening of key fiscal institutions.** Of foremost importance is the establishment of institutions that can support the fiscal adjustment, including a set of credible fiscal rules. In this regard, efforts to include clauses of fiscal responsibility in the recently prepared government's economic plan (June 2018) is a step in the right direction. Ideally, fiscal rules should be accompanied by sound institutional arrangements tailored to mitigate volatile commodity exporting, such as well-designed sovereign funds. Ecuador also needs to strengthen the independence and governance of its central bank and the performance of SOEs to further support fiscal discipline and safeguard financial sector stability. Finally, it is critical to put in place a sound regulatory framework and institutional setting to support the preparation of public private partnerships (PPPs) that can help sustain priority investment, ensure the management and maintenance of assets, and guarantee the efficient provision of services as public spending scale down (BOX III-6).

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<sup>70</sup> The base case scenario assumes the government will be able to reduce the NFPS deficit from 5.3 percent of GDP to 1.3 percent in 2021 and will keep the primary expenditure to GDP ratio constant thereafter. It also assumes economic growth and inflation will converge to 2.1 percent and 1.5 percent respectively after the fiscal consolidation ends in 2021.

<sup>71</sup> This scenario assumes that the Government will only be able to reduce the fiscal deficit from 5.3 percent of GDP in 2017 to 3.1 percent in 2021 and that no other adjustment measures will be applied afterwards. Additionally, it assumes that increasing uncertainty will reduce economic growth by 0.25 percentage points over the projection period, will keep inflation around 1.1 percent, and will increase the borrowing cost by 100 basis points.

### BOX III-6: Building the foundations for successful PPPs

Public-private partnership (PPP) have three main objectives: (i) to crowd in private firms and investors into projects that they would otherwise not undertake; (ii) to transfer to the private sector a significant part of the risks and costs that the government would otherwise fully absorb; and, (iii) to ensure that the project's efficiency and/or quality is at least equal to that obtained if the government alone carried all costs and risks.

Achieving the PPP objectives in practice is much more complicated than is often believed. Under a weak PPP policy, regulatory and institutional framework, the interests of taxpayers and users do not naturally coincide either with those of private firms and investors or with those of the government in office. The government in office has incentives to get the projects on the ground as soon as possible, even if this implies leaving liabilities for future governments. It also has incentives to underestimate or hide contingent liabilities and to give unrealistic guarantees. This may provide a quick fix for a cash constrained government, but it may create higher costs to beneficiaries and reduce service quality. For their part, private firms and investors have incentives to earn as much profit as possible, while transferring as many of the costs and risks as possible to the government. In the absence of a sound PPP policy framework, therefore, the dice are loaded against final beneficiaries, whose interests are not well represented in the PPP design and selection process.

Hence, to ensure that PPPs actually add value to the society, a well-designed policy framework (including well-designed laws, regulations and procedures) is essential. Such a framework would adequately represent the interests of the final beneficiaries by promoting efficiency gains, greatly reducing the incentives of the government in office to over-guarantee, and significantly curbing the incentives of private firms and investors to unduly shift costs and risks to the government. In this context, there are a few key issues to avoid when designing and implementing a PPP policy: i) the provision excessive government guarantees; ii) the awarding of concessions based on wrong parameters; iii) the authorization of multiple agencies within the government to initiate and award PPPs; and iv) the failure to address conflicts of interest and disputes.

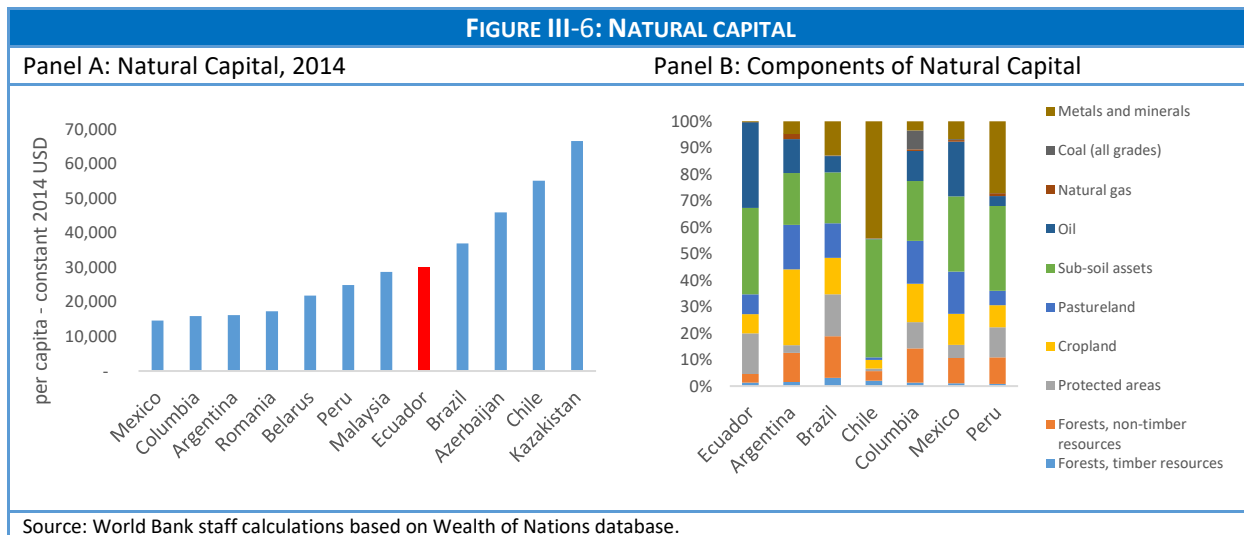
Ecuador's regulatory framework and institutional settings for PPPs need to be strengthened to fulfill its objectives. Line ministries, public enterprises, and subnational governments see PPPs as the means to expand service delivery under tight fiscal constraints. In 2015, Ecuador approved a fiscal incentives law for investments in infrastructure that included some features of a PPP law. It created a steering committee to oversee these incentives and coordinate PPPs. However, this regulatory framework does not: (1) empower the Ministry of Finance to rule on all commitments or liabilities, contingent or actual, associated with PPP's projects; (2) develop a full-fledged institutional set up; (3) clarify procedures and timings for awarding a PPP contract (including, among other requirements, the competitive awarding of rules and processes); (4) differentiate processes and procedures for unsolicited proposals; and (5) address specific requirements for financiers, nor the congruency between dispute resolution mechanisms. While PPPs have been issued via laws and resolutions, the key parameters for risk allocations between the public and the private sector do not figure among these. Without an appropriate framework both to design, evaluate, and select PPPs and to allocate risks between the private and the public sectors, the financial costs for a PPP project in Ecuador might be too high compared to the potential efficiency gains obtained from the private sector's participation.

154. **Finally, it is critical to manage public indebtedness.** After the 2008 default, access to traditional external financing was significantly reduced and the country was forced to increase its financing dependence on expensive non-traditional sources. A new debt management strategy is, therefore needed. Not only should this help to reduce costs and extend maturities of the current stock of debt, but it should also provide a credible and feasible plan for domestic and international borrowing as well as for guarantees and contingent liabilities. In this process, the debt management office should also be strengthened so that it can effectively develop and implement this strategy.

### iii. Environmental sustainability

#### a) Resource Endowments and Natural Capital

155. **Ecuador has higher per capita natural capital than its neighbor peers.** According to the most recent data available, Ecuador's per capita natural capital was above the LAC average (Figure III-6-Panel A). The country has above median endowments of crop and pasture land. It also ranks particularly high on protected areas (Figure III-6-Panel B). These protected areas are increasingly being turned into core providers of ecosystem services, genetic resources, biodiversity conservation, and socio-economic value.



156. **Moreover, Ecuador is the 11th most biodiverse nation in the world and the country with the highest biodiversity per square kilometer, making it one of the world's 17 "mega diverse" nations (MAE, 2016).** Biodiversity conservation in Ecuador is not only driven by the potential economic benefits, it is also intrinsically linked to the country's Indigenous Peoples, whose knowledge of sustainable management practices singles them out as particularly important stakeholders in the stewardship of the country's fragile ecosystems. This has been reflected in the design of the country's National Biodiversity Strategy 2015-2030, which aims to unlock the productive, industrial and commercial potential of biodiversity, and mobilize biodiversity as a key factor in the change of the productive matrix. As a result, Ecuador has invested heavily in the National System of Protected Areas (*Sistema Nacional de Áreas Protegidas – SNAP*), establishing 14 new protected areas in a five-year period between 2007 and 2012 (MAE, 2013).<sup>72</sup> Spending on SNAP increased from US\$ 3 million in 2003 to US\$ 21 million in 2013. This has placed Ecuador among the top five countries in the region for investment in protected areas. Consequently, tourism revenues from these areas has increased substantially. Tourism has also acted as an economic stimulus for communities located nearby. Between 2006 and 2013, communities surrounding the five most visited continental protected areas generated US\$ 115 million in profits (MAE, 2015). In addition, tourist revenues supported 1,341 companies in these communities, sustaining an estimated 5,735 jobs. Meanwhile, Ecuador's best-known ecotourism site, the Galapagos Islands, has witnessed rising numbers of visitors reaching more

<sup>72</sup> In 2015, Ecuador had a total of 50 protected areas (MAE, 2013).

than 200,000 tourists in 2015. This increase comes despite limits being placed on visitor numbers since 2011 to protect the delicate ecosystem of the islands.

**157. Realizing the productive potential of its natural capital, Ecuador has intensified its efforts to strengthen the institutional framework for environmental sustainability.** Ecuador is the first country in the world that has a constitution that establishes the inalienable rights of nature to exist, maintain and regenerate (in Articles 71-74). In addition, the Ecuadorian Constitution incorporates the right of its population to live in a healthy environment and to petition on behalf of nature, or *Pacha Mama*, for the conservation of environmental and biological resources, the restoration of degraded natural areas, and the mitigation of climate change by limiting greenhouse gas emissions, deforestation, and air pollution (in Article 414). Since the ratification of the new Constitution in 2008, the country has implemented wide ranging changes in its national policy framework to address environmental concerns. For example, Ecuador has developed a regulatory framework reflecting these Constitutional obligations related to sustainable development. The *Plan Nacional para el Buen Vivir 2013-2017* (National Plan of Good Living) promotes environmental sustainability related to water, pollution, consumption patterns, and climate change mitigation and adaptation. It aims to restructure energy supply towards renewable sources and increase energy efficiency. The *Estrategia Nacional de Cambio Climático 2012-2025* (National Climate Change Strategy) establishes parameters for sector plans for mitigation and adaptation (Contribución Tentativa Nacionalmente Determinada de Ecuador, INDC, October 2015).

**158. Policies to protect the environment have allowed Ecuador to reduce some of the pressures on its natural capital in recent years.** Environmental concerns were initially driven by the visibly poor air quality in Quito and Guayaquil, as well as rapid deforestation (Mira-Salama et al., 2013). Since then, the country's environmental agenda has expanded to address concerns over human health, protection of the most vulnerable populations, and energy and water security. Economic growth continues to place pressures on natural resources, especially in recent years with high growth rates in resource-intensive industries such as mining, energy, agriculture, forestry, and aquaculture (BCE 2018; FAO 2011-2017; Hidrovo et al. 2017; MAE 2016). In response, Ecuador has intensified its environmental actions on air, water, waste, and biodiversity management with innovative instruments such as tradable emission permits, water rights, fishing quotas, and the establishment of environmental taxes. That said, considerable challenges remain in the form of responses to natural disasters and climate change, air and water pollution, greenhouse gas (GHG) emissions due to fossil fuel consumption, forest degradation and unsustainable use of land (Mira-Salama et al., 2013).

## **b) Major Challenges to Environmental Sustainability**

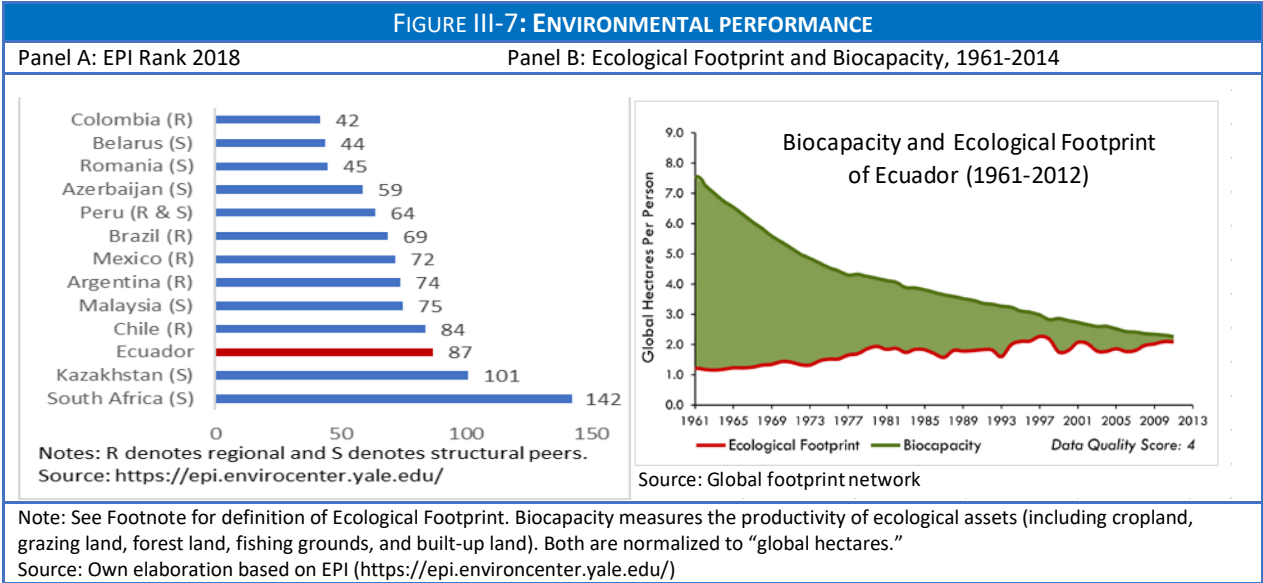
### *i.Reduction in Ecosystem Vitality and Ecological Footprint*

**159. Ecuador has been engaged in unsustainable use of its abundant natural capital.** Consequently, its ecological reserves are disappearing, and the country's environmental management performance lags its regional peers. On an international scale, Ecuador ranked 87 out of 180 countries on the 2018 Environmental Performance Index (EPI), much below its structural and regional peers (Figure III-7-Panel A).<sup>73</sup> Moreover, Ecuador's ecological reserves have been depleting continuously. Since 2011,

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<sup>73</sup> The 2018 Environmental Performance Index (EPI) ranks the performance of ten issue categories covering environmental health and ecosystem vitality, to assess how well countries are doing in reaching established environmental policy goals. The Index is

Ecuador is one of a handful of countries globally to have adopted the Ecological Footprint as a national indicator for sustainable development.<sup>74</sup> It shows that Ecuador’s per capita biocapacity has been falling since 1961, from 7.6 to 2.1 global hectares per capita. Concurrently, the national Ecological Footprint increased from 1.2 global hectares to 2.0 per capita, although it remains well below the global average of 2.8. The reduction in biocapacity has been driven primarily by an increase in pasture and cropland and population growth, while the increase in Ecological Footprint has been driven by a rising per capita carbon footprint, which now constitutes about 40 percent of the total national footprint (Global Footprint Network, 2017 National Footprint Accounts). The country runs the risk of going into an ecological deficit if it continues to use more natural resources (as measured by biocapacity) than the ecosystem is able to replace (as measured by the Ecological Footprint) (Figure III-7-Panel B). Such a scenario would threaten the long-term sustainability of Ecuador’s natural capital and hence the sustainability of its environment as well.



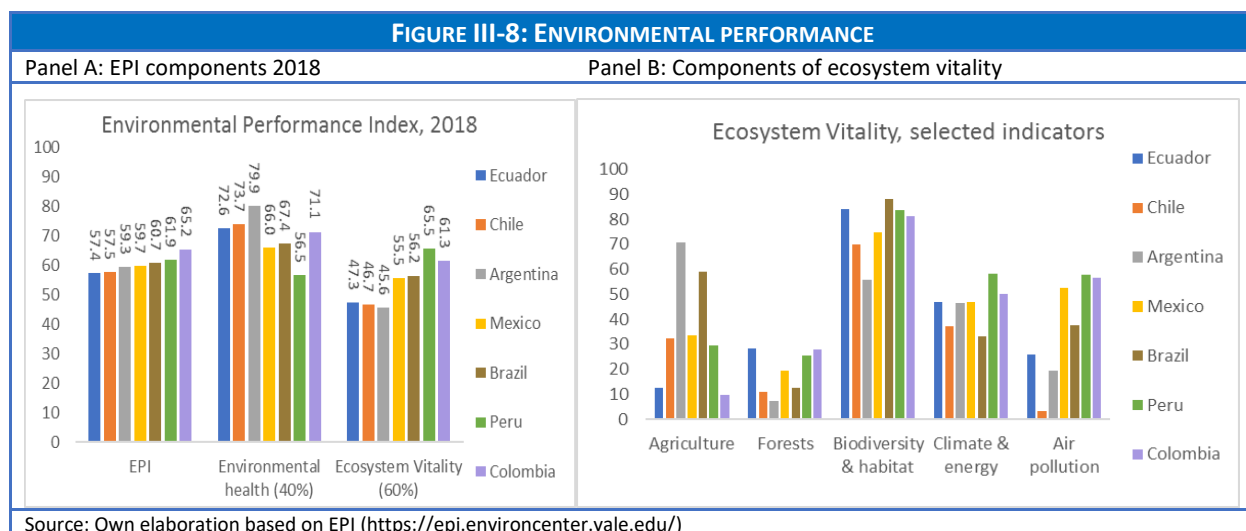
**160. Ecuador’s lower performance on the EPI is primarily driven by lower ecosystem vitality (Figure III-7-Panel A).** Within ecosystem vitality, Ecuador scores particularly low on the ‘agriculture’ indicator, which measures sustainable nitrogen management (Figure III-7-Panel B). This is also captured in the increase in fertilizer use and increasing application of agrochemicals over time. In addition, the deterioration in ecosystem vitality is explained by the country’s weakening performance in air pollution scores (NOX & SO<sub>2</sub> emissions), species habitat index, carbons emission intensity, Regional Marine Trophic Index, tree cover loss, and waste water treatment. Improvements in environmental health scores, on the other hand, reflect investments made in the substitution of household solid fuels

composed of 18 indicators for ecosystem vitality, and six indicators for environmental health. Overall, Ecuador’s ranking has declined from 82 to 87.

<sup>74</sup> The Ecological Footprint of a population is the total amount of biologically productive land and water area that the population requires to produce the resources it consumes and absorb the waste it generates, using current technology. It tracks the use of six categories of productive surface areas: cropland, grazing land, fishing grounds, built-up land, forest area, and carbon demand on land. It is measured in a standardized “global hectare”. Biocapacity measures the productivity of ecological assets (including cropland, grazing land, forest land, fishing grounds, and built-up land). Both are normalized to “global hectares.”



and the expansion of access to water and sanitation services over the last decade.<sup>75</sup> That said, Ecuador still ranks high in biodiversity and habitat, which gives further incentives to invest in agricultural practices that can help protect biodiversity.



## *ii. Exposure to natural hazard events and climate change*

161. **Ecuador's physical characteristics make it particularly vulnerable to natural disasters, which are becoming increasingly frequent (Figure III-9-Panel A).** In addition, climate change-led weather variability and the overexploitation of natural resources increases the probability of natural disasters.<sup>76</sup> On a global scale, Ecuador ranks number 18 among countries with the highest economic risk exposure to three or more hazards in a year (EM-DAT, 2017, GFDRR, 2012). Landslides (45 percent of total events), together with floods, rains and storms, account for almost 90 percent of the recorded events in Ecuador. The remaining include volcanic activity (5 percent), earthquakes (4 percent) and droughts (1 percent). Today, an estimated 96 percent of Ecuadorians live in regions exposed to seismic, volcanic, flood, landslide, or *El Niño*-related hazards (EM-DAT, 2017, GFDRR, 2012).

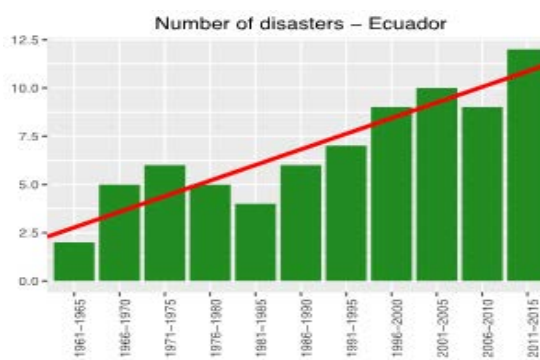
<sup>75</sup> EPI reveals a tension between two fundamental dimensions of sustainable development: (i) environmental health, which rises with economic growth and prosperity, and (ii) ecosystem vitality, which comes under strain from industrialization and urbanization. The key then is to balance these distinct dimensions.

<sup>76</sup> The country faces an unprecedented number of climate change-induced adverse weather events such as extreme precipitation, glacier melts, high temperatures, and droughts. Among the total events that have caused emergencies or disasters, climatic hazards account for 78 percent of total deaths and 84 percent of the total number of houses affected (Wilk and Ludeña 2013)



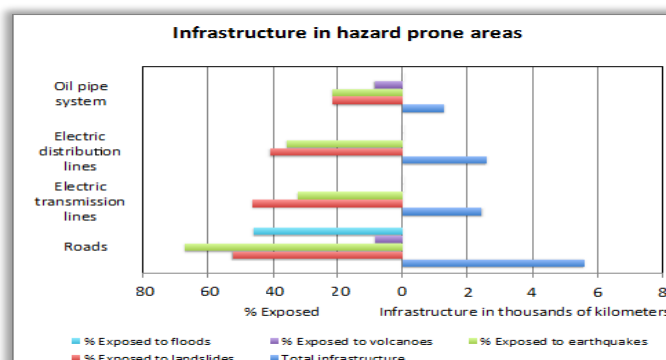
**FIGURE III-9: DISASTERS AND INFRASTRUCTURE**

**Panel A: Number of Disasters**



Source: EM-DAT data 1961 to 2015; earthquakes, volcanic activity, landslides, forest fires, storms, floods, extreme temperature and drought; 69 total events.

**Panel B: Infrastructure in hazard prone areas**



Source: Disaster Risk and Poverty Levels in Ecuador – Identifying Priority Areas –, internal document, WB, 2015

**162. The human, environmental and economic impacts of these disasters are substantial, as are the fiscal costs associated with their consequent damages.** Disasters like landslides and earthquakes, for instance, pose significant risks to the country's road network and utility infrastructure (Figure III-9-Panel B). The most recent earthquake in April 2016, for example, left 663 people dead and 80,000 people displaced. With respect to infrastructure, it destroyed 83 kilometers of the road network, 8,240 houses, 146 schools, 875 educational centers, and 48 hospitals. Reconstruction costs are estimated at US\$ 3.3 billion (SENPLADES 2016). The worst recent *El Niño*, which occurred in 1997-98, resulted in damages and losses of around US\$ 3 billion and caused 293 deaths, affecting 13,374 families (Bartomioli, 2008; Zevallos, 2004). Additionally, 4,333 km of main roads, 5,121 homes and 129 schools were completely destroyed (Zevallos, 2004). The most recent *El Niño* in 2015-16, resulted in 1,196 adverse events (mostly floods and landslides), negatively affecting approximately 27,000 people (Secretariat for Risk Management, 2016). To make matters worse, the poorest regions, with the lowest recovery capacity, are the most vulnerable to these disasters (World Bank Preliminary Assessment, 2016).

**163. Moreover, these disasters generate cross-sectoral losses.** In addition to the negative effects of disasters on health, education, water, transport, and housing sectors, primary sectors such as agriculture, forestry, fishing, and livestock are also subject to significant impacts from hydro-climatic disasters and extreme weather events. In the 1998-99 *El Niño* floods, for instance, large volumes of rice, corn and sugarcane crops were severely damaged (UNDP 2013). Around 80,000 hectares of rice were lost, representing 19 percent of the cultivated rice area at the time. Droughts, floods and other extreme weather events are predicted to cause high agricultural losses in the future. Similarly, the energy sector faces severe threats from climate change-induced natural disasters. Given substantial investments in hydropower capacity in recent years (totaling about \$ 5 billion and reaching nearly 3,000 MW of generation), Ecuador needs to prepare for natural disasters and extreme weather events that can introduce significant variability in the sector's power output. With hydropower supplying more than 90 percent of the country's electricity, increased resilience to seasonal and annual variability is required. Here, specific focus needs to be given to on the local weather conditions, temperature levels, and precipitation patterns in the water catchment areas, is required.

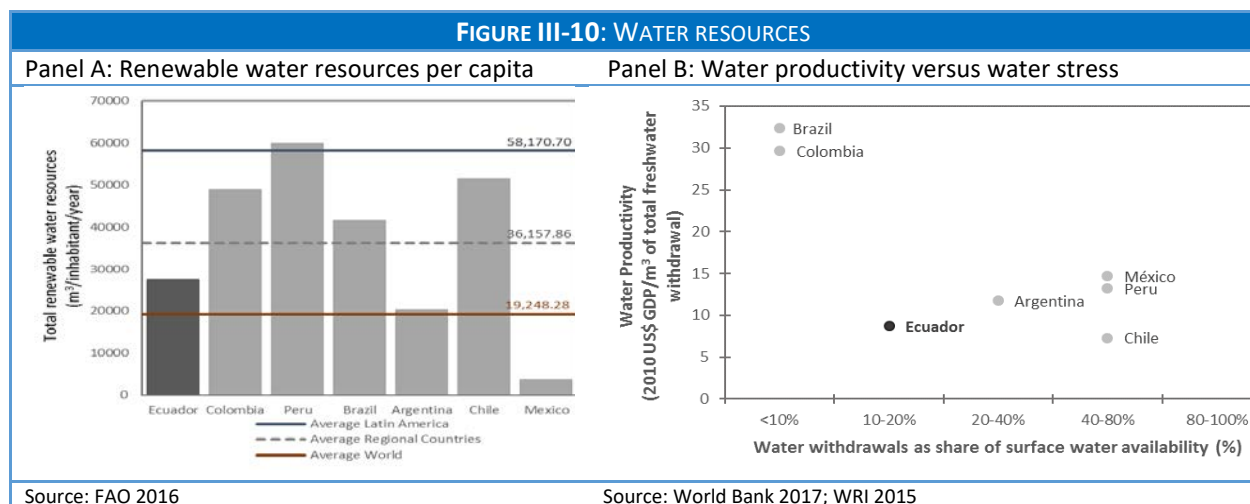
**164. Ecuador's current Disaster Risk Management (DRM) framework suffers from uncoordinated policies and programs.** The country lacks a holistic approach to DRM. In addition, there is a notable

lack of central coordination and regulation. The government has partially established a national institutional framework for DRM at the local and sectoral level, but an overarching national DRM law is needed to coordinate and regulate the functioning of various entities. Regulations are also needed to strengthen central authority and improve subnational DRM units. The 2008 Constitution addresses disaster risk and introduces the Decentralized National Risk Management System (Bartomioli, 2008), headed by the Secretariat of Risk Management. In addition, through the establishment of the Code for Territorial Organization, Autonomy and Decentralization in 2010, the Decentralized Autonomous Governments (GADs) have been made responsible for the inclusion of risk management in their territorial planning (SGR 2014). That said, the country still lacks the ability to deal effectively with natural hazard events, primarily due to the lack of a national DRM law and local capacity constraints.

165. **Ecuador's DRM framework also suffers from a lack of local capacity and knowledge about risk management, reduction and mitigation strategies.** Local governments (which are responsible for the inclusion of risk management strategies in their territorial planning) lack detailed knowledge of localized and specific hazard risks. They also lack consistent methodologies for generating risk information at the local level, resulting in shortcomings in defining policies, strategies and instruments for reducing and controlling risk. Scattered information on hazard risk can be found on the websites of various technical agencies; however, there is no shared platform to be used as a common reference tool for dissemination and manipulation of geo-spatial information. Most importantly, local governments lack the technical capacity to process, generate and disseminate risk information in a timely manner. This impedes their ability to proactively deal with disaster risk, delaying *ex ante* planning and *ex post* management. At the national level, these local shortcomings further constrain the central government's ability to focus on hotspots of disaster risk and allocate financial resources accordingly.
166. **Finally, despite having some instruments for post disaster financing, the country has not developed a comprehensive risk financing strategy to deal strategically with the contingent fiscal liabilities that arise from disasters.** DRM monitoring mechanisms fail to capture advances in DRM, which impedes strategic planning, financial protection and emergency response. It is essential to capture the value and impact of investments in DRM to be able to carry out the appropriate planning for risk reduction at the institutional, sectoral, community, and territorial levels. The national government created the State Development Bank (BEDE) to finance preventive works for risk reduction. According to the Risk Management Secretariat (*Secretaría de Gestión de Riesgos*, SGR), BEDE has invested US\$180 million from its creation up until 2014. However, there is little information beyond this. Nor is there a system to capture and assess the efficacy and efficiency of resources allocated for DRM. The Regulation of the Public Security and State Law, the General Regulation to the Public Procurement Law, and the National Plan for the Development of Good Living 2013-2017 have collectively reinforced the Government's support for DRM. However, there are no benchmarks or baselines against which these investments are made, nor any systems in place to qualify the risk reduction outcomes of these investments.
167. **Thus, the ability to minimize the fiscal impact of disaster response and improve the efficiency and transparency of post-disaster public spending, remains a challenge.** Key actions are needed to improve the response capacity, protect the budget, and plan for more sustainable DRM financing. These include the development of a comprehensive strategy for protecting and insuring public and private assets as well as for enhancing national and territorial knowledge and financial capacity for disaster preparedness *ex ante* and effective disaster response *ex post*.

### iii. Unsustainable Management of Water Resources

**168. Ecuador faces large regional disparities in water availability, and the overall water use efficiency is low.** Although the total volume of water available in Ecuador is well above the world average, Ecuador is less well endowed with per capita renewable water resources relative to its regional peers (Figure III-10-Panel A). More importantly, the geographic variation in water availability is quite stark. The total volume of water available in the Amazonia region, for instance, is as high at 91,000 cubic meters per inhabitant per year (m<sup>3</sup>/inhabitant/year). In the Coast region, meanwhile, the figure is a mere 5,300 m<sup>3</sup>/inhabitant/year, close to the critical value of 2,000 m<sup>3</sup>/inhabitant/year (which is easily reachable in periods of low rainfall and is dangerously low by global standards). Similarly, despite low levels of water stress at the country level (10-20 percent), significant differences in water stress persist across regions (Figure III-10-Panel B). Six out of a total of 70 water basins in Ecuador are already under severe water stress (ECLAC 2011). Most of these are found in Manabí Province and across the south and east of the Gulf of Guayaquil. Adding to the problem are regional and seasonal variation in precipitation patterns, sustained periods of dry spells and droughts, lack of a hydrological monitoring network, deforestation, and poor land management. Together, these render many areas vulnerable to potential water conflicts. The underlying issue is low levels of water use efficiency in the country (Figure III-10-Panel B). Barring any serious efforts to increase the efficiency of water use, increasing population pressures and economic growth are like to make the situation worsen in coming years. According to the 2014-2035 National Water Resources Management Plan, the demand for water resources will increase by 30 percent in the coming years, reaching 22,563 m<sup>3</sup>/inhabitant/year by 2035.



**169. Against this backdrop, the country faces competing demands for water resources from key productive sectors of the economy.** For instance, the agriculture sector which demands the largest share of freshwater withdrawals (81 percent), is growing. This is because irrigated agriculture is five times as productive as feeding crops with rainwater (Donoso-Clark, 2003). Currently, while irrigated agriculture represents an estimated 70 percent of the country's agricultural production, less than one third of the area with irrigation potential is being effectively irrigated (0.9 million hectares out of a total of 3.1 million hectares). This points toward the lack of a holistic strategy whereby investments in irrigation infrastructure (needed for higher agricultural productivity) are not being coupled with technical assistance aimed at increasing water use efficiency. Similar demands are exerted from the power sector which is becoming increasingly reliant on hydro-power generation in line with the country's de-carbonization commitments. Almost two-thirds (65 percent) of Ecuador's electricity

supply in 2016 was generated through hydropower facilities, a figure that the government aimed to increase to 90 percent by 2018. In addition, rapid urbanization is leading to higher demand for water from households and industry. Ecuador's urban population is expected to reach 68 percent by the year 2025, up from 62 percent at present (CELADE 2017). Water demands from expanding cities have already brought the underlying water scarcities to the forefront, along with the extremely dismal situation of waste water management in cities. These factors are exacerbating problems of water pollution, water quality, and water availability.

**170. Satisfying these projected demands for water resources will require significant investments in infrastructure and enhanced execution/operation capacity at all government levels.** A new institutional framework has recently been developed for the water sector, but institutional capacity requires further strengthening. The National Water Authority (*Autoridad Única del Agua*) now known as SENAGUA (National Water Secretariat) has been given responsibility for developing and applying policies, standards, norms and regulations for water resources. SENAGUA has in turn created two autonomous decentralized agencies: ARCA (*Autoridad de Regulación y Control del Agua*) to grant water rights and regulate all types of water uses; and EPA (*Empresa Pública del Agua*), a multipurpose public enterprise charged with executing investment projects, delivering water related services, and providing technical assistance to water service providers. While newly established institutions have clearly defined competences, their structure and operational procedures have yet to be defined. The regulation of the new Water Law was also promulgated in April 2015; however, the Law established a number of transitory legal provisions requiring further actions and regulations to allow for its effective application, which still await completion.

**171. In addition, transboundary water sharing arrangements remain to be institutionalized.** Ecuador shares a total of seven transboundary river basin treaties, mainly between Peru and Colombia.<sup>77</sup> In addition it has 13 international freshwater agreements and treaties with riparian nations. Despite that, an estimated share of  $163.8 \times 10^9$  m<sup>3</sup>/year of surface water either leaving or entering the country is not yet submitted under any treaty or formal agreement. The establishment and effective functioning of transboundary institutions is needed both for the equitable allocation of water, and for the enhancement of fair hydrological data sharing protocols between riparian nations.

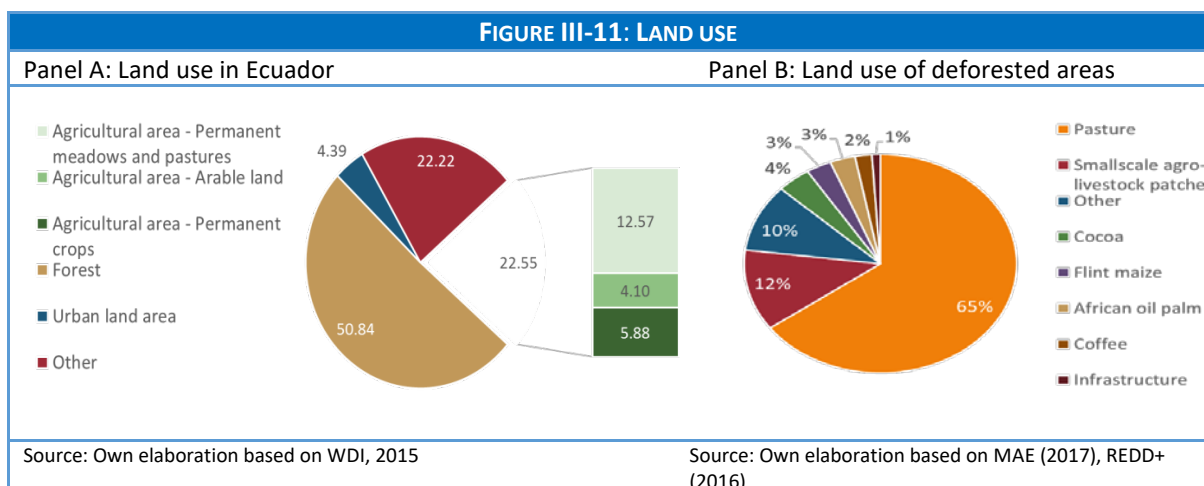
#### *iv. Unsustainable Land Use*

**172. More than half (51 percent) of Ecuador's land area is forested and 23 percent is under agriculture** (Figure III-11-Panel A). Although agriculture has a lower land cover than forestry, it contributes significantly more to Ecuador's GDP and employment. In 2015, the forestry sector contributed 2.3 percent to GDP, and 8 percent to total employment, while agriculture contributed 10 percent to national GDP and employed a quarter of the country's population. Currently, the agri-food sector is the most important source of livelihood for the rural poor and accounts for 21 percent of female employment.<sup>78</sup> Similarly, native forests provide livelihoods for many IP and local communities.

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<sup>77</sup> Transboundary Waters Assessment Programme. River Basins Component. Available at: [http://twap-rivers.org/assets/GEF\\_TWAPRB\\_TableTransboundaryBasins.pdf](http://twap-rivers.org/assets/GEF_TWAPRB_TableTransboundaryBasins.pdf)

<sup>78</sup> Among all the rural poor that were employed, 82 percent were employed in agriculture in 2017 (ENEMDU, INEC)



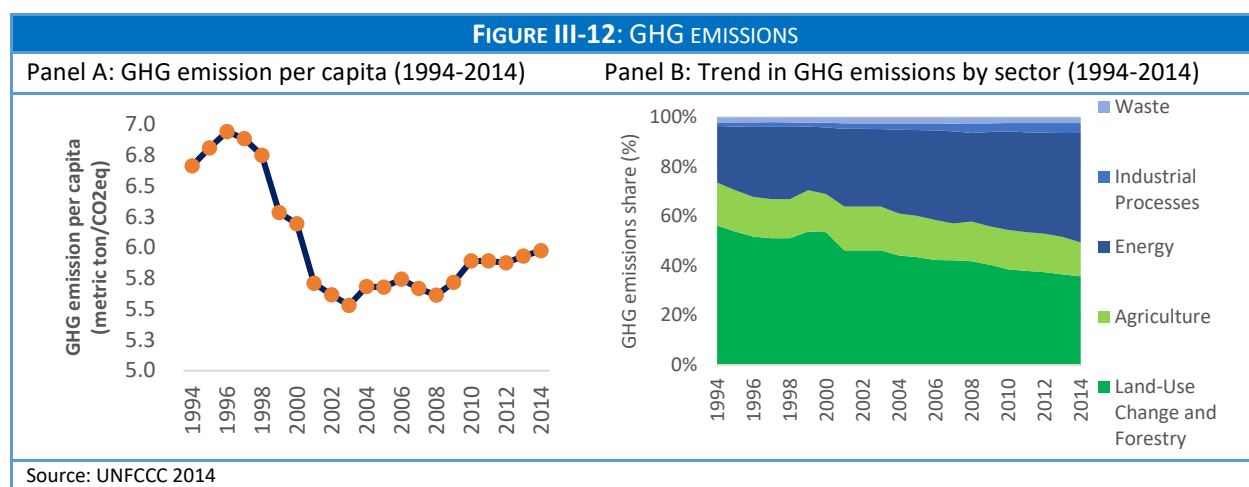
**173. Agriculture and forestry are both a source, and a recipient of pressures exerted by unsustainable use of natural resources.** First, the country suffers from high rates of deforestation. The average annual gross deforestation was more than 8,000 hectares during the 2008 to 2014 period. With respect to primary forest, approximately 2 million hectares have been deforested since 1990 (MAE, 2016). Deforestation leads to the loss of biodiversity and the exacerbation of natural disasters, such as landslides and flooding. It also can generate social conflict in relation to IP territories and unclear land tenure systems. Most importantly, deforestation and land use changes are one of the main sources of GHG emissions in Ecuador (25 percent) (Figure III-11-Panel B).

**174. The bigger issue is that most of the deforested land in Ecuador is used for agricultural purposes, primarily pasture (65 percent) and small-scale agri-livestock patches (12 percent)** (Figure III-11-Panel B). Unsustainable agricultural expansion is also a major factor in land degradation. Approximately 47 percent of total Ecuadorian territory, most of which is located on arable lands, faces soil degradation (MAE 2013b). Of this territory, nearly 22 percent is vulnerable to desertification. Most of these at-risk areas are located in the Coast and Sierra regions (MAE 2013b). Moreover, 70 percent of the eroded land is in the Sierra region, where steep slopes, precipitation events, and deforestation further exacerbate and favor erosion processes (Nguema et al., 2013). This puts pressure on disadvantaged farmers of these marginalized lands. The effect of declining yields due to erosion already causes problems for such farmers, who depend primarily on low-value subsistence agriculture (Nguema et al., 2013). Agriculture's carbon footprint is also significant. Farming accounts for 18 percent of all Ecuador's GHG emissions, making it the country's third most carbon-intensive sector (CAIT Climate Data Explorer, 2017). In addition, agriculture puts a strain on the country's limited water resources. Finally, agriculture contributes to water pollution and soil degradation because of the excessive use of fertilizers. Notice that all these effects—natural disasters, soil degradation, desertification, soil erosion, and climate change – threaten the future viability of agriculture itself.

#### *v. Environmental Pollution*

**175. Ecuador's share of global GHG emissions is very small, and its per capita emissions remain below the global average, but past deforestation has supplemented the country's emissions impact.** As reflected in Ecuador's Third National Communication (2017), per capita GHG emissions from all sectors fell from 7.6 to 5.2 metric tons between 1994 and 2012 (Figure III-12-PANEL A), while total emissions remained fairly stable at about 80 million metric tons (Figure III-12-PANEL B), constituting just 0.15 percent of the world's total. The energy sector is the highest emitter in Ecuador. As of 2012, this sector accounted for 47 percent of total emissions, followed by land use, land use change, and

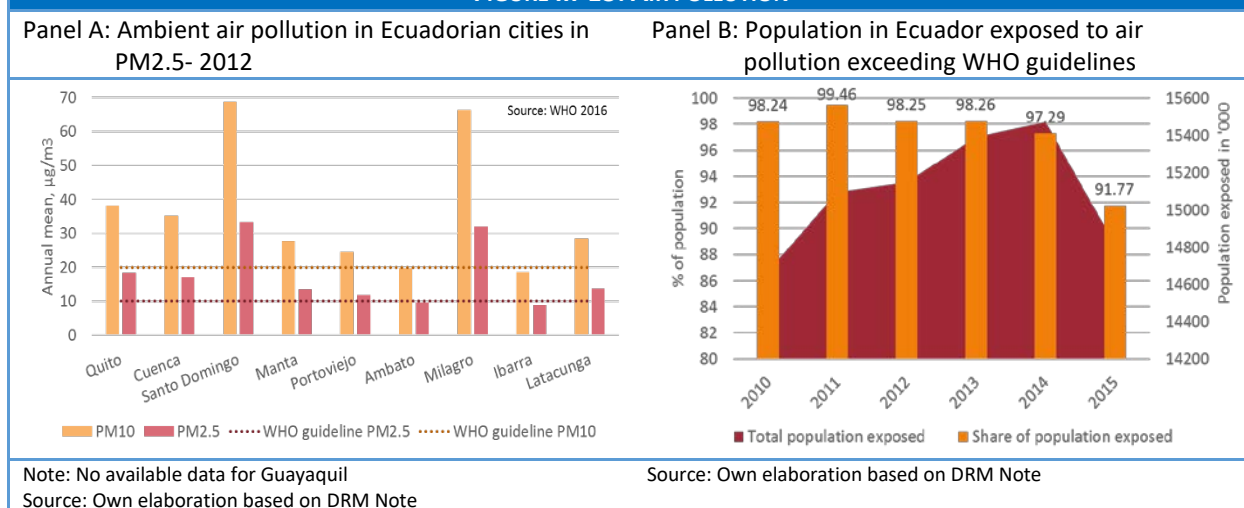
forestry (LULUCF) at 25 percent. Without LULUCF, per capita emissions have been rising since 2000. Within the energy sector, the electricity sector is mostly hydropower, which keeps emissions modest. Yet transport, which accounts for almost half of energy-related GHG, has rising emissions. Importantly in Ecuador, LULUCF pushes emissions up because of deforestation. However, policies to diminish deforestation and support reforestation have mitigated them, from 51 million metric tons in 1994 to 20 in 2012. Ecuador's Constitution commits the country to reduce GHG emissions, but it has not yet submitted its plans for mitigation in its Nationally Determined Contribution under the Paris Agreement (UNFCCC 2012). Any plans to mitigate emissions going forward would likely need to focus on reversing the trends in transport and pushing forward further improvements in LULUCF.



176. **Moreover, air and water pollution in Ecuador remains high, threatening long term environmental sustainability.** Despite considerable progress in reducing indoor air pollution, urban ambient air pollution remains high (Figure III-13-Panel A). In urban areas, transport emissions increased by 80 percent over the past 20 years, primarily due to rapid vehicle fleet growth. This amounts to an increase of 167 percent between 1997 and 2012. In 2016, there were 2.05 million registered vehicles in Ecuador. Besides vehicular transit, which emits more than 50 percent of ambient air pollution, other sources of particulate matter include: thermoelectric stations, industrial processes involving solvents, industries, gas stations, liquefied gas for domestic use, open pits, wind erosion, air traffic, landfills, and brick fabrics. As a result, most cities in Ecuador measure ambient air pollution well above World Health Organization guidelines for annual exposure (Figure III-13-Panel B). Even though overall exposure has decreased over time, more than 90 percent of the country's population is still exposed to concentrations above globally recommended levels (Figure III-13 - Panel B). This leads to severe negative health consequences, such as ischemic heart disease, lower respiratory infections, and chronic obstructive pulmonary disease, all of which are linked to premature death and high rates of mortality.



**FIGURE III-13: AIR POLLUTION**



**177. Untreated residential and industrial waste further adds to environmental pollution.** At the residential level, there is a severe lack of adequate solid waste management, exacerbating the negative effects of residential effluents on water and air quality. In 2015, 32 percent of solid organic waste was dumped into open air landfills. Environmental and social implications of uncollected or poorly disposed solid waste include local flooding, air and water pollution, increased human health risks due to transmittable disease, and GHG emissions. In recent years, the threat of water and air pollution has risen due to increases in mining and oil drilling. Currently, the mining sector in Ecuador is dominated by small-scale, artisanal mining operations, which typically have inadequate waste management infrastructure. As a result, mining and processing waste is directly or indirectly discharged into rivers and catchment areas. This leads to environmental degradation of landscapes and adjacent water bodies, severely reducing and threatening local flora and fauna, as well as affecting higher aquatic life forms in the exposed regions. In the oil sector, environmental pollution is caused by uncontrolled waste pits containing oil and drilling mud, as well as oil spills due to pipeline ruptures, abandoned installations, and the presence of facilities without remediation of contamination. Between 1972 and 1993, more than 30 billion gallons of toxic waste and crude oil were released into the Amazonian environment.

### *c) Identifying binding constraints*

**178. In sum, stewardship of Ecuador's natural capital is threatened by three broad sets of vulnerabilities; namely, structural, biophysical, and climatic vulnerabilities.** In terms of structural vulnerabilities, the issue is two-fold. In the public domain, there is a clear mismatch between government policy, as expressed in the environmental laws promulgated since the 2008 Constitution, and the actual implementation of these rules and regulations at the national and sub-national levels. This is due partly to lack of technical and financial capacity at local levels, partly due to the misalignment of incentives, and partly due to myopic and reactive governance. In the private domain, neither local communities nor the private sector have the necessary incentives required to come together for a more efficient and inclusive way of exploiting natural resources. As for biophysical vulnerabilities, the country faces high rates of deforestation, water stress, and inefficiency of water use in the country's most water stressed areas. Against this backdrop, there are competing demands on Ecuador's biological resources from the most productive economic sectors. Agriculture, for instance, is the highest consumer of freshwater withdrawals. Plus, most of the deforested land in Ecuador is used for agricultural purposes. Similarly, the energy sector is becoming increasingly reliant

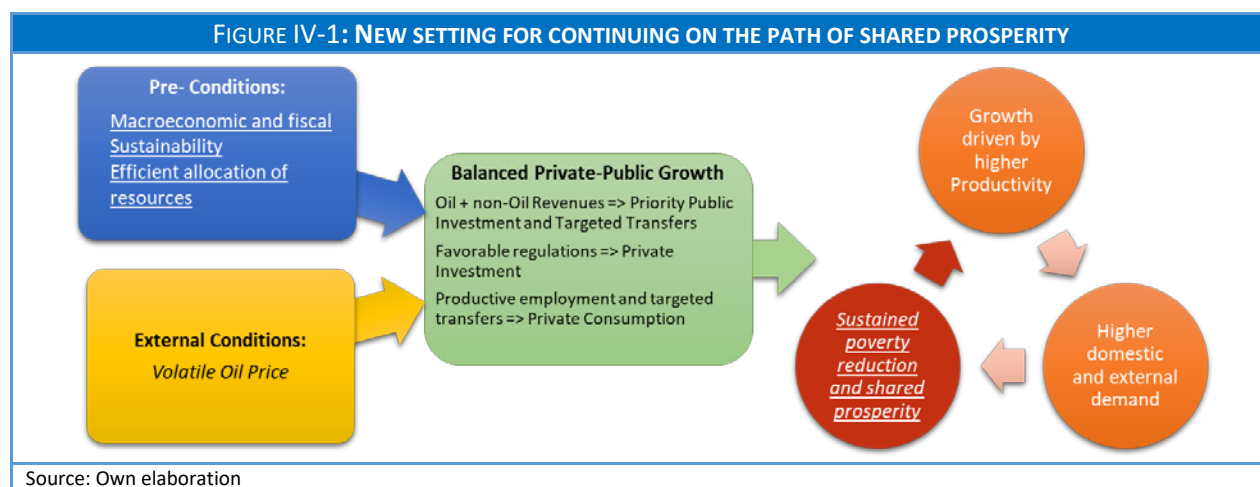
on hydro-power to achieve greener energy generation and universal electricity access. This puts further strain on water resources and natural habitats. Moreover, water and air quality remains low. Both indoor and outdoor air pollution levels are high, threatening both human and ecosystem health. Second, the quality of industrial and residential waste management severely threatens water quality, which is already at elevated levels of contamination. Furthermore, both energy and land use are contributing to environmental pollution through high GHG emissions. These drawdowns of natural capital all contribute to the reduction in Ecuador's overall ecological reserve, which has recently fallen to near zero. Lastly, climatic vulnerabilities arise for two reasons. On the one hand, Ecuador's physical characteristics make it particularly vulnerable to natural disasters as well as climate change-induced extreme weather events and water shortages. On the other hand, an effective and efficient DRM strategy, (i.e. one that incorporates strategic preparedness and timely response) continues to be missing. Although all sectors are affected by disaster risk, an overarching DRM law is lacking at national and territorial government levels. So too is, a forward-looking DRM agenda that speaks to key economic sectors (such as agriculture, energy, transport, water, health, and education) at national and territorial government levels is lacking. For a country that has the highest per capita natural capital of all its regional and structural peers, sustainable management of natural resources is imperative for Ecuador's inclusive growth going forward.



## IV. Prioritization

179. **After fifteen years of high growth and substantial social gains, new external conditions have brought substantial challenges for Ecuador.** As sections 2 and 3 discuss, economic growth supported by favorable external conditions translated into an impressive period of social progress. However, the decline in oil prices exposed underlying vulnerabilities of the country's economic model. Ecuador's public sector expanded quickly, did not save enough during the boom, and had limited fiscal buffers to smooth its adjustment to lower oil revenues. The real exchange rate appreciated and undermined private sector competitiveness. Due to the dollarization, the country could not quickly adjust through nominal devaluations. The weakened private sector was not able to respond when the public sector was forced to adjust. As a result, economic growth declined sharply and poverty reduction stalled.

180. **The central premise of this report for accelerating growth, poverty reduction, and shared prosperity is a rebalancing of growth between public and private sectors with greater reliance on increased productivity gains in both sectors (Figure IV-1).** Volatile oil prices are likely to be the 'new normal' that the country will face in the years to come. In addition, the normalization of monetary policy in the United States and Europe could further tighten the external financing conditions. Under this unfavorable external environment, Ecuador will need to lay the foundations for reigniting and sustaining growth. This will include reducing barriers that prevent factors from moving towards activities with higher returns, which would ultimately unlock the productivity gains needed to support this process.



181. **Three key elements must be in place for such sustainable and inclusive growth process to happen.** These are the bases for the prioritization exercise: (i) promoting macroeconomic sustainability; (ii) enabling an efficient allocation of resources in the public and the private sectors; and (iii) protecting the poor and the vulnerable. Challenges and opportunities -grouped in four pillars- are identified as priorities if they contribute significantly to at least one of the above elements and do not undermine the others. (see Table IV-1: Column 1). The exercise also identifies whether a challenge/opportunity is expected to be addressed in the short, medium or long term. The timing assesses the possible timeframe under which actions are implemented toward tackling the difficulty or achieving the goal. It also conveys a sense of urgency in implementing such actions. As a reference timeframe, the short term is approximately within a year, the medium term is within four to five years, and the long term is more than five years. (see Annex 2: Particularities of the prioritization process for more details about the complete selection process).

**182. In the short term, it is critical to address macroeconomic imbalances (Pillar 1) and lift barriers to private sector development (Pillar 2), while also protecting the recently achieved social gains.** Bringing the fiscal accounts to a sustainable position is essential for reducing uncertainties, relieving external pressures, and creating conditions for growth to accelerate. This adjustment will inevitably entail rationalizing public spending, which ideally should be done through efficiency gains that protect priority social spending. As the public sector downsizes, the private sector is expected to take a more prominent role. For this to happen, an enabling and competitive business environment needs to be in place. In turn, a dynamic private sector would further contribute to fiscal and external sustainability through higher tax revenues and exports, thereby reinforcing a virtuous cycle. These conditions will allow Ecuador to reap the returns of its medium to long-term agenda of further improvements in human capital (Pillar 3), physical capital and natural capital (Pillar 4), while at the same time protecting the country's poor and vulnerable populations.

## **i. Pillars**

### **a) Pillar 1: Addressing macroeconomic imbalances**

**183. Bring the fiscal accounts to a sustainable position, re-build fiscal buffers, and put in place institutions to adequately manage oil windfalls.** As a dollarized, commodity-exporting economy, Ecuador relies on fiscal policy to mitigate the impacts of economic shocks. In this context, Ecuador will have to adjust its fiscal position to a level that is sustainable, while safeguarding social gains. It is also important for Ecuador to rebuild fiscal buffers. The country needs to develop well-designed instruments (credible fiscal rules, wealth funds, etc.) to ensure that sufficient buffers are built and used countercyclically rather than pro-cyclically, as the country has done since 2006. This process will entail mobilizing non-oil resources, aligning spending to lower revenue levels, and better managing the indebtedness process.

**184. Improve the efficiency of public spending at different government levels, and shift resources towards priority social spending.** While prioritizing public investment is a necessary condition for Ecuador's successful adjustment, it is not sufficient in itself. The country's sharp increase in public spending was associated with increased inefficiencies, leading underutilized infrastructure, costly staffing decisions, and expensive and poorly target social programs. Addressing such inefficiencies is critical to achieving the desired fiscal savings, while safeguarding social progress achieved during the last decade. For instance, efficiency gains in the health sector could arise from an increase in the productivity of human resources and a rebalance of resources from secondary to primary care. Education spending, which is high for regional standards, could be better targeted to benefit lower income groups.

**185. Increase efficiency and neutrality of the tax system, broadening bases, phasing out distortive taxes and rationalizing tax benefits.** Ecuador significantly improved its revenue collection in the last decade, achieving relatively high standards of collection efficiency compared to regional peers. However, at around 15 percent of GDP, non-oil revenues are still relatively low. There is room for improving the design and efficiency of Ecuador's tax system by reducing exemptions and reexamining highly distortive taxes (such as import tariffs and taxes on capital outflows).

**186. Address external imbalances and rebuild international reserves to safeguard the dollarization regime.** Ecuador needs to safeguard the dollarization regime by addressing external imbalances and rebuilding its international reserves, which have been depleted following the drop-in oil prices. However, reducing external pressures and regaining competitiveness will entail adjustments in the real effective exchange rate. This can be done by bringing domestic prices and unit labor costs back

into line. The process of realigning prices and costs requires productivity gains that are consistent with, or greater than, those of competitors. Such process could entail reallocations that result in adjustments in average real wages and other factor rents.

***b) Pillar 2: Lifting barriers to private sector development***

- 187. Align labor costs to productivity, modernize labor regulations, and increase effectiveness of safety nets.** There are important trade-offs associated with more flexibility in the labor market. First, it allows the private sector to adapt rapidly to changing conditions linked to business cycles or the emersion of new technologies of production. Therefore, it reduces the costs of creating new formal positions. It also encourages workers and firms to find more productive matches. However, labor market flexibility transfers some of the risk from the employer to the employee, leaving some workers more vulnerable to shocks. In an environment as rigid as the Ecuadorian labor market, it is fundamental to modernize labor regulations to meet the fast past of economic changes; yet this needs to be accompanied with appropriate safety nets for vulnerable workers. The government has been introducing some flexibility in selected exporting sectors since 2016. However, more reforms are needed. Labor costs have lowered firm competitiveness and informality has been increasing significantly since 2014. The labor market is segmented between workers locked into long-term contracts with benefits, on the one hand, and workers with informal contracts and minimal, if any, benefits. Notably, the second group has few opportunities to ascend to the first group.
- 188. Review policies and strategies to attract investment.** With a fixed exchange rate and limited international reserves, Ecuador has been using import tariffs and capital outflow controls to reduce pressures on the current account deficit. However, these measures increased the costs of investing and producing in the country, thereby undermining competitiveness of non-oil exporting sectors that could help with the external rebalancing. In addition, lack of a coherent policy framework for private investment increase uncertainties. Certain business policies and regulations are particularly discouraging for investors. For example, Ecuador's Constitution restricts arbitration of a dispute between parties in an international court, which increases the perceived risks for the private sector. Moreover, limited liability ownership is not contemplated by the Ecuadorian law. In addition, the country lacks a comprehensive regulatory framework and coherent institutional setting for public-private partnership. Finally, recent episodes of default and contract renegotiation in Ecuador add to the overall perception of risk among investors.
- 189. Improve the trade regime and reduce barriers to trade.** Stabilizing and reducing the burden of trade regulation could foster competitiveness, increase access to markets, and aid the country's integration in global value chains. High and frequently changing trade costs are among the top four constraints to doing business, as identified by private firms. This is because they raise production costs and generate uncertainty. Since 2007, Ecuador has been following an import substitution strategy that favors increased import tariffs. Ecuador's tariffs (both most-favored-nation and applied) are higher than in Chile or Mexico and more than three times higher than those in Peru. Ecuador also has a lower number of comprehensive free trade agreements relative to its regional peers. In 2015, following the decline in oil prices, temporary import tariff surcharges were introduced. These tariffs were then removed in June 2017, at which point the government introduced an import tax based on merchandise weight and increased non-tariff barriers. As a result, Ecuador has found itself increasingly subject to specific trade concerns at the World Trade Organization's Technical Barriers to Trade Committee.
- 190. Reduce costs and uncertainties associated with business regulations.** Regulatory instability is a primary constraint to businesses, affecting small and medium enterprises the most. Despite recent

progress, regulations make it difficult to open and close a firm. The time and costs involved in registering a new business in Ecuador are higher compared to regional peers. Procedures to pay taxes are also burdensome. Advanced tax payments take away from operating capital, particularly for small- and medium-sized enterprises. Moreover, frequent changes in taxes and tariffs add uncertainty to investment decisions. During the last decade, the corporate tax rate experienced nine modifications, while the VAT rate and import tariffs were subject to five and seven changes respectively. The government also introduced a tax on capital gains during this period, as well as advanced minimum tax and withholdings tax. Finally, insolvency proceedings are also slow and unclear, with higher than average costs and low recovery rates.

**191. Reduce distortions associated with financial regulation and strengthen regulatory institutions.**

Ecuador's financial intermediation sector is composed of public and private commercial banks, as well as cooperatives. Each of these segments face different regulatory requirements and oversight. Weaker regulatory requirements and oversight of public banks and cooperatives have contributed to lower performance and to relatively higher risk associated with this segment. Private banks face more stringent regulations and oversight, but these are not aligned to international standards. The banking system is broadly stable and profitable, although potentially vulnerable to liquidity shortages if the dollarization regime is put at risk. The system is also shallow. Private credit to GDP is only 29 percent in Ecuador versus 47 percent in Colombia, 36 percent in Peru and 49 percent on average in LAC. A ceiling on interest rates for borrowing distorts the allocation of financial resources and limits access to financial services among riskier segments (such as small- and medium-sized enterprises), even when potentially high returns are expected. Strengthening regulatory institutions and reducing regulatory distortions can help direct financing resources toward more productive investments and unleash productivity gains.

***c) Pillar 3: Expanding economic opportunities***

**192. Improve quality of education.** Ensuring access to high-quality education that delivers the skill-set required for 'good-quality' jobs, particularly in the burgeoning private sector, is critical to establishing a more inclusive economy. Currently, access to education and learning development displays large regional and ethnic disparities. These need to be removed to ensure higher economic and inter-generational mobility. This can be done through the promotion of financing mechanisms that provide incentives to develop targeted educational support programs for the neediest populations. For instance, per student allocations could be raised for students and localities who need them most. Going forward, the policy focus needs to shift toward providing better quality education for all, with particular attention on the relevance of acquired cognitive and non-cognitive skills. Ecuador also needs to foster a better articulation between the teaching career and policies aiming at improving education quality, such as teacher training and evaluation of students' skills by following international standards like PISA. Career promotions and salary increases, for instance, could incentivize teachers' classroom performance, as well as their professional development. Increasing efficiency in public spending, particularly in higher education, is also fundamental to ensuring the sustainability of the system. All these measures need to be combined with national and sub-national policies that focus on reducing high dropout rates in secondary and tertiary education. High dropout rates not only deplete the acquired human capital. They also tend to discourage students from going back to school or participating in the labor market, giving rise to demoralized students and workers. Most importantly, such high rates add to the wastefulness of public resources and cause long-term negative consequences for mental and emotional health.

**193. Address high levels of malnutrition and stunting.** Reducing chronic malnutrition will require multiple synchronized and integrated efforts across several sectors, such as water, sanitation, health, social

protection and education. These efforts need to occur at different government levels (national, departmental, and at canton level), as well as in civil society. In this way, incentives for beneficiaries and service providers stand the best opportunity of being created. Administrative records, combined with better data on the quality of services, could facilitate the monitoring of outcomes and the rapid response to individuals in need. More specifically, Ecuador could enhance the registration of infants aged below one year, as well as the *Bono de Desarrollo Humano's* monitoring system. This second measure will encourage beneficiaries to comply with the program's necessary conditions and will increase the effectiveness of the cash transfer. The government has taken a step in the right direction by creating the Integrated Child Development Services agency in the Ministry of Social Inclusion and Economy (acronym in Spanish MIES). This new agency plans, coordinates, controls, and evaluates programs related to child development up to three years old focusing mainly on poor and vulnerable populations.

194. **Strengthen preventive and primary care.** Ecuador urgently needs to reverse the declining trends in immunizations, reduce high levels of teenage pregnancy rates, and improve coverage of essential maternal health services (prenatal care, postnatal care, and family planning), as well as reduce wasteful spending on unnecessary Caesarian-sections.
195. **Strengthen gender-based violence prevention efforts.** Ecuador has adopted a multi-sectoral approach to prevent and protect survivors of violence. To improve the effectiveness and inclusion of this strategy, the country needs to strengthen the integration of this model by consolidating alliances between the government, civil society organizations, and the private sector so as to protect women at risk. At the same time, the country also needs to increase the scope of services to reach the most vulnerable populations, in particular indigenous, afro-descendent and disabled women. In addition, it must focus on addressing the causes of violence through behavioral changes. Programs and policies to prevent violence and provide comprehensive support to survivors need to be improved in the education and the health systems. For instance, gender-sensitive violence prevention programs could be more systematically implemented in schools, while capacity building efforts in the health sector could focus on training health practitioners to screen and treat for violence in an ethical manner. Finally, the country needs to update data on different forms of violence against women, girls, and boys, in order to better inform policymaking. The last national survey was conducted in 2011.
196. **Protect and integrate vulnerable groups.** On the one hand, the targeting of current transfers needs to be improved, both in terms of making them less regressive and with respect of extending coverage to eligible households that are outside the system. On the other hand, the system of social registry needs to be reformed, both in terms of linking beneficiaries across various social assistance programs and as regards instituting efficient grievance redress mechanisms. This last measure requires a dynamic update of the social registry. Such a move would be particularly beneficial for mitigating inclusion and exclusion errors, monitoring leakages within the system, and ensuring a timely and smooth graduation of beneficiaries out of the system. In addition, it is important for Ecuador to strengthen safety nets to mitigate the adverse impacts of labor reallocations.
197. **Enhance ethnic minority integration.** The persistence of many socio-economic gaps in ethnic minority groups suggests that Ecuador needs to revise policies intended to address their situation, as well as the lens under which their specific development is being implemented. The assimilation of various ethnic groups to build a more cohesive society demands a better understanding of the limitations these groups face in multiple domains of their socio-economic and political life. To deal with this, an integrative policy system would benefit from a clear and well-defined participatory approach to development. For instance, an ethnic vision of development that builds on the positive

qualities of diverse cultures and includes a sense of identity used to mobilize labor and capital could be an effective vehicle for promoting local employment and growth in the ethnic milieu.

*d) Pillar 4: Improving the use of physical and natural capital*

198. **Strategically rethink the use of recently built physical infrastructure.** From 2007, Ecuador began addressing its deteriorating transport infrastructure by investing in roads, ports, airports, logistics equipment, and railways. These interventions expanded levels of service, but also resulted in utilization rates for ports dropping to 60 percent. In addition, many of the country's 37 airports are not operational or are severely underused. Meanwhile, large investments in the power sector shifted the generation matrix towards renewable sources. On the flipside, these investments led to problems of overcapacity and high indebtedness. Some of the new hydro plants are yet to start production. Those sectors that benefited from large investments are likely to find challenges in maintaining and operating their new infrastructure. In this context, a strategy is urgently needed for managing existing assets, increasing utilization capacity and adjusting services costs. Use of some assets may even need to be stopped, if this proves optimal from a financial and social point of view.
199. **Improve quality of water and sanitation services (WSS).** Despite the progress in expanding access to improved WSS, access remains clearly regressive. The service quality is low, while access and quality gaps between urban and rural areas are huge. To tackle these challenges under current fiscal constraints, it is important to ensure the efficient use of public expenditure. This requires a clear delineation of the roles and responsibilities of various national institutions working on WSS. This will not only help to allocate national and sub-national budgets more efficiently, but it will also reduce the inefficiencies in municipal planning downstream. More importantly, such a system can be aided by the introduction of a results-based financing mechanism to align incentives and, ultimately, enhance efficiency.
200. **Improve and complete irrigation network and enable development of agribusinesses to help farmers fully benefit from recent investments.** Investments and technical assistance to improve irrigation practices and network system should target selected areas of the Sierra and Coast regions, particularly where water stress is high. Efforts to enhance irrigation efficiency could be coupled with capacity-building initiatives that help strengthen productivity and commercialization of small farmers, provide business development support for sustainable inclusion of producers' organizations in value chains, increase value-added and improve market access. In addition, the capacity of the Agriculture Ministry (MAG) needs to be strengthened to exploit complementarities between various investments undertaken through other MAGAP programs.
201. **Invest in long term resilience and adaptation mechanisms to address high exposure to exogenous natural hazards and climate risks.** Ecuador needs to strengthen its DRM by increasing the effectiveness and efficiency of its related investments through: (i) incorporating mandatory DRM criteria in the design of public investment projects; (ii) investing in DRM capacity (e.g. pre-disaster early warning and post-disaster emergency response systems) and in the financing of disaster recovery (e.g. insurance schemes), and (iii) adopting an investment monitoring strategy. The country should develop a strategy for reducing the seismic vulnerability of its existing built environment as well as future infrastructure investments. It also needs to design a comprehensive strategy for financial protection against disasters, including mechanisms for risk retention and risk transfer.
202. **Maintain and improve investments in natural capital stocks and environmental service flows under (current) fiscal constraints.** Ecuador's use of natural capital nearly outstrips its ability to provide a sustainable flow of environmental services. In addition, its rank on environmental management is weak. In a constrained fiscal environment, the country has to improve its environmental management



and conservation efforts. This must be done with an eye on the trade-offs between gradual and well-managed utilization of natural resources, on the one hand, and the urgency to expand economic opportunities, on the other. This is necessary if Ecuador is to secure its natural habitat, while also providing productive employment for its most vulnerable populations. In addition, the country needs to mainstream sustainable use of environmental resources into its broader economic development agenda.

203. **Build capacity to address and manage modern environmental challenges that emerge with economic growth, increased consumption, and urbanization.** With increased urbanization, industrialization and economic development, Ecuador is facing a new and rapidly emerging set of environmental threats. These relate mainly to water stress, environmental pollution and solid waste management. While the country has already instituted certain environmental regulations under the 2008 Constitution, the existing framework may not be applicable to newer environmental challenges. Currently, governance remains weak and capacity is limited. Thus, going forward, Ecuador not only needs to build national and local capacity to address environmental challenges in various sectors of the economy, but it also needs to coordinate efforts across these sectors.

## ii. Knowledge and analytical gaps

204. This SCD also underlines knowledge gaps and areas for further research in Ecuador which are described below:
205. **Institutions.** The SCD considers the institutions (or lack thereof) Ecuador has in place to deal with the institutional challenges discussed above. However, there is need for further research on the transparency and the clarity of crucial institutional processes for public and private investments.
206. **Financial and institutional performance of state-owned enterprises:** SOEs account for a large share of Ecuador's GDP and of its public sector. These directly affect not only the quality and cost of goods and services but also the health of fiscal accounts. However, little is known about SOEs' financial and institutional performance, or how to improve them.
207. **Drivers of productivity growth.** Under less favorable external conditions, accelerating growth will required a more prominent role for the private sector and greater reliance on productivity gains. Key determinants of future productivity growth are likely to be those in areas where Ecuador lags behind and where the productivity dividends from closing this gap are substantial. There is almost no analysis on the productivity dividends of productivity drivers for Ecuador. Further analysis and possibly data collection (firm level data) are needed to explore a longer list of drivers and estimate their potential impact.
208. **Impacts of increasing violence.** Terrorist attacks have been impacting Ecuador since January 2018. These started in the northern frontier with Colombia, in the cities of San Lorenzo, Mataje, and Viche, all in the province of Esmeralda. In the following months, they began spreading to other cities. Consequently, President Moreno decided to step out of the dialog that the government of Colombia is having with some insurgent groups (notably, the National Liberation Army – Spanish acronym, ELN). This dialog formed part of the peace process that Colombia initiated in November 2016. Given the recent nature of these events, the SCD team lacks sufficient evidence at this time to assess their economic and social repercussions.
209. **Impacts of increasing migration from neighboring countries.** During 2016 and 2017, Ecuador was affected by the Venezuelan's massive migration. Almost 300,000 Venezuelans entered Ecuador in 2017, up from 100,000 in 2016. However, over two-thirds of the 2017 arrivals continued their journey

to countries further south like Peru, Chile and Argentina. Ecuador provides a legal framework that helps Venezuelans transit or stay for tourism for 180 days. They can also apply for any of the visas under the existing Organic Law on Human Mobility. One of these visas grants temporary residence if economic solvency is proven (Migration Statute (2011)), while another permits temporary residence for two years (UNASUR Visa (2017)). By the end of August 2017, more than 50,000 Venezuelans had obtained a residency permit or a visa. It is important to assess the socio-economic impacts of these migration events. However, the SCD team lacks sufficient evidence at this time to incorporate them as part of this diagnostic.

210. **The income protection system for the elderly in Ecuador.** Both the contributory and non-contributory pension schemes in Ecuador play a very important role in protecting income for elderly citizens. However, given their current parameters, Ecuador's aging population will affect both the actuarial sustainability of the country's social protection system (i.e., its ability to maintain a flow of contribution funds sufficient to finance the flow of benefits), and its fiscal sustainability (i.e. State's capacity to generate sufficient resources to fund promised benefits). In this context, the need exists for further research on these dimensions in order to get a better understanding of the potential impacts of the aging process and of the policy options to moderate these impacts.
211. **A comprehensive fiscal sustainability and efficiency analysis.** Ecuador requires a proper fiscal sustainability and efficiency analysis to better inform its decisions in the short and medium-term. Key inputs needed for debt sustainability analysis include: (1) a sound compilation of all public-sector obligations and the use of best international practices to consolidate them; (2) a credible set of assumptions about internal and external conditions; and (3) rigorous stress testing, particularly for potential external shocks to oil prices, growth, interest rates or other key conditions. Efficiency gains will be critical to ensure an adjustment that safeguards social gains in a sustainable manner. In this context, it is also important to carry out a detail analysis of the efficiency of public investments and re-current spending, as well as, the opportunities to raise revenues more efficiently.
212. **Distributional impacts of aggregate shocks.** Building on the findings of the recent regional report on the impacts of aggregate shocks in LAC, it is important to deepen this analysis for Ecuador. This will provide a better understanding of the temporary (short term) and permanent (long term) impacts of aggregate shocks such as the effect of natural disasters on Ecuador's poor and disadvantaged populations.
213. **Data gaps:** Ecuador is facing major challenges in updating key pieces of information and gathering new data to better inform and monitor public policies. Some of these challenges have been identified during the elaboration of the SCD and are listed below:
  - a. *Household budget survey:* this data is needed for analyzing ex-ante the distributional impact of fiscal policies. The last round was collected in 2012 which reflects old consumption patterns of Ecuadorians.
  - b. *Enterprise survey:* the last enterprise survey, which was collected in 2010, helps to understand the dynamics in the labor market from the demand side. Important efforts have been made by the Statistical Office using administrative records. However, this information is not complete as Ecuador's economy is characterized by high levels of informality and administrative records only cover firms in the formal sector.
  - c. *National Health and Nutrition survey* (ENSANUT acronym in Spanish): the SCD points out the importance of reducing malnutrition. To monitor this indicator, it is relevant to have updated and comparable data on health outcomes. The last round of ENSANUT was in 2012.



**TABLE IV-1 PRIORITIZATION OF KEY CHALLENGES OR OPPORTUNITIES**

Key challenges or opportunities	Prioritization criteria			Timing
	Macroeconomic sustainability	Efficiency gains	Poor and vulnerable	
Pillar 1: Addressing macroeconomic imbalances				
Bring fiscal accounts to a sustainable position, re-build fiscal buffers, and put in place fiscal institutions to adequately manage oil windfall	X	X	X	ST
Improve the efficiency of public spending at different government levels, shifting resources towards priority social spending	X	X	X	ST
Increase efficiency and neutrality of the tax system; broadening bases, phasing out distortive taxes and rationalizing tax benefits		X		ST
Address external imbalances and rebuild international reserves to safeguard the dollarization regime	X			ST
Pillar 2: Lifting barriers to private sector development				
Align labor cost to productivity, modernize labor regulations, and increase effectiveness of safety nets	X	X	X	ST
Integrate the economy to the rest of the world by revamping policies to attract foreign investments and reducing barriers to trade	X	X		ST
Reduce costs and uncertainties associated with business regulations and its enforcement		X		ST
Reduce distortions associated with financial regulation and strengthen regulatory institutions	X	X		ST to MT
Pillar 3: Expanding economic opportunities				
Improve quality of education, and address skill gaps in the labor market		X	X	ST to MT
Strengthen coordinated efforts to address high levels of malnutrition and stunting, and strengthen preventive and primary health care		X	X	ST to MT
Strengthen gender-based violence prevention efforts			X	MT
Enhance integration of vulnerable groups and ethnic minorities			X	MT
Pillar 4: Improving the use of physical and natural capital				
Rethink strategically the use and the sustainability of recently built infrastructure, and resolve how to deal with unfinished projects	X	X		MT
Improve quality of water, sanitation, and irrigation services		X	X	MT
Invest in long term resilience and adaptation mechanisms to address high exposure to exogenous natural hazards and climate risks	X	X	X	MT to LT
Improve investments in natural capital stocks and environmental services to address traditional and emerging challenges under (current) fiscal constraints.		X	X	MT to LT

Note: ST- short-term, MT – medium-term, LT – long-term

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## A. Annex 1: Summary of socio-economic indicators

TABLE ANNEX A-1: Summary of socio-economic indicators (% of GDP unless indicated)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Real</b>																	
GDP growth	4.0	4.1	2.7	8.2	5.3	4.4	2.2	6.4	0.6	3.5	7.9	5.6	4.9	3.8	0.1	-1.6	2.7
GDP per capita growth	1.9	1.9	1.0	6.4	4.0	2.6	0.4	4.5	-1.2	1.6	6.1	3.9	3.3	2.2	-1.4	-3.1	1.2
Nominal GDP (US\$ billion)	24.5	28.5	32.4	36.6	41.5	46.8	51.0	61.8	62.5	69.6	79.3	87.9	95.1	101.7	99.3	98.6	102.3
GDP per capita (2011 international PPP)	7,573	7,715	7,791	8,286	8,617	8,839	8,874	9,270	9,154	9,304	9,869	10,255	10,589	10,817	10,660	10,334	10,459
Inflation (%)	37.7	12.5	7.9	2.7	2.2	3.3	2.3	8.4	5.2	3.6	4.5	5.1	2.7	3.6	4.0	1.7	0.4
<b>Fiscal Accounts</b>																	
Overall Balance	0.0	0.7	1.4	1.9	0.6	2.9	2.7	0.6	-3.6	-1.4	-0.1	-0.9	-4.6	-5.2	-5.1	-7.4	-5.3
Primary Balance	4.1	3.6	3.9	4.0	2.6	4.8	4.4	1.7	-3.0	-0.8	0.5	-0.2	-3.5	-4.2	-3.8	-5.8	-3.2
Total Revenue (and Grants)	20.2	22.3	21.3	22.3	22.0	24.1	26.7	35.8	29.4	33.3	39.3	39.3	39.2	38.4	33.8	30.7	32.0
Tax Revenues	12.1	12.9	12.5	12.6	13.0	13.9	14.4	14.6	15.4	16.1	17.3	19.3	19.1	18.9	20.8	19.0	19.1
Non-Tax Revenues	2.2	3.9	3.4	3.3	3.6	3.9	4.1	5.7	4.4	4.0	3.5	3.2	4.6	4.7	5.3	5.6	5.7
Resource Revenues (if applicable)	5.5	4.9	5.1	5.8	5.3	6.9	6.5	14.0	8.3	11.3	16.3	13.9	12.0	10.7	6.4	5.5	5.7
Total Expenditure	20.2	21.6	19.9	20.5	21.4	21.2	24.0	35.2	33.0	34.7	39.5	40.3	43.7	43.6	39.0	38.2	37.3
Current Expenditures	14.5	16.0	15.4	16.1	17.0	17.0	17.4	23.9	22.3	24.3	27.7	27.8	28.4	28.5	27.7	27.0	27.8
Capital Expenditures	5.8	5.5	4.5	4.4	4.4	4.2	6.6	11.3	10.7	10.4	11.8	12.5	15.4	15.1	11.3	11.2	9.5
Aggregate Public Debt	57.9	49.6	44.7	39.8	35.0	28.8	27.2	22.2	16.4	19.2	18.4	21.2	24.0	29.6	33.0	38.6	45.1
External	46.5	39.9	35.4	30.2	26.1	21.8	20.8	16.3	11.8	12.5	12.7	12.4	13.6	17.3	20.4	26.0	30.8
Domestic	11.4	9.7	9.3	9.5	8.9	7.0	6.4	5.9	4.5	6.7	5.7	8.8	10.4	12.3	12.6	12.6	14.3
<b>External Accounts</b>																	
Current Account Balance			-1.2	-1.3	1.1	3.7	3.7	2.9	0.5	-2.3	-0.5	-0.2	-1.0	-0.5	-2.1	1.5	-0.2
Foreign Direct Investment (Net)			2.7	2.3	1.2	0.6	0.4	1.7	0.5	0.2	0.8	0.6	0.8	0.8	1.3	0.8	0.6
Gross Reserves						4.3	6.9	7.2	6.1	3.8	3.7	2.8	4.6	3.9	2.5	4.3	2.4
<b>Social Indicators</b>																	
Moderate poverty (consumption, %)	44.8*					38.3								25.8			
Moderate poverty (income, %)							36.7	35.1	36.0	32.8	28.6	27.3	25.6	22.5	23.3	22.9	21.5
Extreme poverty (consumption, %)	18.8*					12.9								5.7			
Extreme poverty (income, %)							16.5	15.7	15.4	13.1	11.6	11.2	8.6	7.7	8.5	8.7	8.4

Note: (\*) corresponds to 1998



## B. Annex 2: Particularities of the prioritization process

214. **From the main challenges and opportunities identified in the SCD diagnostic, the prioritization process selects those that are most critical for reigniting inclusive, sustainable growth and, by extension, will significantly contribute to poverty reduction and shared prosperity.** The SCD diagnostic suggests that three key elements form the foundation of such a growth process in Ecuador: (i) promoting macroeconomic sustainability; (ii) enabling an efficient allocation of resources in the public and the private sectors; and (iii) protecting the poor and the vulnerable. These elements are therefore used as filters in the process of selecting priority challenges and opportunities. A challenge or opportunity is considered as a priority challenge for the government if it *importantly* contributes to at least one of these three elements and does not negatively impact the others (trade-offs). Some challenges or opportunities acknowledged throughout the diagnostic process did not meet these selection criteria and were therefore not presented in the list of priorities. The table below presents a longer list of challenges or opportunities for the government, along with an assessment of the extent to which each contributes to (or undermines) the filters in the selection criteria (Table Annex B-1).

215. **An illustration of the selection process implemented for each of the identified challenges or opportunities is detailed for “Increase access to basic services in lagged regions”.** During the last decade, Ecuador made progress in increasing access to basic services, but coverage is still uneven across the country. For instance, urban cities almost reached universal water coverage, while coverage in some rural areas remains at 46 percent. Wider gaps are seen in improved sanitation services between urban and rural areas as well as between regions. To reduce these regional disparities, additional investments in water infrastructure are needed in order to expand access to improved water and sanitation services. Even though this challenge might have a positive impact on poverty and vulnerable populations in the medium or long term, it would have a negative impact on macroeconomic sustainability and possibly on efficiency gains in the short term because it would deviate scarce fiscal resource from uses that promise potentially higher social returns. Similarly, the increase in access to education and health services in lagged areas via new investments seems less likely to meet the SCD prioritization criteria when public resources are very limited and the public-private partnership framework has not yet been developed.

### a) Timing

216. **Another aspect that the prioritization exercise takes into consideration is whether the challenge or opportunity is expected to be addressed in the short (ST), medium (MT) or long term (LT).** The timing assesses the possible timeframe under which actions to tackle the difficulty or achieve the goal could be implemented. As a reference timeframe, the short term is approximately within a year, the medium term is within four to five years, and the long term is more than five years.

### b) Process

217. **The prioritization exercise is based on a process of voting and validating the respective challenges and opportunities, which took place at various stages throughout the SCD’s preparation.** The filters through which the selection was made have been designed in consultation with an extended team, including members from the CMU, GPs and PMs. The longer list of challenges and opportunities presented in Table Annex B-1 derive from the diagnostic done in this report, which was enriched through multiple internal and external consultations. The final prioritization exercise was jointly led by the core team, Program Leaders who represented respective sectors, and the Country Representative who represented the CMU.



**TABLE ANNEX B-1 LIST OF CHALLENGES OR OPPORTUNITIES TO ADDRESS STRUCTURAL CHALLENGES**

Challenges or opportunities	Prioritization criteria			Timing
	Macroeconomic sustainability	Efficiency gains	Poor and vulnerable	
Pillar 1: Addressing macroeconomic imbalances				
Bring fiscal accounts to a sustainable position, re-build fiscal buffers, and put in place fiscal institutions to adequately manage oil windfall	(+++)	(++)	(+)	ST
Improve the efficiency of public spending at different government levels, shifting resources towards priority social spending	(++)	(+++)	(++)	ST
Increase efficiency and neutrality of the tax system; broadening bases, phasing out distortive taxes and rationalizing tax benefits	(+)	(+++)		ST
Address external imbalances and rebuild international reserves to safeguard the dollarization regime	(+++)	(+)		ST
Manage public indebtedness	(+)	(+)		ST to MT
Pillar 2: Lifting barriers to private sector development				
Align labor cost to productivity, modernize labor regulations, and increase effectiveness of safety nets	(++)	(+++)	(+)	ST
Integrate the economy to the rest of the world by revamping policies to attract foreign investments and reducing barriers to trade	(++)	(+++)		ST
Reduce costs and uncertainties associated with business regulations and its enforcement		(+++)		ST
Reduce distortions associated with financial regulation and strengthen regulatory institutions	(++)	(++)		ST to MT
Support investment in research and innovation for business development (*)	(-)			MT to LT
Support expansion in telecommunication and digital services (*)	(-)	(+)	(+)	MT to LT
Pillar 3: Building human capital and expanding economic opportunities				
Improve quality of education, address skill gaps in the labor market		(+++)	(++)	ST to MT
Strengthen coordinated efforts to address high levels of malnutrition and stunting, and reinforce preventive and primary health care		(++)	(+++)	ST to MT
Strengthen gender-based violence prevention efforts			(++)	MT
Enhance integration of vulnerable groups and ethnic minorities			(++)	MT
Increase access to basic services in lagged regions via new investments	(-)	(-)	(++)	MT to LT
Pillar 4: Improving the use of physical and natural capital				
Rethink strategically the use and the sustainability of recently built infrastructure, and how to deal with unfinished projects	(+++)	(+++)		MT
Improve quality of water, sanitation, and irrigation services		(++)	(+++)	MT
Invest in adequate industrial waste management	(-)	(+)	(+)	MT to LT
Invest in long term resilience and adaptation mechanisms to address high exposure to exogenous natural hazard and climate risk	(++)	(+++)	(++)	MT to LT
Shift towards low carbon emission technologies		(++)	(-)	MT to LT
Improve investments in natural capital stocks and environmental services to address traditional and emerging challenges under (current) fiscal constraints.		(+++)	(++)	MT to LT

Note: (+++) very important, (++) important, (+) modest, (=) neutral, (-) undermines or temporarily undermines.

ST = short term, MT = medium term, and LT = long term. (\*) this support is likely to have budgetary implications