

Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

# ECUADOR: Growing Resilient for a Better Future



**AUTHORS:**  
Christian Yves Gonzalez Amador  
Julio Velasco  
Juan Jose Miranda



ECUADOR:

**Growing Resilient  
for a Better Future**

Copyright © 2024, International Bank for Reconstruction and Development

World Bank  
Ecuador Country Office  
Av. 6 de Diciembre y Boussingault, piso 13  
Tel: (593) 2943600  
[www.worldbank.org.ec](http://www.worldbank.org.ec)

This book is a product of the staff of the International Bank for Reconstruction and Development/the World Bank. The findings, interpretations and conclusions expressed in this book do not necessarily reflect the views of the Executive Directors of the World Bank or the governments they represent.

The boundaries, colors, denominations and other information shown on any map in this work do not imply any judgement on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Nothing herein shall constitute or be deemed a limitation or waiver of the privileges and immunities of the World Bank, all of which are specifically reserved.

### **Rights and permissions**

The International Bank for Reconstruction and Development/World Bank encourages the dissemination of its work and allows the reproduction of parts of this book, provided the source is cited.

### **Attributions**

World Bank (2024). *Ecuador: Crecimiento Resiliente para un Futuro Mejor*. Ecuador Country Office: World Bank Group. [*Ecuador: Resilient Growth for a Better Future*].

### **Design and layout**

Manthra Comunicación · [info@manthra.ec](mailto:info@manthra.ec)

First edition, April 2024



# Table of Contents

<b>Acknowledgments.....</b>	<b>10</b>
<b>Executive Summary: Growing Resilient for a Better Future. ....</b>	<b>12</b>
Removing cross-cutting barriers to private sector development.....	16
Making the labor market more resilient. ....	16
Enhancing human capital and reducing skill mismatches.....	17
Boosting competition to improve firm performance.....	17
Enhancing trade to improve productivity. ....	19
Unleash opportunities in key sectors. ....	21
Making mining work for development. ....	21
Fostering agriculture resilience and competitiveness.....	22
Setting effective coordination to release Ecuador’s tourism potential in more profitable segments. ....	23
<b>Chapter 1. Relaunching a More Resilient Growth for a Better Future. ....</b>	<b>28</b>
The end of the oil boom and efforts to rebalance the economy have dampened economic growth as ongoing reforms were insufficient. ....	30
Growth in non-oil tradable sectors could not offset the decline in oil exports.....	34
These patterns led to lower capital accumulation and aggregate productivity losses driven primarily by allocative inefficiencies. ....	38
Allocative inefficiencies are caused by the lack of policy and market mechanisms to manage volatility and structural constraints to firm productivity. ....	45
Actions to unleash Ecuador’s private sector potential and put the country on track to reach a high-income status.....	50
<b>Chapter 2. Addressing Labor Rigidities and Skill Mismatches. ....</b>	<b>54</b>
Rigid labor market regulations constitute a critical constraint to growth in Ecuador. ....	56
Improving skills and reducing mismatches could lessen the effects of labor rigidities.....	62
Easing labor rigidities is key but should be joined by efforts to protect the vulnerable, improve human capital, reduce skill mismatches, and fuel the labor demand.....	67

### **Chapter 3. Addressing Other Critical Cross-Cutting Constraints. ....70**

Enhancing domestic competition can increase productivity. ....	73
Trade openness could help to enhance efficiency and productivity. ....	83
Policy options to address non-labor cross-cutting constraints. ....	87
Improving market regulation to enhance competition gradually. ....	87
Enhancing trade to improve productivity. ....	89

### **Chapter 4. Making Mining Work for Development. ....94**

Shortcomings in formal mining have ultimately fueled illegal mining. ....	98
Without addressing inclusion and sustainability, Ecuador’s mining sector would be condemned to face the negative effects of growing illegal mining. ....	102
Institutional shortcomings limit the potential positive impact of mining on surrounding communities. ....	103
The underdeveloped consultation mechanism increases vulnerability and uncertainty. ....	103
Environmental protection mechanisms are not fully functional. ....	105
The institutional setup to control mining operations is still underdeveloped. ....	105
Addressing social and environmental issues associated with mining activities would help Ecuador to protect economic value and growth in the long run. ....	106

### **Chapter 5. Enhancing Agriculture Productivity and Market Linkages to Foster Resilience and Competitiveness.....114**

Without important productivity gains, agriculture growth could not be sustainable. ....	118
Small farmers face important constraints that drag down overall productivity. ....	122
Public expenditures distort agricultural markets and contribute little to addressing structural challenges. ....	124
Ecuador has been unable to fully unleash its potential in high-value crop exports. ....	126
The domestic food market represents an opportunity for small and medium farms. ....	131
Policy options to enhance agriculture productivity and market linkages. ....	133

**Chapter 6. Setting a Shared Vision and Coordinating Efforts to Release Ecuador’s Tourism Potential. ....140**

Despite some progress, Ecuador is struggling to unleash its tourism potential..... 142

Ecuador could foster lucrative international tourism segments..... 145

The sector is constrained by inadequate marketing, lack of coordination, specific business environment issues, and poor infrastructure. .... 146

    Ineffective marketing and the lack of coordination prevent Ecuador from getting greater value from its cultural and natural assets..... 147

    The tourism-specific business environment is constrained by complex regulations, skill mismatches, and limited access to finance. .... 148

    Underdeveloped transport and communication infrastructure continues to constrain tourism outside Quito, Guayaquil, and Galapagos. .... 149

    Increasing perceptions of crime and instability are becoming an important challenge..... 150

    Limited control of potential environmental adverse effects could hamper the sector’s sustainability..... 150

Policy options to set a shared vision and coordinate efforts to release Ecuador’s tourism potential.....151

**References .....154**

# List of Figures

- Figure 1.** Since the oil price boom ended, Ecuador has made substantial efforts to rebalance its economy.....31
- Figure 2.** The effect of this fiscal consolidation and declining oil exports were not offset by private investment and non-oil exports. ....32
- Figure 3.** The structure of formal firms has remained almost unchanged..... 33
- Figure 4.** The surge of shrimp and mining exports has only partially offset the decline in oil export volumes and the contraction of service exports triggered by the pandemic..... 35
- Figure 5.** Domestic demand compression slowed down most sectors, including manufacturing, showing the high dependency on fiscal impulse, while idiosyncratic factors drove shrimp and mining..... 36
- Figure 6.** The economic slowdown deteriorated labor outcomes, increased agricultural employment, and eroded labor earnings..... 39
- Figure 7.** The end of the commodity boom led to a contraction in capital accumulation and productivity losses, mainly resulting from allocative inefficiencies. ....41
- Figure 8.** Crime is becoming an increasing concern. ....42
- Figure 9.** Aggregate formal firms’ productivity is constrained by the low productivity of micro and small firms and negligible productivity gains through the firm’s life cycle.....43
- Figure 10.** The market selection process of better firms is broken. ....45
- Figure 11.** High public expenditure procyclicality exacerbates inefficiencies..... 46
- Figure 12.** Policy and market mechanisms to allow Ecuador to adjust are not fully functional..... 47
- Figure 13.** Policy instability and limited governance have prevented Ecuador from reaching a consensus on addressing cross-cutting constraints to growth. .... 51
- Figure 14.** Rigid labor regulation is one of the factors behind high informality.....58
- Figure 15.** Above-inflation minimum wage increases propel informality instead of higher labor income.....59
- Figure 16.** Severance payments are high and increasing..... 60
- Figure 17.** Excessive labor costs undermine firms’ development..... 62
- Figure 18.** Despite improving education attainment, education quality still needs to improve. ....63
- Figure 19.** Ecuadorians have lower cognitive skills than their peers in other countries. ....64
- Figure 20.** Educational mismatch is a structural and worsening problem in Ecuador.....64
- Figure 21.** Premiums and penalties have decreased over the past two decades but are still high..... 66
- Figure 22.** The lack of competition is evidenced in concentrated structures in the manufacturing sector and increasing price-cost margins and is worsened by burdensome product market regulation.....74
- Figure 23.** State-owned enterprises operate in a wide range of sectors, including competitive ones. ..75
- Figure 24.** Discriminatory barriers against foreign investors, burdensome procedures, and price controls also hinder competition. ....78
- Figure 25.** Some legal arrangements do not favor the independence and efficiency of the competition agency.....82

<b>Figure 26.</b> Resource-based products continue to dominate exports.....	84
<b>Figure 27.</b> Non-oil export level and growth are concentrated in a few firms.....	85
<b>Figure 28.</b> Ecuador remains a relatively closed economy despite some recent progress. ....	85
<b>Figure 29.</b> Non-tariff barriers to trade are also high.....	86
<b>Figure 30.</b> Trade agreements could help increase market access for Ecuadorian exports. ....	87
<b>Figure 31.</b> Ecuador is seen as an attractive and competitive mining province.....	96
<b>Figure 32.</b> Ecuador is seen as an attractive and competitive mining province.....	97
<b>Figure 33.</b> Social conflict has been a constant in Ecuador’s mining scenario.....	99
<b>Figure 34.</b> Illegal mining has generated more than 4,000 contaminated sites.....	101
<b>Figure 35.</b> The Council for the Equality of Peoples and Nationalities map identifies half of Ecuador as indigenous.....	104
<b>Figure 36.</b> The sector’s development requires decisive action to protect mining value in the medium term .....	108
<b>Figure 37.</b> Agriculture is a key sector in the economy. ....	116
<b>Figure 38.</b> The agriculture sector in Ecuador is highly concentrated in a few regions and mostly low-value-added products. ....	117
<b>Figure 39.</b> Agriculture is constrained by low productivity. ....	119
<b>Figure 40.</b> Access to financial services is low. ....	123
<b>Figure 41.</b> Agriculture expenditure is low and inefficient.....	125
<b>Figure 42.</b> Ecuador can expand its agriculture exports by tapping into its potential in high-value crops.....	129
<b>Figure 43.</b> Road quality continues to be an important constraint on agricultural development. ....	130
<b>Figure 44.</b> The local market is growing and has important needs. ....	132
<b>Figure 45.</b> Ecuador’s tourism has lagged other countries in the region.....	143
<b>Figure 46.</b> The bulk of tourist activity takes place in Quito (Pichincha) and Guayaquil (Guayas). ....	144
<b>Figure 47.</b> Ecuador’s tourism struggles to increase investments and productivity.....	146
<b>Figure 48.</b> Ecuador spends little on tourism.....	147
<b>Figure 49.</b> Ecuador ranks poorly in the Travel and Tourism Development Rating .....	148
<b>Figure 50.</b> Quito and Guayaquil enjoy inexpensive international air connections.....	149



## List of Tables

**Table 1.** Industries with lower job mobility, higher non-wage labor costs and minimum wage incidence, lower access to credit, higher zombie firms, and lower competition are associated with higher misallocation. ....49

**Table 2.** Short-term policies for sustainable mining. ....107

**Table 3.** Long-term policies for sustainable mining. ....111

**Table 4.** Address critical challenges to fully take advantage of its strong agriculture export potential. ....127

## List of Boxes

**Box 1.** The manufacturing sector is highly dependent on domestic markets. ....37

**Box 2.** Ecuador’s labor laws and regulations alternate between flexibility and greater restrictions. ....57

**Box 3.** Stagnant growth and productivity in the Latin American and the Caribbean region seem related to a lack of competition. ....72

**Box 4.** Overhauling Ecuador’s dysfunctional insolvency framework could mobilize resources stuck in unprofitable endeavors and encourage risk-taking in new endeavors. ....79

**Box 5.** International evidence confirms that competition reforms are key to fostering economic growth. ....88

**Box 6.** Overhauling Ecuador’s dysfunctional insolvency legal framework. ....90

**Box 7.** The trade agreement with Costa Rica is likely to benefit both countries. ....91

**Box 8.** Colombia’s royalty system is a model to follow in generating benefits and reducing inequalities. ....110

**Box 9.** Moquegua is an example of progressively deepening trust and dialogue. ....110

**Box 10.** Chile is an example of a broad participatory process to define the National Mining Policy. ....112

**Box 11.** Implementing the Impact-Benefit Agreements approach could strengthen trust and predictability. ....113

**Box 12.** Agriculture firms’ productivity has barely improved in recent years. ....120

**Box 13.** Productive alliances could help small farmers to overcome some constraints. ....135

**Box 14.** Productive alliances could help to foster exports while improving small producers’ earnings. ....136

**Box 15.** Efforts to increase agriculture productivity need complementary measures to prevent deforestation. ....138

## Acronyms

ARCERNNR	Agencia de Regulación y Control de la Energía y los Recursos Naturales no Renovables
ARCOTEL	Agencia de Regulación y Control de las Telecomunicaciones
CECFMI	Special Committee for the Control of Illegal Mining
CODELCO	Corporación Nacional del Cobre, Chile
DMO	Destination management organization
EITI	Extractive Industries Transparency Initiative
EMCO	<i>Empresa Coordinadora de Empresas Públicas</i>
ENAMI	Empresa Nacional Minera
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GVC	Global Value Chain
HHI	Herfindahl–Hirschman index
IADB	InterAmerican Development Bank
INIAP	National Institute for Agricultural Research
MAATE	Ministry of Environment, Water and Ecological Transition
MSE	Medium and Small Enterprises
MFN	Most Favored Nation
NTMs	Non-Tariff Measures
OECD	Organization for Economic Co-operation and Development
PCM	Price cost margins
R&D	Research and Development
RIA	Regulatory impact assessments
SCPM	<i>Superintendencia de Control del Poder de Mercado</i>
SNAP	National System of Protected Areas
SOE	State-Owned Enterprise
SRI	<i>Servicio de Rentas Internas</i>
TFP	Total Factor Productivity
UNESCO	United Nations Educational, Scientific and Cultural Organization
WBG	World Bank Group









# Acknowledgments

The Ecuador Country Economic Memorandum (CEM) was prepared by a World Bank team led by Christian Yves Gonzalez Amador, Julio Velasco, and Juan Jose Miranda. The team also included Bjorn Philipp, Tanja Goodwin, Maria Laura Sanchez Puerta, Adolfo Rouillon, Aguiar Roman, Alberto Anderson, Andres Martinez, Andrew Beath, Angel Alfredo, Anthony Mavrogiannis, Arthur Galego, Carolina Vaira, Barbara Cunha, Daiana Blanstein, Daisy Loayza, Dennis Sanchez, Diego Grijalva, Elena Resk, Esteban Ferro, Fausto Patiño Peña, Francisco Andrade, Graciela Miralles, Gustavo Canavire, Harshit Kumar Gupta, Hector Pena, Israel Osorio, Ivan Gachet, Javier Aguilar, Johannes (Hans) Jansen, Jose Villascusa, Karlygash Serikovna, Leandro Deambrosio, Luis Alberto Portugal, Luis Castro, Mohammad Mohammadi, Noelia Carreras, Paula Ramos, Renzo Lavin, Richard Gordon, Roberto Echandi, Seidu Dauda, Steven Pennings, Thomas Reardon, Tristany Armangue, Truman Packard, and Winston Dawes.

The report was prepared under the supervision of Doerte Doemeland, Genevieve Connors, Robert Talierno, and Oscar Calvo Gonzalez. The team is grateful for the guidance and support of Marianne Fay, Issam A. Abousleiman, Pilar Maisterra, and Boris Weber.

The peer reviewers were Augusto de la Torre, Consultant (ELCMU), Kevin Carey, Adviser (EMNDR), and Renato Nardello, Program Leader (SLCDR).

The team appreciates the excellent collaboration with the Government of Ecuador. It acknowledges the Ministry of Economy and Finance coordination efforts, plus the valuable support of Paula Suarez Buitron, Advisor to the Executive Director.





# Executive Summary

## Growing Resilient for a Better Future

**To sustain poverty reduction and achieve high-income country status, Ecuador needs to tap into additional sources of growth.** The country is blessed with natural resources, including arable land, forests, fish, diverse ecosystems, significant hydropower and oil, gold, and copper. It also has significant potential in agriculture, extractive sectors, and tourism. In the past, Ecuador has been one of Latin America's fastest growing countries, with an average growth rate of 4.6 percent between 2002 and 2014. However, growth has remained elusive in recent years, averaging only 0.5 percent between 2014 and 2019 and 0.2 percent between 2014 and 2022. Without accelerated growth, Ecuador will struggle to preserve its income per capita and will not be able to reach high-income country status.

**Past growth relied on an unsustainable expansion of public spending, fueled by windfall gains from the oil price boom and a costly erosion of fiscal buffers, and coincided with the introduction of rigidities to private sector development.** During a period of strong growth and high oil prices, Ecuador dismantled its sovereign oil funds, accumulated new debt, and defaulted on old debt to pay for a large public investment program. Since then, Ecuador has struggled to regain access to international capital markets under favorable conditions, having to pay higher interest rates than its macroeconomic fundamentals suggest. The medium-term economic and social gains from the large public investment program seem limited.

**Fiscal policy and economic flexibility are critical in a dollarized economy.** Ecuador is the largest fully dollarized country in the world. Full dollarization was critical in supporting macroeconomic stability by providing credibility and keeping inflation in check. However, the loss of an independent monetary policy, including exchange rate actions, makes it more difficult to respond to shocks. With policy mechanisms limited, any adjustments fall on nominal prices severely constrained by price and wage controls, which thwarts the adjustments' impacts, erodes competitiveness, and undermines growth. The real exchange rate contributes little in response to shocks because it is mainly driven by changes in the price level of the United States. In this context, Ecuador needs to rely on fiscal policy to deal with shocks but the lack of fiscal buffers, high public debt, and limited access to international capital markets constrain fiscal policy's room to maneuver.

**Ecuador has made significant progress in restoring fiscal buffers in recent years, but continued rigidities meant the consolidation carried high economic and social costs.** The consolidation reduced the fiscal deficit (from 9.8 percent of GDP in 2016 to near balance in 2022), stabilized public debt, reduced arrears, restored international reserves (increased from 2 percent of GDP in 2018 to 7.3 percent of GDP in 2022), and cemented confidence on dollarization. However, it also dampened domestic demand. The pandemic, natural disasters, social unrest, political instability, rising insecurity, and declining oil production exacerbated the situation. Weaker demand affected all sectors, including manufacturing, and led to significant productivity losses. Firms struggled to adapt to the new economic context, and the private sector remained overwhelmingly dominated by small firms with low productivity. The productivity of non-oil firms fell 33 percent between 2012 and 2020, with increasing allocative inefficiencies more than offsetting limited productivity gains from technical and managerial improvements. As a result, growth plummeted, formal employment demand declined, and labor earnings compressed, affecting the most vulnerable groups, such as self-employed individuals, young people, rural workers, agricultural workers, and those with limited educations. The dampening of formal labor demand and domestic demand contributes to an expansion in agriculture employment and informality, as workers had few other options for employment, that further undermines aggregate productivity.

**The private sector will need to become a more significant driver of growth to break Ecuador's cycle of economic ups and downs and achieve sustainable growth.** The informal sector employs more than half of Ecuador's working-age population, and 97 percent of formal firms are micro or small enterprises that struggle to create jobs and increase productivity. Private sector development is essential not only for boosting jobs but also for reducing macroeconomic imbalances and addressing emerging challenges, such as climate change. Just as important, it can give the public sector more resilient revenues and support foreign exchange inflows to expand the money supply. With a recent referendum mandate to stop oil production in the *Yasuni* national park in the short run and a global push to reduce oil consumption in the medium to long term, diversifying sources of growth is becoming more critical than ever for creating new and better jobs and increasing household income. Limited access to external financing and declining oil production means Ecuador cannot return to previous models of state-led expansion that relied on oil windfall gains. The private sector could also help the country take advantage of emerging opportunities, including the possible increase in metal demand due to global decarbonization efforts.

**In addition to the need to control the recent upsurge of insecurity and crime, this report argues that unleashing Ecuador's private sector potential and putting it on track to reach high-income status will require sustained actions in three areas:**

- **Maintain a sustainable fiscal path:** As a fully dollarized economy, fiscal adjustment is the only key policy tool at Ecuador's disposal to deal with shocks, including those related to commodity prices and natural disasters. Maintaining a sustainable fiscal path to reduce public debt and preserving strong fiscal buffers are critical to making the economy more resilient.

Better and improve public services are critical for growth and poverty reduction. The country will face significant challenges on the fiscal front in the near term, such as spending pressures related to address the consequences of the El Niño event, including the current drought that is likely to reduce hydroelectric production and force the country to import electricity from Colombia. While highly important, fiscal policy is not the focus of this report but was extensively discussed in the last Public Finance Review (World Bank, 2019), which highlighted the importance of increasing the low value-added tax rate, reducing tax expenditures, reducing the fuel subsidy while protecting vulnerable people, securing social security sustainability, and containing the public wage bill growth.

- **Remove rigidities to private sector development across sectors:** To grow faster, Ecuador needs to reallocate its productive capacities to better uses, foster firms' growth and productivity, and boost labor demand for more and better-paid jobs. Removing labor market rigidities is important, but it is also critical to improve labor supply by enhancing human capital and foster labor demand by removing other barriers to private sector growth. This report analyses those barriers related to labor market performance, competition, and international trade in more detail. It does not provide a comprehensive assessment of the economic effects of non-wage price distortions and barriers to access to finance. They have been extensively analyzed in the Macroeconomic Stability and Competitiveness Challenges report (World Bank, 2019), the Trade and Investment Competitiveness report (World Bank, 2019), the Creating Market in Ecuador (World Bank Group, 2021), and the recent Financial Sector Assessment (World Bank, 2023). These reports concluded the need to gradually unwind distortions generated by interest rate ceilings and price controls, including those in energy and agriculture, while also addressing vulnerabilities in public banks, strengthening the national payments system, and leveling the playing field of regulation and supervision of private banks, public banks, and cooperatives.
- **Unleash opportunities in critical sectors:** The report identifies opportunities to increase the growth potential for agriculture, mining, and tourism, which are critical in the contexts of pro-poor growth and climate change. Agricultural exports represent more than 40 percent of the total exports, employ about a third of employees, and have the potential to expand to higher value-added products. Mining exports are the fourth largest export sector and can expand considerably and help develop local communities. Tourism represents about 3 percent of Gross Domestic Product (GDP) and about 5 percent of employment. It has the potential to grow and generate jobs.

**These policy areas interact with each other and are critical to protect dollarization and support any efforts to tackle insecurity.** Maintaining a sustainable fiscal path is a precondition to fostering growth not only because it could help to reduce country risk, facilitating the return to international capital markets, but also because it is critical to protecting dollarization and reducing the macroeconomic risk perceived by private and foreign investors. Removing barriers to private sector development across sectors and unleashing sectoral opportunities are key to fostering growth in activities not directly linked to the public sector. In turn, the private sector growth is critical to reducing pressure on public's fiscal account, avoiding the need for a larger fiscal consolidation and shielding dollarization. In addition, tackling problems in these policy areas could improve the country's prospects for dampening the recent security deterioration by reducing uncertainty and creating new labor opportunities. A sustainable fiscal path is important to reducing the probability of larger and disordered consolidations that could limit the government's capacity to provide public services, including security and protection of vulnerable people. Fostering growth, meanwhile, is important not only to providing the public sector with revenues to finance efforts to reduce insecurity but also to providing people with job opportunities to be less likely to be affected by crime.



More than half of employees earn less than the minimum wage, affecting vulnerable workers the most, including young, medium-educated, and poorer people in primary sectors, unskilled services, and construction.

## Removing cross-cutting barriers to private sector development

### Making the labor market more resilient

**Ecuador has exceptionally rigid labor regulations.** Although labor laws allow about 40 types of contracts, only a handful are widely used. Hourly contracts, intermediation outsourcing, and fixed-term contracts are forbidden; occasional contracts have a 35 percent surcharge; and the probationary period for new employees has been reduced from 12 months to 90 days. The country has the region's second-highest minimum wage as a percentage of GDP per capita, and its above-inflation increases contrast with the economy's declining labor productivity. The minimum wage imposes a complex structure of minimums by sector and occupation and results in higher non-wage labor costs. Ecuador also has one of the region's highest dismissal costs, mandating 32 weeks of salary – even for workers who resign. When a dismissal occurs without a justified cause, the severance payment includes an additional payment. Ecuadorian firms also pay various non-wage labor costs, such as mandatory employment allowances, compulsory worker participation in firm dividends, and other obligatory services like childcare for larger firms. *Jubilación Patronal* is an employer-paid pension for formal workers with over 20 years of service, paid in addition to mandatory social security. On top of that, a public wage premium of 52 percent crowds out the private sector from competing for highly qualified employees.

**In conjunction with other barriers to firms' development, labor regulations constrain formal labor demand and reduce the number of better jobs available for Ecuadorians, mainly youth, women, and those with less human capital.** Labor costs in Ecuador directly increase with firm size, age, and productivity, indicating the negative impact of labor regulations on firms' development – which, in turn, affects labor demand. More than half of Ecuadorians with jobs work in small firms with limited capacity to increase earnings. More than half of employees earn less than the minimum wage, affecting vulnerable workers the most, including young, medium-educated, and poorer people in primary sectors, unskilled services, and construction. Between 2007 and 2021, young workers earning less than the minimum wage increased from 53 percent to 66 percent, and the comparable figure for women workers was 51 percent to 69 percent.

**To address these issues, the country needs to modernize labor regulation while providing adequate protection to its workers over the medium term.** Areas to explore could be limiting directionality in minimum wage increases, reducing contract rigidities, lowering dismissal costs, eliminating the 35 percent surcharge in occasional contracts (at least for young workers), or eliminating the *Jubilación Patronal*. Reforms could also eliminate mandated severance payments for workers who resign voluntarily, reintroduce hourly contracts, and legitimize outsourcing – at least for younger workers. Increased flexibility must be accompanied by provisions to protect vulnerable workers, including redesigning unemployment insurance and advancing reforms that improve labor supply and

increase formal labor demand by addressing other constraints to private sector development. While well-designed labor regulations can avoid inefficient and inequitable labor market outcomes, poorly designed and enforced labor regulations can cause harm to workers and keep firms from growing.

## Enhancing human capital and reducing skill mismatches

**Ecuador suffers from low-quality education. Access to education has improved, but educational quality remains low.** Ecuador's Programme for International Student Assessment (PISA) math scores for 15-year-olds are 30 percent lower than Organization for Economic Co-operation and Development (OECD) countries, 12 percent lower than Chile, and 8 percent lower than Mexico. Only 11 percent of young adults earned higher education degrees in Ecuador – lower than Colombia, Mexico, and Chile. Learning losses during the pandemic were much higher than in other countries in the region. Low cognitive skills and inadequate training are crucial concerns for firms. In addition, the education mismatch in the labor market is substantial at about 30 percent. The share of undereducated workers has substantially increased in both formal and informal sectors, partly because older cohorts struggle to keep pace with changing labor demand resulting from, for example, technological progress.

**Improving educational quality and revamping active labor market programs would improve labor supply.** It is critical to implement reforms to remedy the low educational quality that prevents the labor force from acquiring critical cognitive skills. This requires reforms across the educational system – from fighting malnutrition, one of the highest in the region, to improving tertiary education. For example, it could be helpful to enhance tertiary education's role in problem-solving, critical thinking, and advanced communications skills and use technology to optimize graduation time, skill development, and education cost. In the short run, however, strengthening the technical, financial, and administrative capacity of training programs and working with the private sector to redesign them would be a relatively straightforward first step. Targeted and well-designed employment incentives – for example, hiring subsidies and social security waivers – could help reorientate their programs towards needed skills. Other important potential actions might include certifying the skills of informal workers and using technological innovation to develop core competencies, such as analytical thinking, problem resolution, communication, and digital literacy. Although these short-term interventions will not address the labor market problems, they offer good opportunities to keep the labor issue in the national dialogue and allow workers to better adapt to the potential short-term negative side effect of other reforms.

## Boosting competition to improve firm performance

**Domestic competition in Ecuador is very low.** In the 2019 Global Competitiveness Reports, Ecuador ranks poorly in terms of domestic competition (123 of 141 countries), market dominance (118), and competition services (98). As of 2017, more than one-third of manufacturing companies were declared to operate in highly concentrated markets. Moreover, price cost margins (PCM), a proxy of market power in manufacturing and services, increased between 2010 and 2017, suggesting that there are barriers to entering or exiting markets. According to the OECD and World Bank Group (WBG) Product Market Regulation (PMR) Index, Ecuador is the most restrictively regulated market among its peer countries. Domestic companies are protected from foreign competition through domestic content requirements, reserved participation on public tenders, and Foreign Direct Investment (FDI) barriers. Burdensome regulation for all business activities also undermines competition.



Finally, the price of several goods and professional services is regulated, discouraging competitors' entry and favoring anti-competitive practices. In effect, critical prices are distorted and do not respond to market forces. Fuel prices are subsidized, interest rates are capped, minimum wages are set too high, and agricultural prices are centrally negotiated. Production quantities are equally influenced by policy through import quotas, agricultural absorption commitments (public purchases), or the activities of state-owned enterprises (SOE).

**Ecuador's complex insolvency legislation is a major barrier to exit, affecting the overall market efficiency, including the firms' willingness to enter.** The country's insolvency framework is so complex that it is rarely used. Only 20 preventive insolvency proceedings have been initiated in the past 25 years. This undermines the relocation of resources from one firm to another when changing economic conditions call for it. Less efficient firms stay in the market, undermining innovation and discouraging the entry of more productive firms. Insolvency issues also explain the increase in firms with access to credit that cannot service their debt – so called zombie firms – from 8.4 percent in 2014 to 12.6 percent in 2022. Ecuadorian law allows insolvency proceedings only for large commercial companies in specific circumstances. It does not enable pre-insolvency filings or filings past 60 days of the cessation of payments. Starting insolvency proceedings can take up to six months. The law does not explicitly allow the sale of a business or provide for the extinction of unpaid obligations during liquidation proceedings. Regarding cross-border insolvency, the law does not give rules on jurisdiction, recognition of foreign judgments, cooperation among courts in different countries, choice of law, and other current challenges of cross-border insolvency. Moreover, the law does not establish a simplified process of reorganization and liquidation of Medium and Small Enterprises (MSE), which is different from international standards. The insolvency framework would require a complete overhaul, replacing insolvency provisions in high-level legislation such as the General Code of Procedures (COGEP) and the Organic Law of Entrepreneurship. This will be difficult but partial reforms could lead to additional layers of complexity, undermining a better insolvency process.



Despite having a relatively large industrial sector, manufacturing only exports 16 percent of its gross production, and the bulk of these exports are concentrated in a handful of subsectors linked mostly with primary products from agriculture and extractive industries.

**SOE operations significantly distort competition in Ecuador.** Operating revenues of businesses with state participation account for 24 percent of GDP. SOEs' activities do not necessarily translate into market distortions, but the risk is elevated. Only 18 percent of SOEs are corporatized under private law but half are engaged in competitive sectors. In addition, SOEs are subject to different labor and bankruptcy regulations, have beneficial tax treatment not available to private firms, and lack separation between commercial and non-commercial functions. Although SOEs are subject to competition law, they are prone to conflicts of interest and political influence because public authorities appoint CEOs and entities that exercise ownership rights are sometimes sectoral regulators. Besides their impact on the overall investment climate, these shortcomings could limit Ecuador's capacity to mobilize private investment in specific sectors, such as decarbonizing the electricity sector.

**Market regulation sets barriers to entry, inhibits competition, and distorts markets.** Domestic companies are protected from foreign competition through domestic content requirements, reserved participation on public tenders, and FDI barriers. For example, Ecuador lacks bilateral investment and double-taxa-

tion treaties, and its public procurement regulation lacks competitive neutrality. Competition is also hindered by burdensome regulation for all business activities and the lack of mechanisms to ease dealings with these procedures. Finally, the price of several goods and professional services is regulated, discouraging competitors' entry and favoring anti-competitive practices. In effect, critical prices are distorted and do not respond to market forces. Fuel prices are subsidized, interest rates are capped, minimum wages are set too high, and agricultural prices are centrally negotiated. Production quantities are equally influenced by policy through import quotas, agricultural absorption commitments (public purchases), or SOE activities.

**On top of that, the competition authority lacks financial and procedural independence, and there are no instruments to limit the influence of interest groups and public officials' conflicts of interest.** The *Superintendencia de Control del Poder de Mercado (SCPM)* is among the less independent in the region, trailing only Bolivia, Jamaica, Colombia, and Argentina. Its budget depends on the general budget of the State, exposing it to budget cuts that led to a high staff turnover and unfulfilled vacant positions. As a result, anticompetitive practices such as price fixing or abuse of dominance do not face a credible threat of enforcement, and sector regulators set prices that are not cost-reflective (e.g., electricity). Ecuador does not have lobby regulations or rules to break conflicts of interest or guide interaction between public officials and interest groups. There are no requirements to disclose the identity of the interest groups consulted or advisory bodies involved in each regulatory process. Stakeholders are not informed as part of the regulatory processes, and regulators are not formally required to consider comments from stakeholder consultations.

**Strengthening competition requires fostering competitive neutrality of SOEs, reducing the burden of regulations and entry barriers, and strengthening enforcement of competition laws.** Ecuador may review the role of SOEs, particularly in competitive sectors, separating their commercial and non-commercial activities with at least account separation in the short term. SOE activities that operate under legal monopolies can be unbundled, so some segments can be open to private competition in the medium term. Yet, this reform would require complementary measures to ensure a level playing field, including FDI provisions and a review of regulatory provisions in network industries in the short term. Removing burdensome regulations for startups and price regulations can favor entry and more fierce competition in the short term. Critical measures include creation of a national database of primary regulations, streamlining procedures for new businesses, including introducing one-stop shops in the short term or amendment of the Code of Territorial Organization, Autonomy, and Decentralization to standardize licensing procedures in the medium term. Agencies with competition mandates require more independence, more robust safeguards to limit conflicts of interest, and additional resources to fulfill their role in the short term. The potential positive impacts of these measures could be maximized in the medium term by addressing limits on factor mobility, such as rigid labor regulations and the lack of a functional insolvency framework. These actions should be complemented by mechanisms to protect vulnerable workers and enhance human capital formation.

## Enhancing trade to improve productivity

**Ecuador's exports are dominated by primary and resource-based products, and its participation in global value chains (GVC) has remained unchanged.** Although Ecuador added 115 products to its export portfolio between 2014 and 2021, the number of exported products (2,677) remains below its regional peers. In 2021, oil exports accounted for about 30 percent of exports, and the top eight non-oil exported products accounted for roughly 50 percent. Ecuador's participation in GVC, dominated by forward participation, has stabilized since the early 2010s because some non-oil commodity exports, like bananas and shrimp, offset the drop in oil exports. Despite having a relatively large industrial sector, manufacturing only exports 16 percent of its gross production, and the bulk of these exports



Small-scale and artisanal mining, which accounts for 22 percent of registered gold production, often creates precarious jobs and significant environmental damage, fueling animosity against mining that extends to the formal one.

are concentrated in a handful of subsectors linked mostly with primary products from agriculture and extractive industries.

**Ecuador is one of the world's most closed-off economies, ahead of only Indonesia and Egypt among peer countries.** Ecuador's favored nation (MFN) tariff is above all peers. Although Ecuador has evident competitive advantages in agriculture products, the MFN tariffs (2.2 percent) remain above all regional peers due to high protection on dairy, animal products, coffee, tea, beverages, and tobacco. In 2018, 46 percent of imported products had to comply with at least one non-tariff measure (NTM), partly due to high technical barriers to trade (43 percent) and quantity controls (23 percent). Several products face tariffs higher than 25 percent.

**As a first step, Ecuador should consider opening its input markets.** As Ecuador reduces its dependence on oil, it will need to find other sources of foreign exchange, revenues, and growth by promoting non-oil exports. However, only a tiny fraction of firms could respond to import competition, given the domestic market's severe distortions and the challenging business environment. In such a context, trade liberalization could have adverse side effects on employment and productivity in the short to medium term. To avoid that outcome, it will be critical for Ecuador to improve competition and liberalize input markets first. Ecuador should also continue to advance trade agreements with other countries, particularly in areas where it is already competitive. For example, the recently completed trade agreement with Costa Rica is likely to benefit both countries because their export profiles are highly complementary and sensitive



items were excluded from the treaty, such as dairy products, bananas, pineapples, and other fruits. Lack of preferential access to foreign markets on agricultural products is limited: only two comprehensive free trade agreements were signed, compared with 22 by Chile, 13 by Peru and eight by Colombia. Similarly, the government could undertake a strategic review of NTMs, focusing first on quick wins and then setting up a public-private dialogue, supported by a technical team, to address pressing problems arising from NTMs.

**The government could also consider complementary measures, such as enhancing export promotion programs and improving logistics and security.** Pro-Ecuador could work with other ministries and public entities, such as BanEcuador and *Corporación Financiera Nacional* (CFN), to improve export diversification and the survival rate of new exporters by promoting export services, improving value chain participation in emerging products, and increasing the financing for working capital. Another way to improve competitiveness in the short to medium term is the reduction of logistics costs arising from growing insecurity. Authorities could implement comprehensive risk-based compliance strategies by: developing a unified and enriched risk profiling and simultaneous inspections; expanding the use of before-arrival processing and release of merchandise; expanding the reach of the scanner program at ports and strengthening it with complementary equipment; exploring advanced cooperative arrangements between customs and other border agencies; and implementing programs that have been successful in other countries, such as Colombia's Authorized Economic Operators program.

Measures to enhance trade openness require some time to pay off, and these policies should be carefully evaluated to reduce or mitigate their potential adverse short-term side effects on existing activities and employees. Trade openness could increase aggregate productivity in the long run. However, only a tiny fraction of firms can respond to import competition. If so, greater openness could have adverse side effects on employment and productivity in the short to medium term if market efficiency continues to be hindered by rigid labor regulation, a dysfunctional insolvency framework, and restrictions on competition. In this context, trade liberalization should be carefully evaluated to reduce or mitigate short- to medium-term effects on existing activities and employees by, for example, prioritizing trade agreements with highly complementary countries or liberalizing input markets. In the same vein, the potential positive impacts of these reforms could be enhanced by improving the capacity of high-capability firms more likely to innovate in response to competitive pressures.

## Unleash opportunities in key sectors

**Ecuador could also consider reforms to improve the performance of specific sectors.** The report focuses on three of them:

- **Mining** exports multiplied over seven times in the past four years, becoming the fourth largest export sector, on the back of two large-scale mines, *Fruta del Norte* and *Mirador* that began production in 2019. Moreover, Ecuador has a pipeline of medium- and large-scale mining projects expected to start this decade that may help the country take advantage of increasing metal demand in a decarbonizing world.
- **Agriculture** growth shielded the country during the post-oil boom slowdown and the pandemic-led recession, securing the food supply and acting as a safety net for people losing their jobs in declining non-tradable sectors. Looking forward, it has the potential to increase economic diversification by expanding high-value-added agriculture exports and foster the development of export-oriented agro-industry.



- **Tourism:** Due to its unique ecology, topography, and cultural heritage, Ecuador has a tourism product that appeals to an array of visitors – from adventurous young backpackers to high-spending retirees. Tourism growth can create productive jobs and, unlike other service sectors, support the current account.

### Making mining work for development

**Social and political opposition to formal mining is increasing as the country struggles to ensure mining benefits local communities and addresses environmental concerns; the alternative could be growth of illegal mining and its adverse effects, including the upsurge of organized crime and insecurity.** Institutional shortcomings limit formal mining's potential positive impact on fiscal revenues, local communities, and the environment. For example, opportunities for local development are constrained because the mechanism to transfer mining revenues to local governments is not functional, and local governments have limited capacity to implement impactful projects. The ancestral territory is central to current discussions on areas excluded from mining activities, but mapping is incomplete and controversial. The environmental licensing process is rigid and unrealistic. The institutional setup to control and monitor mining operations is still underdeveloped because mining titling has stopped since 2018. Among environmental activists and the public, these shortcomings generate suspicion about the government's capacity to control environmental risks. Small-scale and artisanal mining, which accounts for 22 percent of registered gold production, often creates precarious jobs and significant environmental damage, fueling animosity against mining that extends to the formal one. Illegal mining has entered a symbiosis with organized crime, leading to a surge in insecurity and smuggling of illegal gold, mercury, explosives, and firearms.

**To counteract this outcome, urgent measures and strengthening of critical institutions are needed to ensure mining's positive impact on communities and address environmental concerns.** This includes securing broad citizen participation in drafting legislation related to environmental consultation and indigenous organizations, improving the Special Committee for the control of illegal mining, and implementing urgent regulatory reforms to improve tax collection and enable mining revenues to reach local governments. Implementing these short-term priorities requires stronger technical, financial, and human capacities in critical institutions, such as the *Agencia de Regulación y Control de la Energía y los Recursos Naturales no Renovables* (ARCERNNR), the Ministry of Environment, Water and Ecological Transition (MAATE), and *Servicio de Rentas Internas* (SRI). Longer-term policy measures include developing a comprehensive, multisectoral, and participatory national mining policy, integrating consultation and participation processes, reopening the mining cadaster, and strengthening and integrating the environmental assessment and oversight system. Formalizing artisanal mining could also enhance sustainable mining in Ecuador.



Tourism activity is concentrated in Quito and Guayaquil despite other regions' natural, cultural, and historical attractions.



## Fostering agriculture resilience and competitiveness

**Ecuador has been unable to fully unleash its agriculture growth potential.** Small farmers account for three-quarters of total productive units but use only one-tenth of the cultivated area. Economies of scale are limited, one of the main reasons behind low agricultural productivity. In addition, small farmers have limited access to irrigation, technology, and financial services. Public spending on agriculture is highly inefficient, focused on supporting prices rather than providing public goods, including research and development (R&D). Domestic crop absorption commitments, high import tariffs, and public procurement at minimum support prices discourage quality improvements and switching to higher-value crops. Meanwhile, agriculture exports are constrained by logistical challenges, including inadequate cold-storage infrastructure, poor storage techniques, limited specialization in logistic services, low quality of tertiary roads, and fragmented freight transportation services. Preferential access to foreign markets is narrow, and major impediments are low firm and farm adoption of international quality standards, food-safety standards, cold-chain protocols, and pesticide and fertilizer use. Development of the domestic market, an opportunity for less sophisticated small and medium farms, including indigenous population, is constrained mainly by the low quality of tertiary roads and wholesale markets.

**Agriculture suffers from low productivity and overuse of pesticides and fertilizers.** Fertile soil and favorable agroclimatic conditions allowed Ecuador to expand exports of traditional products, such as bananas, cacao, shrimp, and, to a lesser extent, coffee as well as non-traditional products, such as fruit and vegetables. Yet, Ecuador's labor productivity in agriculture is among the lowest in the region, and total factor productivity (TFP) growth basically stagnated over the past decade. Agriculture growth has been driven by higher input intensity, reflected in overuse of fertilizers and pesticides, with adverse effects on the environment and public health. Although deforestation has declined over the past two decades, some sectors continue to cut down trees, leading to local environmental degradation and greenhouse gas emissions.

**Agriculture productivity could benefit from phasing out highly distortive support prices and reallocating public funds to address structural challenges, including low R&D public expenditures.** The government has limited fiscal room to increase expenditures, but the country could benefit from reallocating public resources that support agriculture prices to provide better public goods, such as R&D services, sanitary and phytosanitary facilities, logistics infrastructure, market information, improved tertiary roads, and modernization of wholesale markets. In addition to improving public expenditure efficiently, this would reduce distortions that prevent the growth of more competitive sectors, including high-value, non-traditional agricultural products.

**The government could mobilize private and foreign investment to help address long-lasting constraints on agriculture growth.** In the short term, the government could enhance competition in the air cargo market by facilitating entry of new air cargo and freight enterprises. It could also be helpful to establish a rental market for machinery. In the medium term, public-private partnerships could foster investments in the rail network, port upgrades, cold-chain facilities, and other infrastructure. The private sector could help to establish an area yield index-based agriculture insurance that could offset the effect of climate change on agriculture. The government could enhance private investment in R&D by, for example, setting some incentive to private firms investing in R&D and facilitating timely dissemination of donor funds for R&D.

**Agricultural production could also benefit from productive alliances, which could enhance small-producer productivity and linkages with both external and domestic markets.** The development of the domestic market represents an opportunity for less sophisticated small and medium farms. Successful in several countries in the region, productive alliances could help small producers meet

local and external market requirements while easing access to improved inputs, introducing better production methods and technical assistance, gaining access to credit, obtaining better market information, and enhancing negotiation power with buyers.




**Complementary conservation initiatives could be needed to prevent higher agriculture productivity and market linkages from increasing deforestation and emissions.** Successful conservation instruments similar to the System of Protected Areas (SNAP) and SocioBosque could be further expanded to lower deforestation while better targeting high-risk deforestation areas and critical ecosystems, such as paramos and mangroves. Curbing illegal deforestation, enforcing conservation agreements, and enhancing benefits for local communities through high-value tourism or sustainable management of timber and non-timber resources are also important.

### Setting effective coordination to release Ecuador's tourism potential in more profitable segments




**Ecuador's tourism sector's contribution to employment and the economy is among the lowest in the region and has been further constrained by the recent upsurge in insecurity.** Tourism activity is concentrated in Quito and Guayaquil despite other regions' natural, cultural, and historical attractions. Key lucrative tourism segments remain underdeveloped, such as foreign visitors, digital nomads, and elderly visitors from high-income countries drawn by Ecuador's cultural and natural attractions. Moreover, Quito and Guayaquil could attract more business travelers if they addressed the surging security concerns, which have prevented the sector to fully recovery from the pandemic.

**Beside the recent insecurity concerns, tourism potential has been traditionally constrained by inadequate marketing, lack of coordination, specific business environment issues, and poor infrastructure.** Despite being price competitive, with relatively cheap accommodations, short-term rental prices, and subsidized fuel prices, the Ecuadorian tourism industry attracted just 2 percent of Latin America and the Caribbean foreign investment in tourism in between 2015 and 2019. The lack of an effective and long-lasting country brand, limited coordination between government agencies and the private sector, complex sectoral regulations, insufficient training, and limited access to finance, particularly credit for small and medium enterprises, stymie the sector's potential. Underdeveloped transport and communication infrastructure continues to constrain tourism, mainly outside Quito, Guayaquil, and Galapagos. Close cooperation between government agencies and private sector stakeholders is required to realize Ecuador's tourism potential. This could help advance complementary multi-sectorial approaches to tourism growth while addressing environmental concerns, such as solid waste management and enhancing preservation of the Galapagos and other protected areas.

## Main policy options

 <b>POLICY OPTIONS</b>	 Short-term reforms	 Medium-term reforms
	<b>Maintain a sustainable fiscal path</b>	
Continue the consolidation to reduce public debt, build some buffers, and reduce country risk.		
Set a national dialogue about the need to address critical but controversial issues.		
<b>Remove cross-cutting barriers to private sector development</b>		
<b>Making the labor market more resilient</b>		
Reduce directionality in the minimum wage increases.		
Reduce labor rigidities resulting from surcharges in occasional contracts, Jubilación Patronal, severance payments, and the lack of hourly contracts and outsourcing.		
Protect vulnerable workers, including redesigning unemployment insurance.		
<b>Addressing skill mismatches</b>		
Revamp active labor market programs by strengthening their capacities and work with the private sector to redesign them.		
Certify informal workers' abilities and use technological innovation to develop core competencies.		
<b>Improving market regulation to enhance competition</b>		
Foster competitive neutrality of SOEs, particularly in competitive sectors.		
Reduce the burden of regulations, including price controls, by creating a regulation database and streamlining procedures, including introducing one-stop shops and standardized licensing procedures.		
Strengthen institutions with competition mandates by enhancing their independence, limiting conflicts of interest, and providing additional resources.		
Replacing an outdated, fragmented, and dysfunctional insolvency framework with a new unified regime.		
Complement these policies with measures to enhance firms' management and organization practices.		
<b>Enhancing trade to improve productivity</b>		
Reduce tariffs, including agriculture tariffs, and advance ongoing trade agreement negotiations.		
Carry out a comprehensive assessment to streamline non-tariff barriers with the private sector.		
Improve export promotion and market intelligence instruments and enhance firms' capacity.		
Complement these policies with measures to enhance firms' management and organization practices.		

 <b>POLICY OPTIONS</b>	 Short-term reforms	 Medium-term reforms
<b>Unleash opportunities in critical sectors</b>		
<b>Making mining work for development</b>		
Secure broad citizen participation in drafting legislation on consultations, including indigenous people.		
Strengthen the Special Committee for the Control of Illegal Mining (CECMI) to prioritize the fight against insecurity related to illegal mining.		
Improve tax collection, enable revenues to reach local governments, and ensure appropriate use.		
Implement an integrated capacity development plan to strengthen relevant public institutions.		
Accelerate the SRI adaptation to control and audit large mining.		
Strengthen Extractive Industries Transparency Initiative.		
Developing a comprehensive, multisectoral, and participatory national mining policy.		
Integrate consultation, participation, and regulatory initiative processes.		
Reopen the mining cadaster and expand coverage of geological information.		
Introduce a progressive tax structure and formalize artisanal mining.		
Strengthen and integrate the environmental assessment and oversight system and implement the Integrated Mining Management System.		
<b>Enhancing small farms' productivity and market linkages</b>		
Implement a productive alliances scheme to simultaneously address small producers' low productivity and limited access to markets, including export markets.		
Phase out highly distortive support prices and reallocate public funds to address structural challenges.		
Prioritize public investment in tertiary roads, wholesale markets, and irrigation.		
Mobilize private investment to improve logistics, transport infrastructure, and access to machinery.		
Enhance private investment in R&D by, for example, providing some incentives to private firms investing in R&D and facilitating timely dissemination of donor funds.		
Expand and strengthen conservation instruments like SNAP and <i>SocioBosque</i> .		

 <b>POLICY OPTIONS</b>	 Short-term reforms	 Medium-term reforms
<b>Setting effective coordination to release Ecuador's tourism potential</b>		
Enhance cooperation between government agencies and private sector stakeholders, including creating a destination management organization (DMO), to develop a cohesive strategy, including a brand initiative.		
Expand efforts to collect and analyze data on the experiences and perceptions of international tourists.		
Promote measures to enhance road safety.		
Set adequate vocational training courses to reduce skill mismatches.		
Ease barriers that inhibit the extension of financial services to small and medium tourism firms.		
Establish fines for illegal waste disposal and establish incentives and conditions to reduce waste and promote recycling.		
Enhance protection on the Galapagos and other protected areas.		









# Chapter 1

## Relaunching a More Resilient Growth for a Better Future



### Summary

**T**he country's efforts to rebalance its economy after the oil boom have reduced macroeconomic imbalances at the expense of economic growth. Reform efforts were insufficient to ignite private investment and foreign direct investment, especially after the pandemic, and failed to foster non-oil exports and other tradable sectors. Allocative inefficiencies combined with weak private investment have led to lower capital accumulation and total factor productivity losses since the end of the oil boom. Without fiscal buffers, the economy struggled to adjust to the low commodity price environment. If Ecuador wants to become a high-income country, it will need to avoid returning to unsustainable state-led growth and instead create opportunities for private sector development. Such a strategy would require removing cross-cutting barriers to growth, including rigid labor regulation, the lack of competition, and limited trade integration, while increasing the potential of critical sectors, such as mining, agriculture, and tourism.

**To sustain poverty reduction and achieve high-income country status, Ecuador needs to tap into additional sources of growth.** Ecuador is rich in natural endowments, primarily minerals, land, forestry, and diverse ecosystems, resulting in comparative advantages in agriculture, tourism, and extractive sectors. Besides the widespread consensus around the dollarization applied after the late 1990s crises, the country has not been able to agree on critical reforms that would unleash this growth potential. The lack of structural reforms, combined with an underdeveloped private sector and over-reliance on the state, has resulted in a vicious cycle of boom and bust, led by international oil prices, that has kept average economic growth low. Without accelerated growth, Ecuador will struggle to preserve its current income per capita and will not be able to reach high-income country status.

### **The end of the oil boom and efforts to rebalance the economy have dampened economic growth as ongoing reforms were insufficient**

**The oil boom fostered growth, but Ecuador did not use the opportunity to build resilience and diversify the economy.** In the second half of the previous century, procyclical management of oil export windfalls led to macroeconomic cycles in many countries (World Bank, 2015). Ecuador followed this trend. Its state-led economic model during the last oil price boom resulted in a pro-cyclical expansion of public expenditures financed by oil windfalls, fiscal buffers, and foreign debt. This strategy contributed to economic growth, poverty reduction, and infrastructure improvements; however, it depleted Ecuador's sovereign oil funds, accumulated new debt, and defaulted on old debt to pay for a large public investment program (World Bank, [2018](#)). As a result, the public sector registered a sizable deficit, preventing the country from recording current account surpluses and accumulating external buffers to deal with a less favorable global context. Since then, Ecuador has struggled to regain access to international capital markets under favorable conditions. Having to pay higher interest rates than its macroeconomic fundamentals suggest crowds out necessary social spending. Moreover, changes in the oil contracts, growth of SOE activity, above-inflation minimum wage increases, trade restrictions, and distortive regulation on goods and factor markets inhibited private sector development.



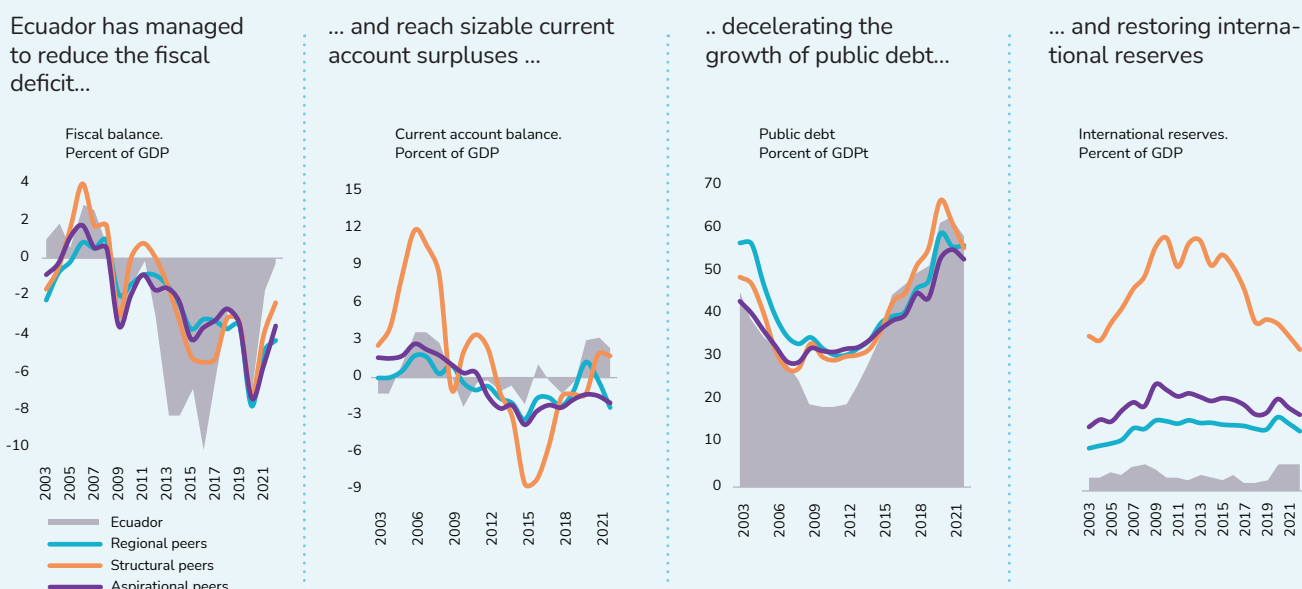
Dollarization played a critical role in supporting macroeconomic stability by providing credibility, keeping inflation in check, and softening volatility.

#### **Once oil prices collapsed, no fiscal buffers were in place to dampen the shock.**

Ecuador was one of Latin America's fastest-growing countries during the commodity boom, with GDP increasing an annual average of 4.6 percent between 2003 and 2014. In recent years, growth has proven elusive, averaging only 0.5 percent between 2014 and 2019 and 0.2 percent between 2014 and 2022. The slowdown has been partly due to the lack of public spending capacity to offset the drop in oil windfalls, particularly in the context of a largest fully dollarized country in the world. Dollarization played a critical role in supporting macroeconomic stability by providing credibility, keeping inflation in check, and softening volatility. However, the loss of an independent monetary policy, including exchange rate policy, makes it more difficult to respond to shocks. In fact, dollarization requires countries to rely on fiscal policy to deal with shocks through the accumulation of fiscal space to cushion the effect of adverse shocks. In the absence of real price adjustments, any adjustment falls on nominal prices severely constrained by price and wage controls, preventing the adjustments and eroding competitiveness.

**Ecuador has made significant progress in restoring fiscal buffers in recent years.** The fiscal deficit was reduced from 9.8 percent of GDP in 2016 to a near balance in 2022, the largest consolidation across several groups of peer countries (Figure 1). The consolidation was achieved through public investment rationalization, revenue mobilization, and debt renegotiation with international bondholders and China. A partial recovery in oil prices provided added support. Public debt, which had ballooned from 18 percent in 2014 to 62 percent in 2021, was put on a firm downward trend in 2022. With no accumulated external buffer during the oil boom and limited access to finance after the unilateral default in 2008, this fiscal policy allowed the country to keep the current account balance under control, strengthen international reserves, and protect dollarization. Coupled with substantial financing from international institutions and lower Central Bank financing to the public sector, international reserves rose from a low of 2.0 percent of GDP in 2018 to a more comfortable 7.3 percent by 2022.<sup>1</sup>

Figure 1. Since the oil price boom ended, Ecuador has made substantial efforts to rebalance its economy.



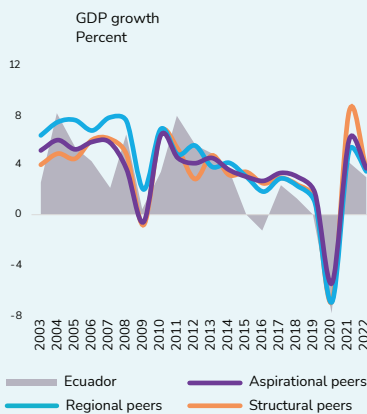
Note: Structural peers are Tunisia, Bolivia, Algeria, Turkmenistan, Peru, Angola, and Malaysia. Regional peers are Bolivia, Peru, Guatemala, Colombia, Paraguay, Mexico, and Argentina. Aspirational peers are Tunisia, Algeria, Kazakhstan, Peru, Malaysia, Colombia, South Africa, Paraguay, Mexico, Türkiye, and Thailand.  
Source: Central Bank of Ecuador (BCE), World Economic Indicators, World Economic Outlook, and International Financial Statistics.

**Between 2017 and 2022, Ecuador also implemented growth-enhancing reforms.** To reduce uncertainty around macroeconomic management, the country reformed the fiscal management code, enhanced fiscal and debt transparency, set medium-term public debt objectives, and strengthened the Central Bank's autonomy. It tried to attract private investments to develop untapped mining resources, reintroduced oil risk-sharing contracts, simplified the regulated interest rates, streamlined business regulations, reduced the tax on dollar outflows, dropped import surcharges, reduced tariffs and non-tariff trade barriers, advanced new trade agreements, and allowed international arbitration. As part of its climate-change agenda, Ecuador tried to attract foreign investment to continue decarbonizing energy by enabling distributed generation initiatives and private investment in non-conventional renewable generation.

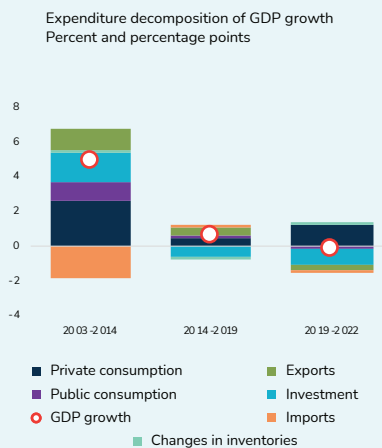
1 At 7.3 percent of GDP, international reserves are low in comparison to the standard comparison groups' average, but they are close to the levels observed in other fully dollarized economies, such as Panama (6.4 percent) and El Salvador (7.7 percent).

Figure 2. The effect of this fiscal consolidation and declining oil exports were not offset by private investment and non-oil exports.

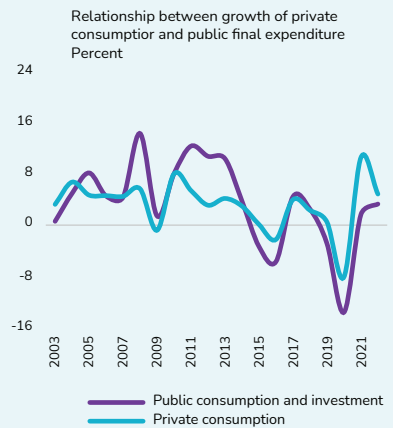
Economic growth decelerated after the commodity boom ...



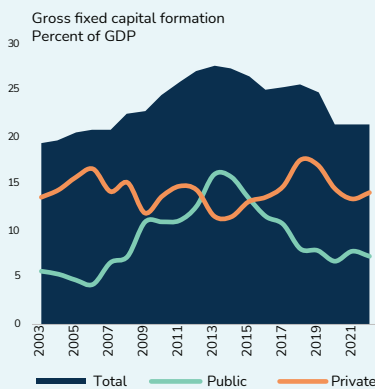
... due to a compression of the domestic demand led by ...



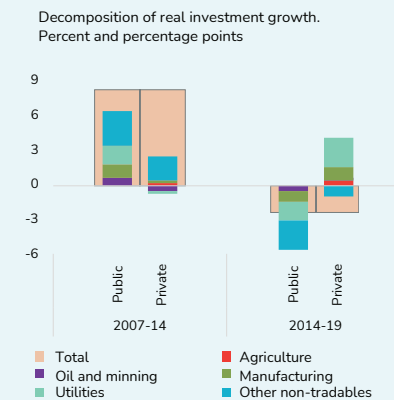
... the fiscal consolidation that also dampened private consumption.



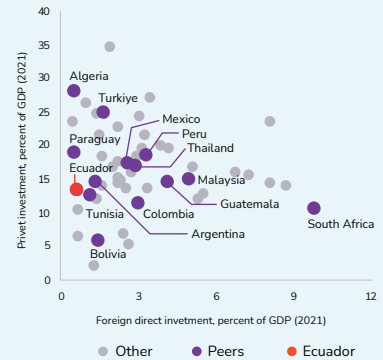
This compression was only partially offset by an uptick in private investment that lost momentum after the pandemic.



Before the pandemic, higher private investment in utilities and manufacturing did not offset the drop in public investment



... leaving Ecuador with relatively low levels of private and foreign investment.



Note: The breakdown of gross fixed capital formation from 2020 was estimated based on fiscal figures; this breakdown has not been published since 2019 because the government is updating the national account base year.

Source: Central Bank of Ecuador (BCE), World Economic Indicators, World Economic Outlook, Macro Poverty Outlook, and World Bank staff estimates.

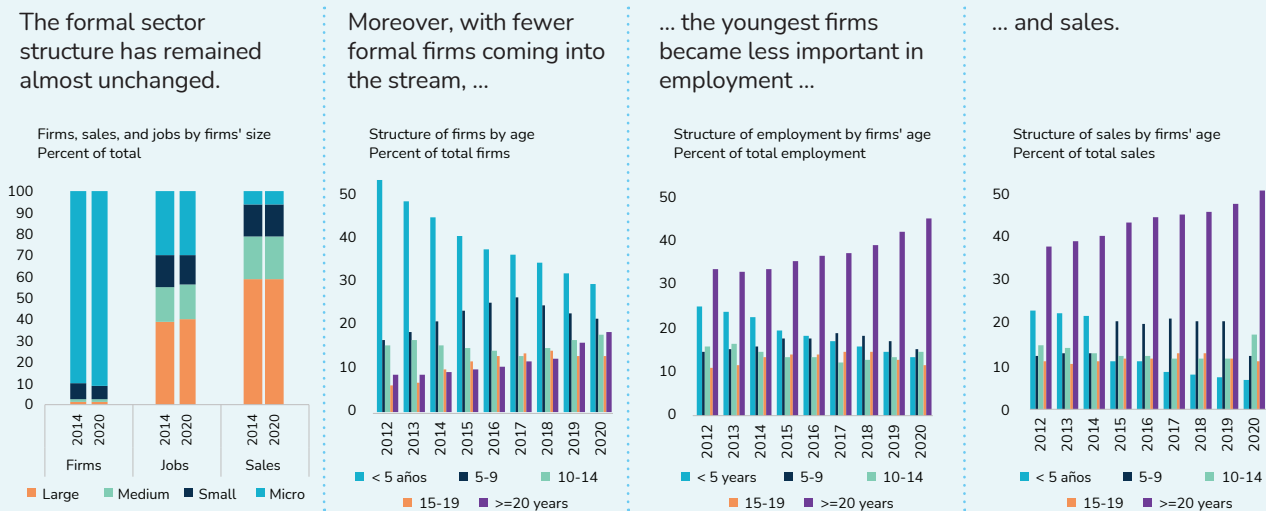
However, Ecuador's small private sector could not compensate for the necessary retrenchment of the state, especially after the pandemic. Growth decelerated from an average of 4.6 percent between 2003 and 2014, when oil prices were high, to a low of 0.2 percent between 2014 and 2022, when oil prices declined (Figure 2). Given the lack of macroeconomic buffers and limited access to external financing, the authorities compressed public spending, adversely affecting private consump-



tion. The government’s effort to restore confidence and improve the business environment increased private investment. Yet, this was not enough to compensate for the decline in public investment between 2015 and 2019. After the pandemic, private investment lost momentum, with the large installed excess capacity and domestic and global uncertainty discouraging new investments. In addition, the government could not build consensus to pass critical growth-enhancing reforms to, for example, reduce labor market rigidities and enhance the institutional framework to foster public-private partnerships. Meanwhile, private investment in extractive sectors faced higher uncertainty due to growing environmental and social opposition. By 2021, Ecuador had one of the world’s lowest private investment levels (13 percent of GDP), trailing only Bolivia, South Africa, Colombia, and Tunisia, and one of the lowest FDI levels (0.6 percent), behind only Paraguay and Algeria.

**The private sector continues to be overwhelmingly dominated by low-productivity small firms and lacks business dynamism, consistent with low investment levels.** The composition of formal firms remained almost unchanged between 2014 and 2020, with large enterprises (more than 100 workers) accounting for about two-fifths of employment in formal firms but more than half of sales (Figure 3).<sup>2,3</sup> On the other hand, the large majority of formal firms are microenterprises (less than five workers), which contribute less than 6 percent of sales despite employing one-third of workers.

Figure 3. The structure of formal firms has remained almost unchanged.



Firms are classified on the basis of World Bank Enterprise Survey categories: (i) micro firms have less than five workers, including the self-employed, (ii) small firms have five to 19, (iii) medium-sized firms have 20 to 99, and (iv) large firms have more than 100. Source: National Institute of Statistics and Census (INEC) and Patiño Peña and Ferro (2024).

2 The firm analysis is based on information from the *Directorio de Empresas y Establecimientos* (DIEE), a public database compiled by the Ecuadorian Statistics Institute (*Instituto de Estadísticas y Censos - INEC*) with administrative data from the national revenue service (*Servicio de Rentas Internas - SRI*) and employment data from the social security institution (*Instituto Ecuatoriano de Seguridad Social - IESS*). In all, the analysis uses information on around 800,000 firms registered in the SRI. This source was complemented with the non-public firm administrative data from the SRI to produce all the variables needed to estimate the total factor productivity through robust estimation methods. It also uses the employer-employee database known as the *Laboratorio de Dinámica Laboral y Empresarial*, built by INEC with information collected by IESS, SRI, and other government institutions. From 2009 onwards that database contains worker-level data for over 70,000 firms reporting sales to the SRI and employment to the IESS.

3 As a reference, the share of large firms in the United States is higher than in Ecuador. Large firms in the United States account for more than 65 percent of employment, 25 percentage points more than in Ecuador, while micro firms only contribute to 5 percent of employment, 25 percentage points less than in Ecuador.

**The economic slowdown and the pandemic depressed entry of formal firms.**

The share of firms under five years old decreased from nearly 50 percent in 2012 to 30 percent in 2020, while the shares aged 15 to 19 years rose more than 7.0 percentage points and those with 20 or more years increased 9.0 points. Slow creation of new firms contributed to this aging, coupled with persistent barriers to exiting in adverse economic circumstances, such as high firing costs and a weak insolvency regime. The low entry and exit resulted in a substantial shift in labor and business to older firms, with the youngest firms' share declining 12 percentage points for employment and 16 points for sales. By 2020, firms of more than 20 years accounted for more than 40 percent of employment and 50 percent of sales.

**Growth in non-oil tradable sectors could not offset the decline in oil exports****Surging shrimp and mining exports have only partly offset the secular decline in oil exports and the contraction of service exports triggered by the pandemic.**

Oil export volumes declined due to years of underinvestment in exploration and, more recently, sporadic pipeline damage caused by regressive erosion of the Coca River and social unrest (Figure 4).<sup>4</sup> At the same time, non-oil exports stagnated as the oil boom's end coincided with the end of favorable external conditions for non-oil commodity exports, such as banana and aa. The situation worsened during the pandemic as service exports – mainly travel revenue – declined due to the contraction of tourism; services had remained stable as a percent of GDP before the pandemic. This reduction, however, was partly offset by increased agriculture and mining exports. Aquaculture export was driven by the expansion in shrimp exports, triggered by introducing new technologies that allowed shrimp farmers to take advantage of Ecuador's favorable weather conditions. The mining exports' surge resulted from reforms implemented in the early 2010s that triggered some medium- to large-scale investment projects to develop Ecuador's untapped mining resources (World Bank, 2016 and World Bank, 2021). However, these patterns do not imply a transition to increasing exports with higher economic complexity; Ecuador's complexity index remained almost unchanged between 2014 and 2021, still the lowest among the country's peers.

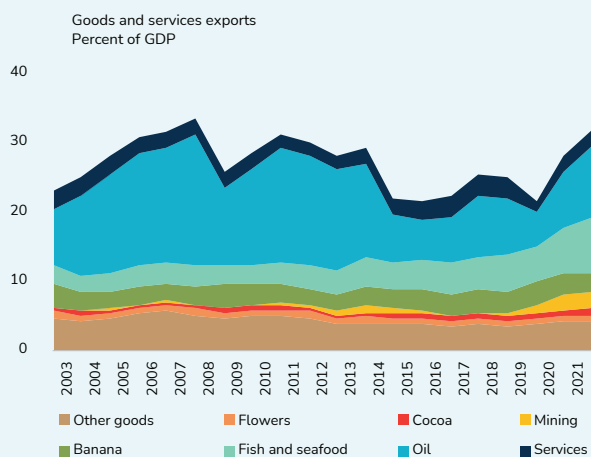
**The contraction in domestic demand dampened the growth of most sectors, except aquaculture and mining.** Compounding the reduction in oil output, dampened domestic demand led to a substantial deceleration of non-tradable sectors, such as public administration, commerce, transport, and construction (Figure 5). Manufacturing, usually considered a tradable sector, also slowed because it is highly dependent on domestic demand. Only a few manufacturing subsectors export, most of them linked to the processing of primary products (Box 1). The good performance of some tradable sectors, such as mining and aquaculture, is explained by sector-specific dynamics rather than the endogenous market mechanisms that typically drive the tradable sector. Similarly, more sophisticated tradable sectors, such as manufacturing and high-quality services, have struggled to redirect production to export markets or substitute for import products.

---

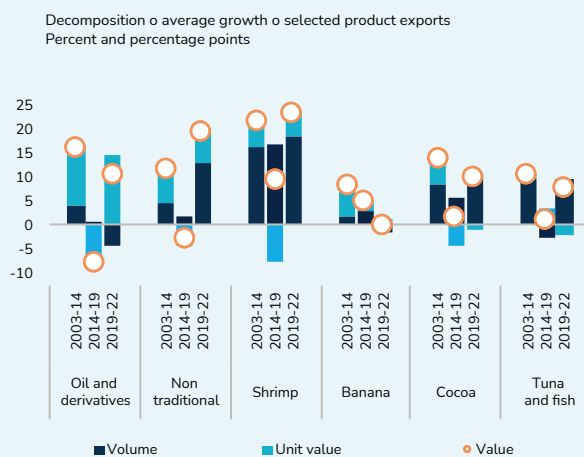
4 Oil exports accounted for about one-third of goods exports, and the top five non-oil exported product – shrimp, banana, flowers, cacao, and seafood – accounted for more than two-fifths.

**Figure 4. The surge of shrimp and mining exports has only partially offset the decline in oil export volumes and the contraction of service exports triggered by the pandemic.**

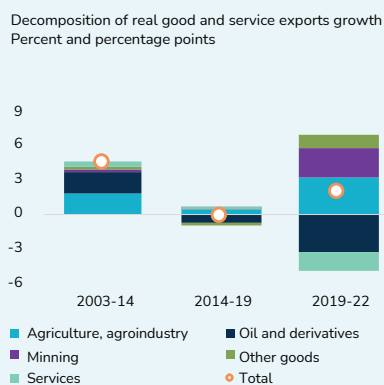
Exports have recently recovered on the back of higher oil, fishery, and mining exports.



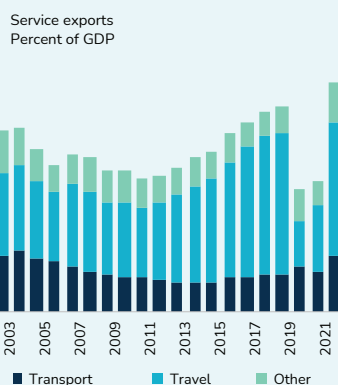
Yet, oil exports recovered due to high prices, and non-oil export growth was driven by growing mining and shrimp exports.



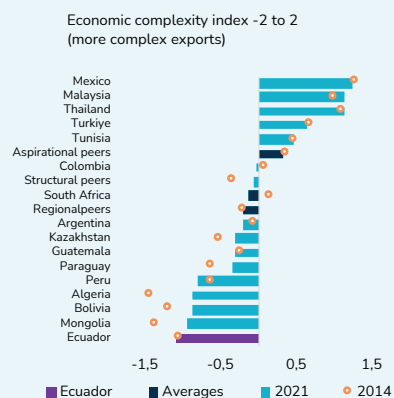
This recovery was offset by pandemic-led compression in service exports ...



... that resulted in a dramatic reduction in travel.



This dynamic, however, prevented Ecuador from improving its economic complexity.

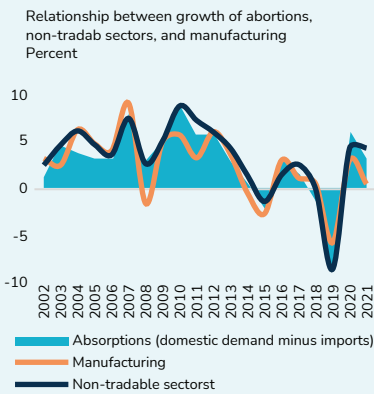


Note: As detailed national accounts figures are only available for 2007-2019, the breakdown of real exports was extrapolated based on information from trade statistics, the oil sector, and the balance of payments.

Source: Central Bank of Ecuador (BCE), World Economic Indicators, World Economic Outlook, Observatory of Economic Complexity.

Figure 5. Domestic demand compression slowed down most sectors, including manufacturing, showing the high dependency on fiscal impulse, while idiosyncratic factors drove shrimp and mining.

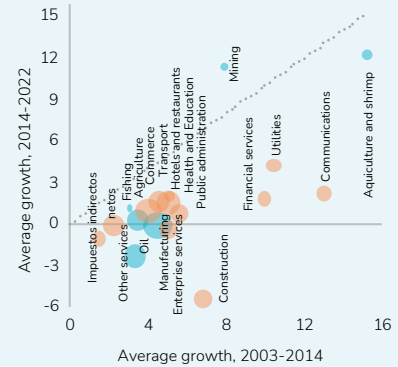
The compression in the domestic absorption has dampened the non-tradable sectors and manufacturing, ...



... compounding poor performance in oil and other tradable sectors that contributed little to growth, ...



... with only mining and shrimp growing rapidly.



Note: Non-tradable sectors include services, construction, and utilities; tradeable sectors include agriculture, mining, oil, and manufacturing. The bubble size represents the sectors' contribution to total GDP.  
 Source: Central Bank of Ecuador (BCE), World Economic Indicators, World Economic Outlook (WEO), and World Bank's staff estimates.





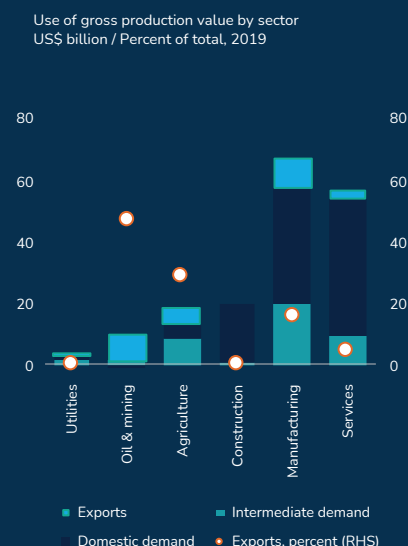
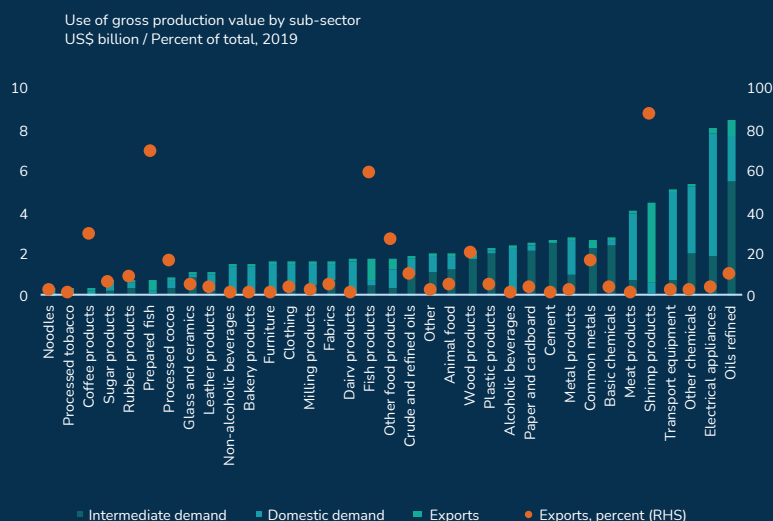
**Box 1.**

The manufacturing sector is highly dependent on domestic markets.

**Manufacturing exports are concentrated in a handful of subsectors linked mostly to primary products from agriculture and extractive industries.** The bulk of manufacturing exports is concentrated in the subsector related to the basic transformation of primary sector products, such as shrimp, fish, other food products, and oil. These products include prepared fish, fish products, shrimp products, coffee products, animal food, common metals, processed cocoa, wood products, and other food products.

The bulk of manufacturing exports is linked with the basic process of a handful of primary products, such as shrimp, fish, other food products, and oil

Manufacturing exports are a small share of manufacturing gross production value.



**In this context, Ecuador’s manufacturing is highly dependent on domestic demand.** Manufacturing is traditionally categorized as a tradable sector, but Ecuador’s manufacturing exports only 16 percent of its gross production value. This figure is well above the export share of non-tradable sectors, such as construction, utilities, and services; however, it is far below the share in other tradable industries, such as oil, mining, and agriculture. As a result, manufacturing output is highly exposed to changes in domestic demand through both a direct effect on final domestic demand and an indirect effect on intermediate consumption from non-tradable sectors.

**Limited manufacturing exports are a symptom of an unsupportive business environment.** This shortcoming reflects a lack of competitiveness that results from restrictions that prevent manufacturers from reaching export markets, including high labor costs, significant trade barriers, and inadequate transport and logistics. Many of these issues will be discussed in this report. Most manufacturing firms survive by exporting to very narrow niche markets based on the country’s natural endowment (e.g., processed shrimp, fish, cacao, and coffee products) or targeting domestic niches where import competition is not intense due to protectionist measures (e.g., electronic appliance, transport equipment, and sugar) or country specific demand (e.g., non-alcoholic beverages, alcoholic beverages, and bakery products)

**The post-boom slowdown led to a surge in informality, underemployment, and a decline in labor income, all of which worsened during the pandemic.**

Like many other developing countries, Ecuador has a relatively low unemployment rate. After peaking at 4.2 percent in 2020, it declined to 3.2 percent by 2022 (Figure 6). Yet, the slowdown and pandemic increased underemployment from 13 percent in 2014 to 19 percent in 2022, with a peak of 23 percent in 2020. Quality jobs declined from 50 percent in 2014, hit a low of 30 percent in 2022 and remained depressed at 36 percent in 2022. Formal employment declined from 49 percent in 2014 to 42 percent in 2022, with large losses in employment after the commodity boom only partly offset by modest job creation by entering and expanding firms. The 2016 earthquake and the 2020 pandemic worsened the stagnation in employment, which reduced jobs in existing firms (intensive margin) through lower hiring and increased firing of workers. As a result, post-boom labor earnings dropped across the income distribution, leading to a substantial increase in labor force participation. People in the lower deciles of the income distribution were particularly hard hit. Formal workers were less affected because labor regulations restricted employee dismissal and wage reductions.<sup>5</sup> Yet, self-employed and rural, agriculture (primary), poorly educated, and young employees experienced steep drops in earnings.

**Agriculture became a social safety net, generating most new jobs after the commodity boom.**

During the commodity boom, employment growth was driven by commerce, construction, and transport activities, reducing agricultural employment. As domestic demand declined, however, the share of employment in non-tradable sectors fell, mainly construction, utilities, education, and other services. Conversely, agriculture employment increased from 24 percent (1.5 million employees) in 2014 to 31 percent (2.3 million) in 2022, returning to a pre-oil-boom level.<sup>6</sup> This surge in agricultural jobs led to substantial within-sector productivity losses because it did not lead to a similar expansion in agriculture output, which remained around one-tenth of real GDP at factor cost.

## **These patterns led to lower capital accumulation and aggregate productivity losses driven primarily by allocative inefficiencies**

**The growth slowdown was, to a significant extent, the result of negative TFP growth and declining within-sector productivity.**

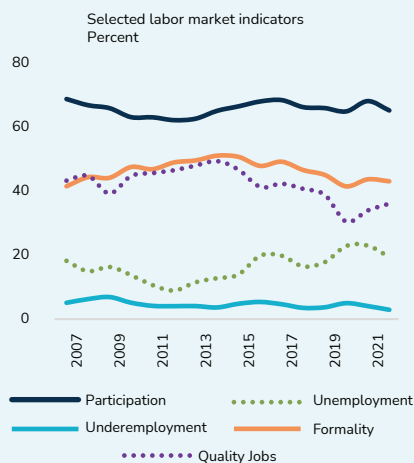
During the commodity price boom, high economic growth resulted from high capital accumulation linked to increased public investment and substantial productivity gains from growing domestic demand that mobilizing underutilized productive factors in non-tradable sectors (Figure 7). When domestic demand grows, within-sector

<sup>5</sup> These segments include employees in formal firms (according to the legalistic definition of contribution to the social security system), large private firms, public institutions, health, and education.

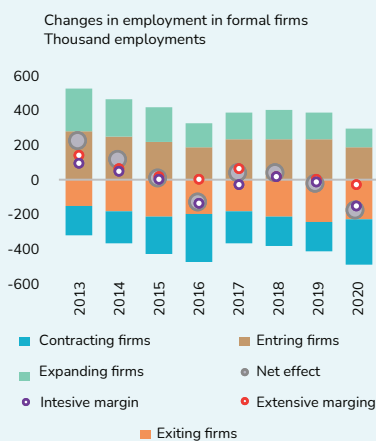
<sup>6</sup> The fact that the expansion in agriculture employment is closely related to the economic cycle does not rule out the role of other drivers, such as the expansion of shrimp exports. More granular information suggests that higher employment in crop and animal production between 2014 and 2022 is explained by an increase in the number of people working in mixed farming, which refers to different agricultural activities within a single farming system or on the same piece of land, a signal that the expansion of agriculture employment is not explained by any specific sector. Agriculture employment grew in variety of provinces – from Napo, Pastaza, Orellana, and Sucumbíos in the east to Tungurahua, Chimborazo, and Loja in the Sierra and Esmeralda and Los Ríos in the coast – reinforcing the proposition that the surge in agriculture employment is not related to any specific sector.

Figure 6. The economic slowdown deteriorated labor outcomes, increased agricultural employment, and eroded labor earnings.

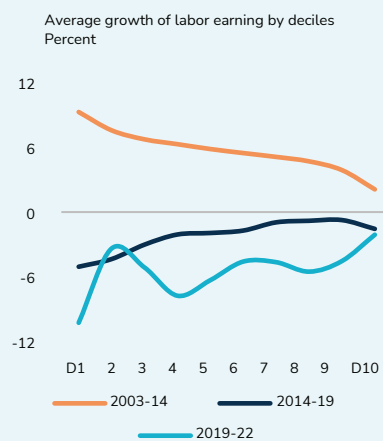
Labor market outcomes have eroded ...



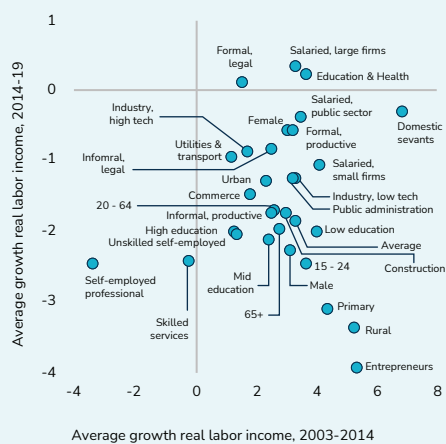
... partly because the formal sector has struggled to generate employment.



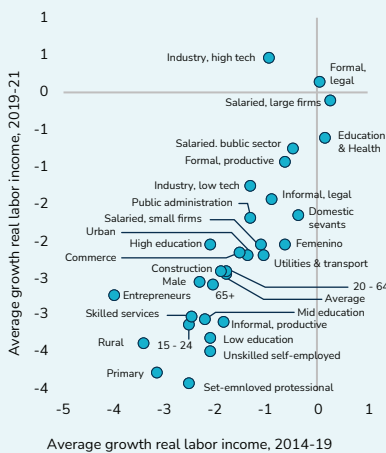
Poor labor performance has resulted in lower earnings across the income distribution...



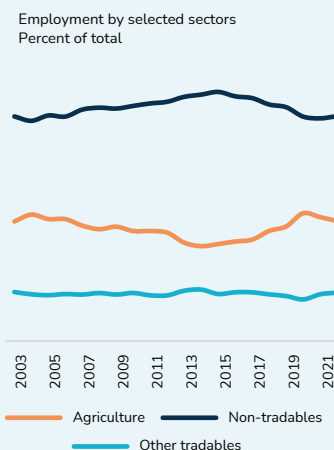
... as the post-boom slowdown and ...



... the pandemic hit most labor segments, ...



... leading people to return to agriculture, which acted as a social safety net.



Note: The employment generation by formal firms was decomposed using standard methodologies developed and implemented by Davis, Haltiwanger, and Schuh (1996), Decker et al. (2014), Haltiwanger et al. (2016). The extensive margin refers to aggregate employment changes arising from the creation of jobs by new firms or the destruction by exiting workers, and the intensive margin captures changes generated by continuing firms expanding or contracting their labor demand. Source: National Institute of Statistics and Census (INEC), Socio-Economic Database for Latin America and the Caribbean (SEDLAC), and Patiño Peña and Ferro (2024).



The commodity boom's end showed that Ecuador cannot base its development on an expansion of public expenditures that, despite generating growth and employment in the short term, can only be sustained by high terms of trade or an unsustainable increase in external public debt.

productivity tends to grow with firms operating closer to the installed capacity. In addition, workers seek jobs outside agriculture, a low-productivity sector, increasing static allocation. However, this unraveled once the commodity boom ended.

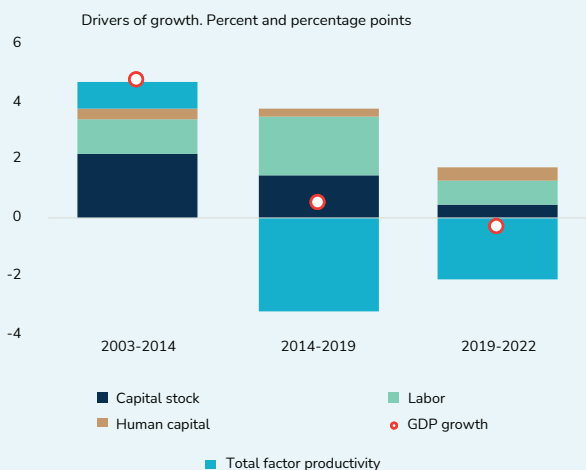
**Slowdowns in capital accumulation and aggregate productivity losses show the need for Ecuador to tackle restrictions on private investment and competitiveness.** The commodity boom's end showed that Ecuador cannot base its development on an expansion of public expenditures that, despite generating growth and employment in the short term, can only be sustained by high terms of trade or an unsustainable increase in external public debt. However, it is also clear that Ecuador has struggled to reduce its dependency on public expenditures by fostering higher private investment or tradable sector competitiveness. Despite a favorable demographic transition and higher labor participation rates, medium-term growth fell after the commodity boom. Private investment remained elusive, and the compression in public investment led to a substantial reduction in the contribution of capital accumulation to growth. As most economic sectors slowed, TFP growth turned negative as factors stayed in the non-tradable sector, with its declining productivity, or moved to low productivity sectors with little entry restriction, such as agriculture.



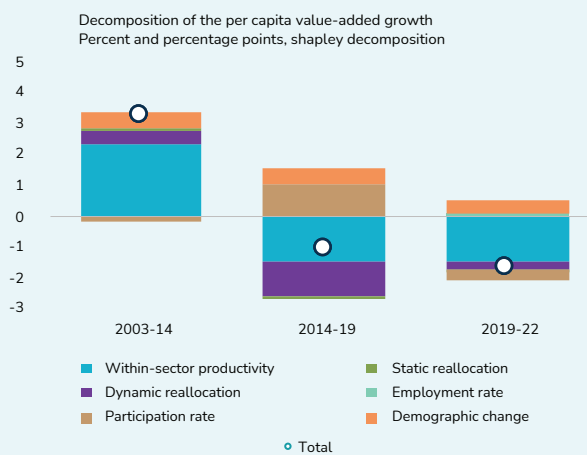


**Figure 7. The end of the commodity boom led to a contraction in capital accumulation and productivity losses, mainly resulting from allocative inefficiencies.**

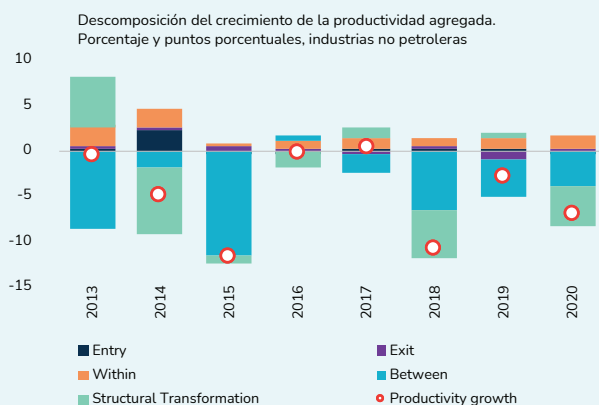
The end of the commodity boom and the pandemic reduced capital accumulation and unveiled structural constraints that create allocative inefficiencies, depressing TFP.



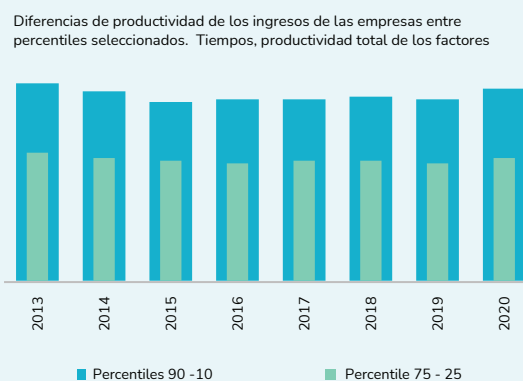
Labor productivity dropped due to declining within-sector productivity and factor misallocation.



In line with this result, the aggregate productivity of formal firms was dragged down by increasing allocative inefficiencies...



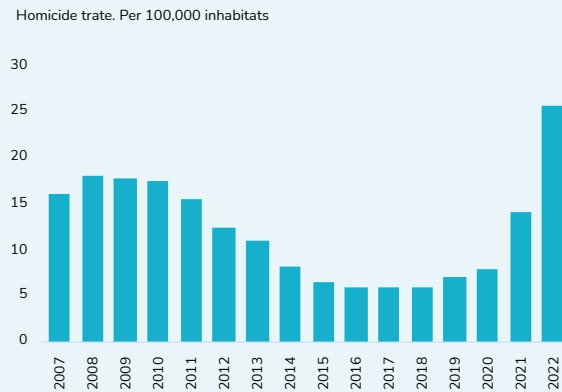
... that are also seen in the large dispersion in firms' revenue productivity that signals the presence of market distortions.



Note: Following Melitz and Polanec (2012), the changes in the aggregate productivity in non-oil firms can be decomposed into: (i) the within component that captures changes resulting from technical efficiency of survivor firms, (ii) the between component that accounts for changes from a reallocation of resources among surviving firms in each sector, (iii) the entry component that corresponds to changes induced by new firms, (iv) the exit component that corresponds to changes driven by the exit of firm, and (v) the structural transformation component that measure the changes driven by the reallocation of resources across sectors.

Source: Central Bank of Ecuador (BCE), National Institute of Statistics and Census (INEC), and Patiño Peña and Ferro (2024).

Figure 8. Crime is becoming an increasing concern.



Source: World Bank.

**Labor demand and TFP were also affected by several supply shocks.** These included the pandemic (2020) and its aftermath (2021 and 2022), prolonged social demonstrations (2019 and 2022), earthquakes (2016 and 2023), sporadic damages to oil pipelines caused by the regressive Coca River's erosion (2020 to 2023), and recurrent climate disasters. In addition, maturing oil fields reduced production and increased the cost of developing new reserves, decreasing productivity in the oil sector. In more recent years, economic activity has also been affected by a surge in insecurity led by organized crime, marked by a substantial increase in the homicide rate

to a historic high of 25.5/100,000 inhabitants in 2022 (Figure 8). In addition, post-oil boom productivity could have been affected by the low returns of massive public investments made during the commodity boom that were affected by critical technical problems, delays, and cost overruns.

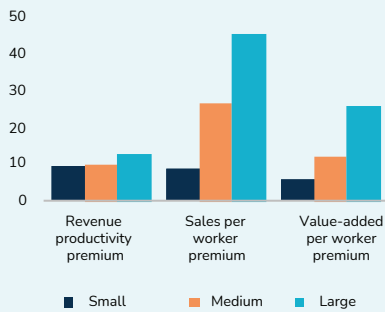
**Firm-level data confirms that the TFP decline has been driven mainly by falling allocative efficiency across firms and sectors.** Aggregate productivity of firms in non-oil sectors<sup>7</sup> dropped by more than one-third between 2012 and 2020. This is related to a persistent misallocation of factors among surviving firms (between component) and the reallocation of factors toward less productive sectors (structural transformation component) that could result from rigidities that prevent firms from adjusting to the new context. The declining allocative efficiency was only partly offset by modest firm capability improvements from adopting new technologies and practices by surviving firms (within component) and the entry of more productive firms (entry component). As previously noted, the entry of new firms slowed significantly. In addition, the exit of firms (exit component) had almost no effect on productivity. Gaps between low- and high-productivity firms remain very large. Ecuador has huge allocative inefficiencies, shown by a high and persistent revenue productivity dispersion between the 10th and 25th percentiles. In Mexico, for example, the gaps reach 1.5 between 90th and 10th and 1.1 between the 75th and 25th (Iacovone and Patiño Peña, 2021). In Ecuador, the average is about 2.8 for percentiles 90th and 10th and 1.4 for percentiles 75th and 25th. Unlike in developed countries, labor and capital do not flow to more productive firms and sectors during a downturn, leading to negative within-sector productivity growth.

<sup>7</sup> Aggregate productivity of formal firms is measured as average firm-level revenue productivity, weighted by firms' value-added share. The firm revenue productivity is estimated using a panel Cobb-Douglas model through the control function approach developed by Akerberg et al. (2015), which corrects for this endogeneity issue using materials as an instrumental variable and corrects for entry and exit. Oil firms, public administration, defense, education, health, and social work activities were excluded because their non-commercial nature.

**Figure 9. Aggregate formal firms' productivity is constrained by the low productivity of micro and small firms and negligible productivity gains through the firm's life cycle.**

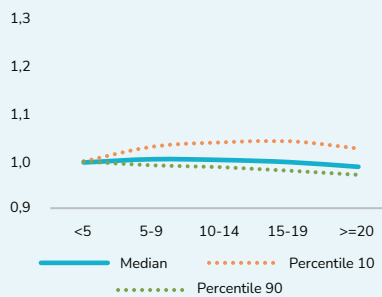
The dominance of small firms prevents the formal sector from taking advantage of economies of scale.

Productivity indicators by firms size  
Percent more than microenterprises



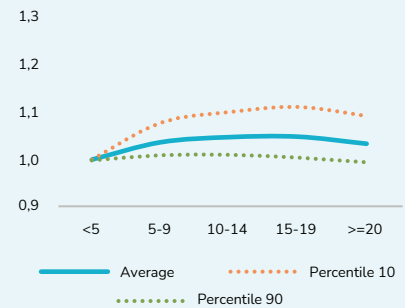
Moreover, firms' aging does not foster productivity because it does not improve through the firms' lifecycle ...

Total factor productivity by firms age  
Less than 5 = 100



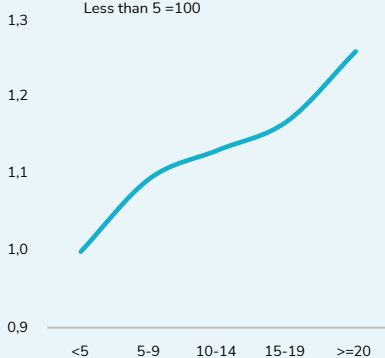
... inducing the use of higher sales per worker ...

Labor productivity by firms age  
Less than 5 = 100



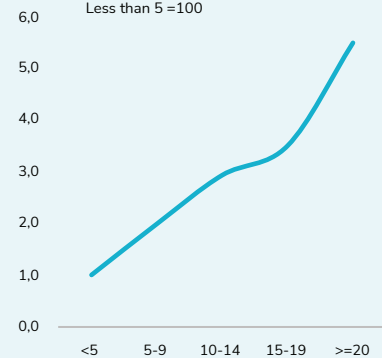
... resulting from capital accumulation ...

Capital by firms' age  
Less than 5 = 100



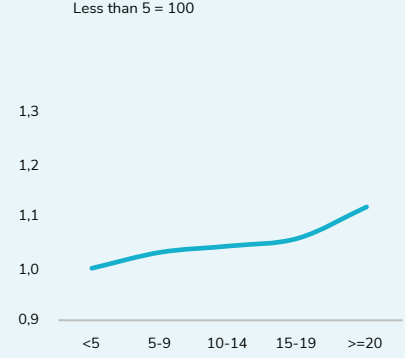
... to pay more employees and ...

Employment by firms' age  
Less than 5 = 100



... to a lesser extent higher wages.

Average wages by firms' age  
Less than 5 = 100



Note: Estimates exclude mining, oil, utilities, and public administration. Some charts that relate the firms' age with other variables do not include the range between percentiles 90 and 10 due to insufficient sample size.

Source: National Institute of Statistics and Census (INEC) and Patiño Peña and Ferro (2024)



**Firms' technical efficiency gains have been limited.** There has been some improvement in firms' technical efficiency, but the prevalence of unproductive micro and small firms and negligible firm-level productivity improvement across firms' life cycles undermine within-component productivity growth. The positive suggests firms introduce some technical and managerial progress, but this component is too small to offset the allocative inefficiencies. Its small size reflects the dominance in Ecuador's productive sector of micro and small firms, which tend to have lower productivity (Figure 9). On average, larger firms have higher productivity, whether measured as revenue productivity, sales per worker, or value added per worker.

**The shifts to older firms after the commodity boom have not led to important productivity gains.** On average, older firms are not more productive because TFP almost stagnates across firms' life cycles. Labor productivity shows a similar pattern.<sup>8</sup> Firms seem to engage in factor hoarding, increasing employment and capital rather than enhancing productivity. Firms' labor costs increase with age, and they allocate resources to physical capital to cover these costs rather than adopting new technologies to improve their capabilities. The result is a vicious cycle of stagnated firm productivity and inefficient hoarding of resources. While larger firms are more productive in Ecuador, just as elsewhere in the world, they do not exhibit sustained productivity and sales growth over time and remain underrepresented relative to low-productivity small firms.

**The entry and exit of firms have negligible impact on aggregate productivity growth.** In line with international evidence, market experience translates into slightly higher revenue productivity in incumbent firms compared to new entrants. Yet, due to limited productivity gains across firms' life cycles, this gap is small and declines over time, implying that experience does not provide incumbents with a substantial advance. As a result, the productivity distributions of incumbent and entrant firms largely overlap (Figure 10).<sup>9</sup> In addition, the average productivity of exiting firms is only slightly below the average of survivor firms – and this productivity gap is shrinking. The market selection process is so distorted that it did not even have an incidence in productivity growth in 2020, when the pandemic hit many firms. The implication is that firms with invariant low productivity will continue to operate and hoard factor inputs over time. The productivity distribution of entrant, incumbent, survivor, and exiting firms remained essentially unchanged between 2013 and 2019, suggesting that Ecuadorian firms struggle to make technical and managerial progress.

8 Hsieh and Klenow (2014) found that firms' productivity in emerging countries such as China, Mexico, and India grow slowly across the life cycle than their counterpart in developed countries due to the lack of incentives to improve efficiency and quality and expand into foreign markets.

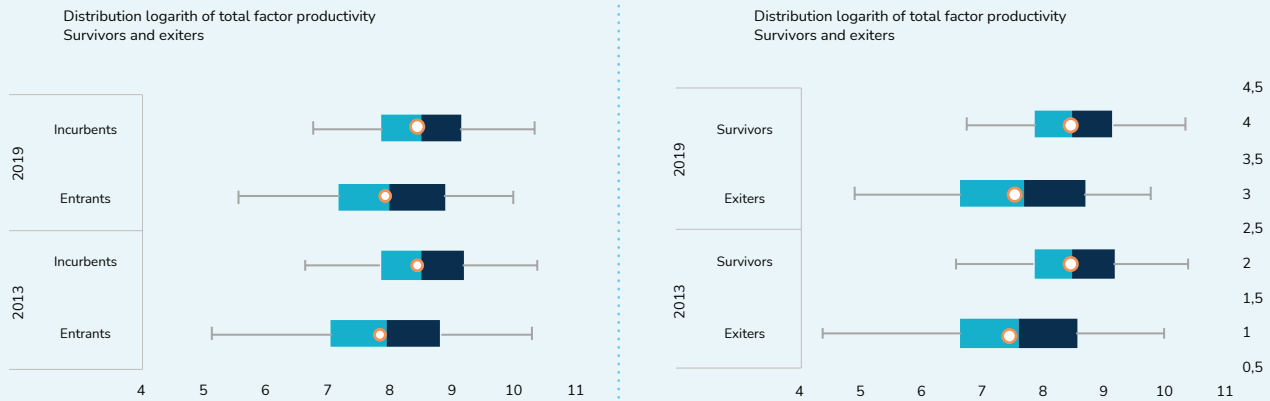
9 As explained by Bartelsman and Doms (2000) and Foster et al. (2001), incumbent firms in efficient markets are, on average, more productive than entrant firms because incumbents' market experience yields higher capabilities and many entrant firms will exit rapidly because their productivity will not be able to catch up to that of the incumbents.



Figure 10. The market selection process of better firms is broken.

Limited access to credit and other entry barriers could limit the birth of more productive firms.

Barriers to firm exit, such as weak insolvency regimes, prevent less productive firms from exiting.



Note: The box plots show the range between percentiles 5 and 95, the boxes show the range between 25 and 75, and the dots show the average.

Source: National Institute of Statistics and Census (INEC) and Patiño Peña and Ferro (2024).

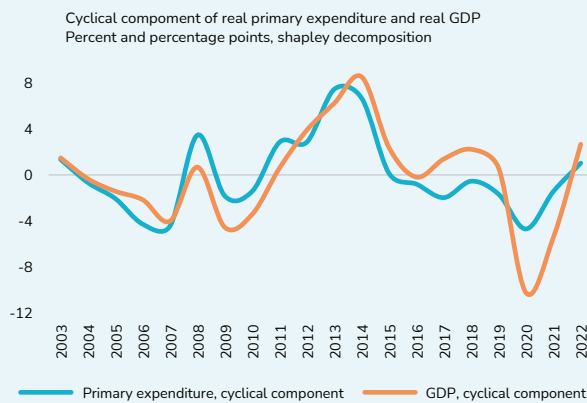
## Allocative inefficiencies are caused by the lack of policy and market mechanisms to manage volatility and structural constraints to firm productivity

Given the market rigidities, Ecuador’s procyclical fiscal policy management exacerbated allocative inefficiencies. The oil boom led to oversized procyclical fiscal management that eroded the country’s fiscal buffers during the boom time, forcing a steep consolidation once oil prices came down. This procyclicality is shown in the high correlation between the cyclical complement of real primary expenditures and real GDP, with Ecuador the highest among its peers (Figure 11).<sup>10</sup> Procyclicality increases budget rigidities during booms that cannot be unwound during busts. Besides this impact on fiscal management, Ecuador’s public expenditure procyclicality enlarged GDP volatility and led to an inefficient allocation of factors of production in non-tradable sectors that, given market rigidities, proved challenging to reverse.

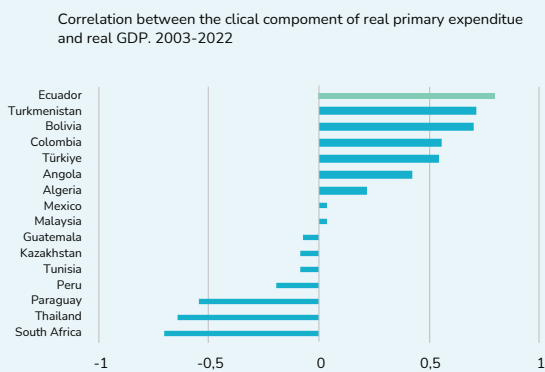
10 According to the World Bank (2023), Ecuador has been one of the world’s most pro-cyclical countries in between 2000-2021, behind only Nicaragua, Uruguay, and Argentina in the region. Along with Ukraine and Argentina, Ecuador was one of the few procyclical countries where procyclicality worsened between 2000-2010 and 2011 and 2021.

**Figure 11. High public expenditure procyclicality exacerbates inefficiencies.**

Public expenditure is highly correlated with the economic cycle ...



... becoming the most procyclical among peers.



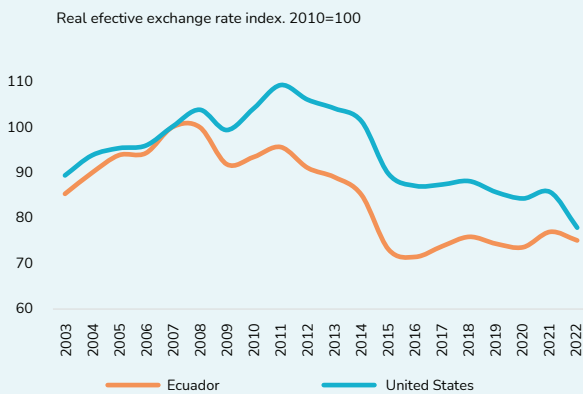
Note: The cyclical components were estimated using the Hodrick and Prescott filter, and the primary expenditure was deflated with the average consumer price index.  
Source: World Economic Outlook.

**In a dollarized economy, rigid labor regulation has constrained the real exchange rate's stabilizing role, amplifying the macroeconomic cycle.** As in other dollarized economies, Ecuador's real exchange rate is determined by the dynamic of the United States' real exchange rate, preventing adjustments from cushioning macroeconomic imbalances (Figure 12). Despite the difference in inflation rates, the correlation between Ecuadorian and United States real exchange rates is higher than in other dollarized economies, such as Panama and El Salvador. This contrasts with the negative correlation in other commodity exporters, such as Kazakhstan, Colombia, and Mexico, where more flexible exchange regimes decouple their real exchange rates from those in the United States. During the most recent commodity boom, Ecuador's real exchange rate changed little, unlike in other commodity exporters (Angola, Colombia, Kazakhstan, and Bolivia), where high exports led to substantial real appreciations. In the post-commodity boom, Ecuador's real exchange rate modestly appreciated despite the internal devaluation resulting from declining wages. This is contrary to what happened in other commodity exporters (Colombia, Kazakhstan, Algeria, and Peru), where the reversal of external conditions caused a substantial real depreciation. Due to its real appreciation, Ecuador lost competitiveness respect to its main trading partners, except the United States and Vietnam, affecting the tradable sectors' capacity to compete with countries with similar export profiles, such as Colombia, Peru, and Chile, or countries that compete with local producers, such as Mexico, China, and Brazil.

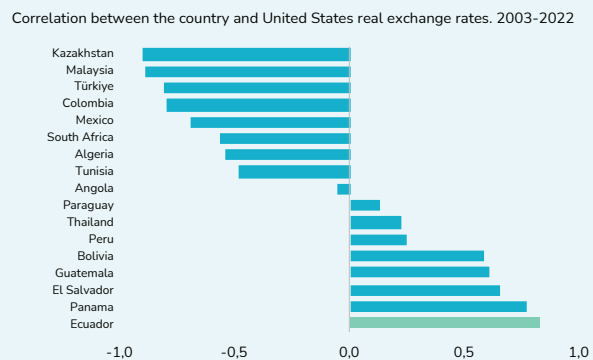
**Adjustment through internal devaluation was insufficient to restore Ecuador's competitiveness.** The real appreciation after the commodity boom reduced tradable prices, contributing to low inflation (the most important exception was agriculture, where prices continued rising, driven by increasing international food prices). On the other hand, non-tradable prices stagnated as market rigidities prevented them from falling to fully reflect the post-boom's contraction in domestic demand and its signal to reallocate resources from non-tradable to tradable sectors. Dollarization prevented any erosion of real wages and nominal wages were sticky downward; as a result, the adjustment is taking longer than it would in an economy with more flexible monetary and exchange policies, leading to sustained increases in unemployment, underemployment, and informality. With the price mechanism severely constrained and the absence of progress on critical productivity-enhancing structural reforms, the economy partly adjusted through increased informality and low-paid employment, including in agriculture, and to a more limited extent a reduction in formal labor earnings.

Figure 12. Policy and market mechanisms to allow Ecuador to adjust are not fully functional.

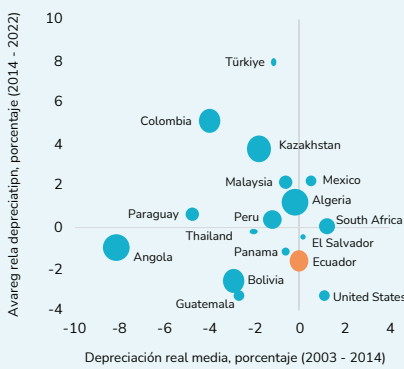
With a dollarized economy, the real exchange rate has been driven by the United States real exchange rate ...



... with which it maintains the highest correlation among peers and other dollarized economies.



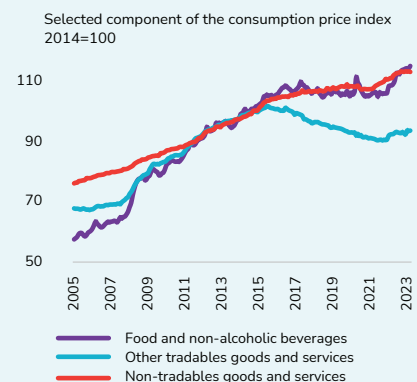
This pattern undermined the real exchange rate's role as a stabilizer ...



... leading to sizable appreciation with most trading partners after the oil price boom ...



... partly due to market rigidities preventing non-tradable prices from adjusting.




Note: The bubble size represents the share of oil and mining exports in 2014, the end of the commodity boom. The price indexes were calculated using consumer price index weights. The tradable goods and services include food and non-alcoholic beverages, alcoholic beverages, clothing and footwear, and furniture. The non-tradable goods and services include accommodation and utilities, health, transport, communications, recreation and culture, education, restaurants and hotels, and other goods and services.  
Source: Central Bank of Ecuador (BCE), National Institute of Statistics and Census (INEC), World Economic Outlook, and Brugel.

**Firm-level analysis suggests that allocative inefficiencies are related to frictions with their roots in rigid labor regulations, limited access to credit, and lack of competition).** Looking first at labor regulations, regression analysis finds that sector-level allocative efficiency is negatively correlated with higher compulsory non-wage labor costs and distortive minimum wage policies and positively correlated with job-to-job mobility (Table 1). These results suggest that industries with higher labor frictions demonstrate aggregate productivity losses through the allocative efficiency channel (Table 1). Turning to credit, efficiency's positive relationship with access to financial sector loans suggests that Ecuador's productivity is also constrained by regulatory restrictions on capital mobility, including those related to limited access to credit, such as excessive collateral requirements and high interest rates. While limited credit access could prevent productive firms from growing, inefficient insolvency regimes may result in unproductive firms surviving by excessively hoarding labor and capital. When it comes to competition, industries with higher product market concentration and a greater presence of zombie firms are associated with lower allocative efficiency. The results indicate the existence of constraints on domestic competition, including a weak insolvency system, and these policies hinder efficient resource allocation across firms because they do not favor productive firms' entry or unproductive firms' exit. Competition also suffers when restrictive product market regulations impede the functioning of markets by deterring entry that can challenge incumbents and foster exit of less productive firms. In a relatively closed economy with few large firms, many markets are highly concentrated, which hinders efficient factor allocation. The inefficiencies are worsened by distortive government intervention, including price controls and SOEs' operations. Reforms in these areas have the potential to promote improved allocation of resources and facilitate healthier market selection, contributing to higher levels of aggregate productivity.





Table 1. Industries with lower job mobility, higher non-wage labor costs and minimum wage incidence, lower access to credit, higher zombie firms, and lower competition are associated with higher misallocation.

 <b>Dependent variable: Sector covariance between firms' revenue productivity and value-added share.</b>							
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Job-to-job mobility	5.804						3.892
Non-wage Labor Costs / total labor costs		-0.554					-0.420
Minimum wage incidence			-1.289				-0.295
Access to finance from financial institutions				3.225			3.038
Product market concentration					-0.444		-0.037
Zombie firms' presence						-0.140	-0.270

Notes: All coefficients are statistically significant at the 10 percent level or less. Coefficients report the relationship between proxies of structural and policy drivers of allocative inefficiencies at the sector level (independent variables) and the sector covariance between firms' revenue productivity and value-added share (dependent variable). Job-to-job mobility is the ratio of workers in a sector that transitioned into other jobs between t-1 and t relative to the average number of workers in the same industry (between t-1 and t). Non-wage labor costs relative to total labor costs are calculated as the sector average of firms' ratio of non-wage labor costs to total labor costs. Non-wage labor costs include mandatory compulsory allowances (i.e., "thirteenth" and "fourteenth" salaries), compulsory worker participation in firms' dividends, and other remunerations (i.e., transportation, commissions, bonuses, childcare). Total labor costs consist of wages plus social security contributions, severance pay costs, mandatory compulsory allowances (i.e., "thirteenth" and "fourteenth" salaries), compulsory worker participation in firms' dividends, and other remunerations (i.e., transportation, commissions, bonuses, childcare). The minimum wage incidence is the ratio between the mandated minimum wage and the sector median wage. Higher values of this ratio imply that the minimum wage is more binding for firms within the sector. The share of firms with access to credit from a financial institution is the ratio of firms in a sector with a loan from a financial institution relative to the total firms in the industry. Zombie firm presence is the share of zombie firms in the industry. The product market concentration is calculated using the sectors' Herfindahl-Hirschman Index (HHI), which goes from 0 to 1 (maximum concentration). Each regression is controlled by industry- and year-fixed effects and weight sectoral observations by the number of firms. All estimated coefficients are significant at the 1 percent confidence level. Following Angrist and Pischke (2008), regressions weight aggregate sectoral observations by the number of firm observations within industry per year.

Source: Patiño Peña and Ferro (2024).

**Policy-related frictions are behind the overrepresentation of micro and small firms and the stagnation of firms' productivity across their life cycle.** Firms could be discouraged from increasing their workforces because large, older firms incur additional labor costs. Some of them are directly linked with firm size and employee tenure, more likely to be scrutinized by government, and limit resources to investments and innovation (Patiño Peña and Ferro, 2024). Restricted access to credit could prevent small productive firms from growing and allow large unproductive firms to hoard domestic credit. Persistent constraints to firm exit, such as weak insolvency regimes, may have exacerbated overall firm aging by preventing less-productive older firms from exiting. Constrained competition and barriers to entry prevent potentially more productive new firms from challenging incumbent firms, reducing pressure to innovate and improve technical and managerial practices. Limited trade openness prevents local firms from enhancing productivity to compete with international supply, making them increasingly dependent on domestic demand.

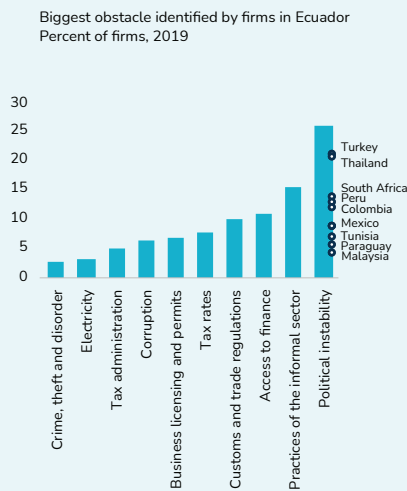
**These inefficiencies can also explain the low private investment and low technical efficiency gains.** Private investment is constrained by several issues, including restrictions on foreign investment in extractive sectors and uncertainty about political support for policies promoting private investment and ensuring macroeconomic stability. Private investment also depends on profit prospects, which are usually affected negatively by regulations that prevent efficient allocation of resources. Excessive regulation could discourage new inventors willing to invest and constrain the existing firms' capacity to invest. As previously mentioned, increasing non-wage labor costs the rise with the firm size and age could erode firms' profitability prospects, discouraging them from investing and innovating in improving their production processes and managerial practices.

## **Actions to unleash Ecuador's private sector potential and put the country on track to reach a high-income status**

**A lack of consensus has prevented Ecuador from implementing reforms to tackle long-lasting constraints to growth and spurred the already-high political instability.** In the past few years, the government has passed some positive measures to promote a more sustainable and balanced development path. However, it struggled to enact others, including an initiative to gradually reduce the fuel subsidy, a reform aimed at improving the public-private partnership framework, and reforms to reduce labor market rigidities and improve governance of the SOEs. The lack of political consensus around the ongoing reform agenda has generated concerns about the political sustainability of reforms and possible reversals of actions already undertaken, particularly if reforms take longer than expected to deliver positive results for people's well-being. As a result, political instability has become important to private sector development, with one-quarter of firms citing it as the biggest obstacle to their operations, the largest share among peer countries (Figure 13). Compounding Ecuador's reputation as a serial defaulter, high political uncertainty results in a volatile and high-risk perception that is well above what macroeconomic fundamentals, such as debt to GDP ratio, would suggest.

Figure 13. Policy instability and limited governance have prevented Ecuador from reaching a consensus on addressing cross-cutting constraints to growth.

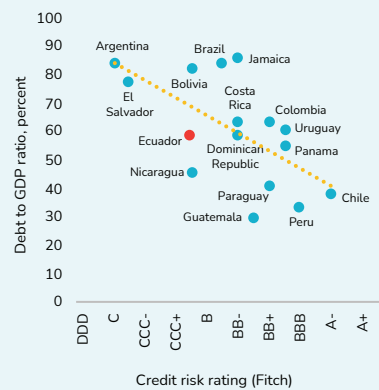
Political instability is perceived as the business environment's biggest obstacle ...



... that leads to a volatile country risk driven to some extent by political developments ...



... and a risk perception above what macroeconomic fundamentals suggest.



Source: World Economic Forum (Global Competitiveness Report), JP Morgan, and Fitch ratings.

**Igniting new sources of growth becomes increasingly important for meeting upcoming challenges, including those linked to climate change.** In the short- to medium-term, Ecuador needs new sources of growth to cushion the effect of the recent referendum decision to stop oil production in the Yasuni national park, which currently accounts for about one-tenth of national production. Without additional investment in exploration and new extractive capacity, Ecuador's oil production could decrease significantly in coming decades. The international oil price would decrease slightly in a stated-policies scenario – from US\$97 a barrel in 2022 to US\$95 in 2050; however, it would decrease substantially if countries achieve announced pledges (US\$60) or a net-zero carbon scenario (US\$24) (IEA, 2022).<sup>11</sup> This long-term demand risk could lead to stranded fossil-fuel assets partly because Ecuador is not competitive enough to outprice other oil exporters, including the Organization of the Petroleum Exporting Countries (OPEC). In the same vein, exporting carbon-intensive goods and services will become more difficult, especially if new standards or carbon border adjustment mechanisms (CBAMs) and bans on imports of deforestation-based products become the norm.

**More diversified sources of growth could help Ecuador to be more resilient to natural and climate-induced hazards, including floods, earthquakes, landslides, extreme heat, wildfires, tsunamis, and volcanoes.** Ecuador is also highly vulnerable to the El Niño-Southern Oscillation (ENSO), which increases flooding and drought risks. Preliminary simulations suggest that, without additional adaptation measures, the rising temperatures would reduce Ecuador's per capita income by 5 percent in 2030 and by almost 20 percent in 2050 (Cardenas et al., 2021). Lifting growth constraints would help Ecuador become more resilient by generating wealth to cope with worsening natural disasters

11 The stated-policies scenario shows the oil-price trajectory with today's policy settings. The announced-pledges scenario assumes that all aspirational targets announced by governments are fully met on time and in full, including long-term net-zero and energy access goals. The net-zero scenario maps out a path to a 1.5°C stabilization in the rise in global average temperatures and universal access to modern energy by 2030.

through investments in infrastructure and public services and creating new sources of growth less exposed to climate change.

**In this context, private sector development will need to become a more significant driver of Ecuador's growth.** It is essential to boost jobs, reduce macroeconomic imbalances, and address emerging challenges, such as climate change. The private sector can give the public sector more resilient revenues and support foreign exchange inflows to expand the money supply. With a recent referendum mandate to stop oil production in the Yasuni national park in the short run and a global push to reduce oil consumption in the medium to long term, diversifying sources of growth is becoming more critical than ever to create new and better jobs and increase household income. Limited access to external financing and declining oil production means that Ecuador cannot return to previous models of state-led expansion that relied on oil windfall gains. The private sector could also help the country take advantage of emerging opportunities, including the possible increase in metals demand due to global decarbonization efforts.

**This report argues that unleashing Ecuador's private sector potential and putting the country on track to reach high-income status will require sustained actions in three areas – in addition to the need to control the recent upsurge of insecurity and crime:**

- **Maintain a sustainable fiscal path:** As a fully dollarized economy with limited buffers and limited access to external financing, fiscal policy is the only key policy tool at Ecuador's disposal to deal with shocks, including those related to commodity prices and natural disasters. For instance, the country will face significant challenges on the fiscal front in the near term, such as spending pressures related to El Niño that would lead to climate disasters, including the current drought that is likely to reduce hydroelectric production and force the country to import electricity from Colombia. With already high public debt, completing the ongoing consolidation process would help secure macroeconomic stability, reduce investors' risk perception, lower financing costs, regain access to international markets, build some macroeconomic buffers, and reduce public debt to deal with uncertainty from the global context and natural disasters. Careful fiscal management is critical to reducing dependency on oil-export revenues in a decarbonizing world and providing private investors security that macroeconomic risks are under control. In addition, prudent fiscal management could prevent sporadic increases in oil revenues from leading to inefficient resource allocation in non-tradable sectors that, given existing rigidities, could be difficult to reverse. Reducing dependency on oil would also require the country to gradually move away from unsustainable public expenditure-led growth to a more balanced development based on private investment and productivity gains. While highly important, fiscal policy is not the focus of this report but was extensively discussed in the last Public Finance Review (World Bank, 2019). This report highlighted the importance of increasing the low value-added tax rate, reducing tax expenditures, reducing the fuel subsidy while protecting vulnerable people, securing social security sustainability, and containing the public wage bill growth.
- **Remove barriers to private sector development across sectors:** Although fiscal discipline constitutes an essential precondition, preventing fiscal discipline from leading to secular stagnation requires the government to improve the regulatory environment to foster new private and foreign investment to ignite new sources of growth, an objective that has proved elusive for the time being. To grow faster, Ecuador needs to reallocate its productive capacities to



The report identifies opportunities to increase the growth potential for agriculture, mining, and tourism, all critical for pro-poor growth in the context of climate change



better uses, foster firms' growth and productivity, and boost labor demand for more and better-paid jobs. The report identifies what are the barriers to private sector growth. It analyses those related to labor market performance, domestic competition, and international trade in more detail. Without addressing these cross-cutting issues, growth will continue to depend on the government's capacity to spur domestic demand, with its potential to interrupt fiscal discipline, foster procyclical fiscal management, and increase the macroeconomic crisis risk. However, this report does not provide a comprehensive assessment of the fiscal and financial effects of non-wage price distortions and barriers to accessing finance, which were extensively analyzed in the Macroeconomic Stability and Competitiveness Challenges report (World Bank, 2019), the Trade and Investment Competitiveness report (World Bank, 2019), Creating Market in Ecuador (World Bank Group, 2021), and the recent Financial Sector Assessment (World Bank, 2023). These reports concluded the need to gradually unwind distortions generated by interest rate ceilings and price controls, including those in energy and agriculture, while also addressing vulnerabilities in public banks, strengthening the national payments system, and leveling the playing field of regulation and supervision of private banks, public banks, and cooperatives.

- **Unleash opportunities in critical sectors:** The report identifies opportunities to increase the growth potential for agriculture, mining, and tourism, all critical for pro-poor growth in the context of climate change. Agriculture represents more than 40 percent of total exports, employs about a third of the country's employees, and has the potential to expand to higher value-added and sophisticated agricultural products. Mining is the fourth largest export sector and can expand considerably and help develop local communities. Tourism represents about 3 percent of GDP and about 5 percent of employment. It has the potential to grow and generate jobs. Ecuador could benefit from taking advantage of opportunities in sectors with some comparative advantages, such as mining, agriculture, and tourism. The global climate change agenda generates opportunities in some industries, such as a growing demand for metals, mainly copper, and deforestation-free products. Although policies in these sectors are unlikely to fully unleash Ecuador's economic potential, they could help the country increase growth while it tackles more structural issues that have hampered Ecuador's development.

**These policy areas interact with each other and are critical to protecting dollarization and supporting any effort to tackle increasing insecurity.** Maintaining a sustainable fiscal path is a precondition to faster growth for two reasons: it could help reduce country risk, facilitating the return to international capital markets, and it is critical to shielding polarization and reducing the macroeconomic risk perceived by private and external investors. Removing barriers to private sector development across sectors and unleashing sectoral opportunities are keys to fostering growth not fueled by the public sector. Private sector growth is critical to reducing pressure on fiscal accounts, avoiding the need for a larger fiscal consolidation, and shielding dollarization. In addition, addressing problems in these policy areas could help the country dampen the recent insecurity upsurge by reducing uncertainty and creating new labor opportunities. In effect, a sustainable fiscal path is important to reducing the probability of a larger and disordered consolidation in the future that could limit the government's capacities to provide public services, including security and protection for vulnerable people. Fostering growth, on the other hand, is important not only to providing the public sector with revenues to finance public insecurity efforts but also to providing people with job opportunities to reducing their exposure to crime.

**The following chapters elaborate on the challenges and policy options that could contribute to removing barriers to private sector development across sectors and unleashing opportunities in critical sectors.** The second chapter will focus on labor rigidities, one of the most salient cross-cutting constraints to growth, and how addressing skills mismatches could help ease labor misallocation while the country builds consensus toward reforming its labor regime. The third chapter evaluates other critical cross-cutting issues identified in this chapter: insufficient competition, including the dysfunctional insolvency framework, and trade barriers. These chapters will not only highlight the structural problems but also try to identify, to the extent possible, actionable policy options to continue moving forward with a medium-term growth agenda. Chapters four, five, and six will focus on the performance in agriculture, mining, and tourism to identify these sectors' main policy challenges and propose policy options to address them.







## Chapter 2

# Addressing Labor Rigidities and Skill Mismatches



### Summary

Labor market rigidities are widespread in Ecuador. While they protect a small group of workers in the short term, they deprive all Ecuadorians of better employment opportunities in the longer term. Despite several attempts in the past, labor reforms have not been able to advance because of the lack of consensus around critical reforms, such as the discretionary management of minimum wage, high non-wage labor costs, and high severance payments. The reduction of labor market rigidities should be complemented by long-term efforts to improve human capital and protect the most vulnerable segments of the population. In this regard, more effective active labor market policies would help to advance growth-enhancing reforms in the short-term by reducing skill mistakes.

**This chapter evaluates Ecuador’s rigid labor regulations, one of the cross-cutting issues identified in the first chapter, and options to enhancing human capital and reducing skill mismatches.** The first chapter concludes that Ecuador’s low capital accumulation and aggregate productivity losses are driven primarily by allocative inefficiencies associated with cross-cutting issues – most notably, rigid labor regulations, limited competition, and financial access constraints that prevent expansion of labor demand. This chapter evaluates Ecuador’s labor regulations and their impact on firms’ development and proposes policy options to address labor market rigidities. Addressing these rigidities has proven difficult, and this chapter also evaluates opportunities to improve labor allocation and technical productivity by improving human capital and reducing skill mismatches.

## Rigid labor market regulations constitute a critical constraint to growth in Ecuador

**Ecuador has one of the most rigid labor regulations in the world.** According to the World Economic Forum’s Global Competitiveness Report 2019, Ecuador ranks 123rd among 141 countries in terms of labor market flexibility, mainly due to difficult hiring and firing practices (137), high redundancy costs (128), inadequate active labor policies (116), workers’ rights (93), and inflexible wage determination (92). In the past two decades, Ecuador’s labor regulations were reformed several times, swinging from attempts to enhance flexibility and employee protection (Box 2).

**Labor market rigidities are particularly harmful in a dollarized economy.** In a dollarized economy without new engines of growth and employment, labor market rigidities prevent employment from adjusting to the economic cycle. For example, as mentioned in Chapter 1, the end of the oil price boom has led a larger share of the labor force to engage in low-quality jobs, increasing informality from about 50 percent at the end of the boom to 55 percent in 2019 (Figure 14). While employment and labor force participation gradually recovered to pre-pandemic levels, informality continued its upward trend, approaching the level observed in 2021. According to the harmonized Socio-Economic Database for Latin America and the Caribbean, Ecuador has one of the highest informality rates in the region, behind only Bolivia and Peru. This high informality disproportionately affects vulnerable workers, such as youth, medium-educated, and poorer people working in primary sectors, unskilled services, and construction. Firms are responding to labor market rigidity by adopting labor-saving technologies and increasing their reliance on informal labor.



In a dollarized economy without new engines of growth and employment, labor market rigidities prevent employment from adjusting to the economic cycle





**Box 2.**

Ecuador's labor laws and regulations alternate between flexibility and greater restrictions.

Over the past two decades, labor law and regulation have changed several times, fluctuating between flexibility and greater restrictions. Implementation of the dollarization regime in 2000 was accompanied by labor reform that simplified wage settings for the private sector by unifying various components of remuneration packages, such as extra wages, commissions, and in-kind payments (e.g., cost of living). This reform also introduced flexible hiring methods, including hourly and temporary contracts. Yet, several regulatory instruments and structures remained, such as the minimum wage setting structure, dismissal costs, and mandated profit sharing for workers. In 2001, changes to the Social Security Law made all workers contribute to the system regardless of the nature of their contracts, equalizing to some extent the contractual obligations of workers hired directly by firms and those hired through temporary agencies.

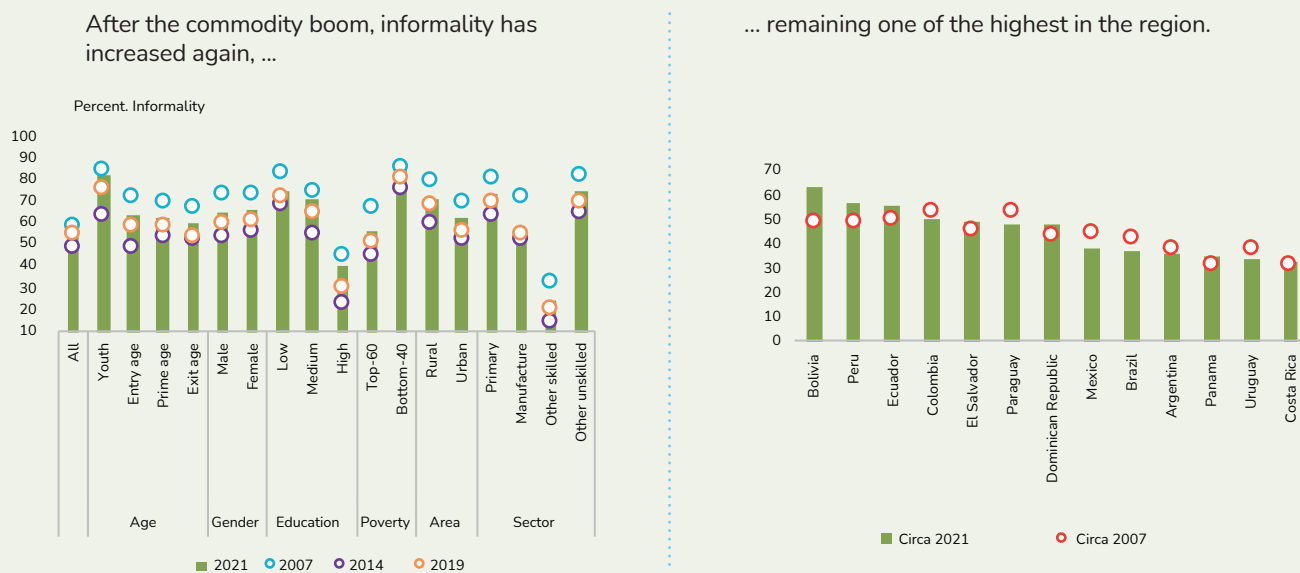
In 2008, the flexible reforms introduced in the early 2000s started to be reversed. The Constitutional Assembly banned hourly contracts, intermediation, and outsourcing. In 2010, affiliation to the Social Security System became mandatory for all formal workers and enforceable by law. As a result, the number of workers affiliated with the system increased significantly. In 2012, affiliation of domestic servants also became compulsory. In 2013, a new labor code was introduced, restricting overtime work and extending the social security mandate. In 2015, the Law of Labor Justice introduced ceilings on firm profit sharing and wages for senior executives, mandatory severance payments for workers voluntarily resigning from their jobs, and the elimination of fixed-term contracts. It also reduced the probation period from 12 months to 90 days.

With slower economic growth after the oil price boom, the authorities started taking small steps to increase labor market flexibility in 2016, with mixed results. The Law for Youth Employment established a new unemployment insurance program, a subsidized youth employment scheme, and temporary reductions in workers' hours for financially strapped companies. It also imposed nine months of unpaid maternity or paternity leave. In 2018, more flexible contracts were implemented for selected sectors, including agriculture (flowers, bananas, and livestock), manufacturing (textiles, food and beverages, plastic, furniture, and others), and services (tourism, software development, and other services), but the adoption of these contractual forms has been limited due to high costs and regulatory uncertainty. The authorities introduced a parametric mechanism to reduce discretion in the minimum wage increase in 2020, but that has been abandoned since 2022.

Source: Gachet, I., Packard, T., and Olivieri, S. 2020. Ecuador's Labor Market Regulation: A Case for Reform.



Figure 14. Rigid labor regulation is one of the factors behind high informality.



Source: National Institute of Statistics and Census (INEC) and Socio-Economic Database for Latin America and the Caribbean (SEDLAC).

**In addition, Venezuelan migration adversely impacted youth low-skilled workers in areas with high migration.** According to Oliveri, Ortega, and Carranaza (2020), Venezuelan migration had a limited impact on Ecuador's overall labor market but adversely affected the youth and low-skilled workers in regions with high migrant inflows. These authors estimated that these workers have experienced a 5 percentage point increase in informality and a 13 percentage point reduction in earnings relative to workers with similar characteristics living in areas with very low or non-existent inflows of Venezuelans.

**Among Ecuador's complex labor regulations, minimum wage increases that outpace inflation are particularly distortionary.** Minimum wage hikes contrast with declining labor productivity, measured as value added per worker, and stagnating median wages (Figure 15). As a result, Ecuador has one of the region's highest minimum wages as a percent of GDP per capita, the second highest after Bolivia. This issue is particularly problematic because the minimum wage directly determines all non-wage labor costs, which ratchet up every time the minimum wage rises without much legal room for subsequent downward adjustments. In Ecuador, rising labor costs from above-inflation minimum wage increases constrain formal job creation and training (Gachet, Packard, and Oliveri, 2020). According to Choi, Rivadeneyra, and Ramirez (2021), the 35 percent increase in the unified minimum wage in 2008 led to a decrease in labor demand in affected firms by 0.5 percent after a month and 2.5 percent after four months.<sup>12</sup> At the worker level, they found that the hike led to a 2.2 percentage point decline in the probability of remaining employed after one month and 3.9 percentage points after four months. In addition, the minimum wage has a strong

<sup>12</sup> This impact has been estimated using a differences-in-differences approach at the firm level, using administrative information that covers all formal sector workers by month.

signaling effect on the earnings of informal employees, generating rigidities even in the informal sector that could encourage self-employment and underemployment, particularly among women (World Bank 2020).

**Figure 15. Above-inflation minimum wage increases propel informality instead of higher labor income.**



Source: National Institute of Statistics and Census (INEC) and ILO's Global Wage Report 2020-2021.

**Setting the minimum wage is complex and includes a national minimum wage and many minimum wages by sector and occupation.** These statutory wage floors are ideally decided through a bargaining process between workers, employers, and government representatives at the end of every year. If no agreement is reached in the negotiation process—which is usually the case—minimum wages are set by the Ministry of Labor. Once the national minimum wage is defined, over 2,000 minimum wages by sector and occupation are supposed to be determined by a bargaining process. The Ministry of Labor sets these without considering the labor market differences in productivity within and across firms. In a system with multiple minimum wage levels, it can be challenging to keep the tripartite process balanced regarding workers' participation in many sectors, enforce the changes, ensure compliance, and avoid creating distortions in the labor market. As a result of these rigidities, workers earning less than the minimum wage increased from 53 percent in 2007 to 66 percent in 2021 for young people and 51 percent to 69 percent for women.

**Contract restrictions significantly raise labor costs and reduce the country's capacity to respond to shocks.** Ecuador's labor legislation allows about 40 types of contracts, but only a handful of them are widely used in practice, mainly open-ended and fixed-term contracts. In addition, constitutional restrictions and changes in the labor code forbid specific contract modalities, such as hourly contracts, intermediation outsourcing, and fixed-term contracts. The latter represents a major difference from regional peers, which allow fixed-term contracts for 12 months in Chile, 24 in Brazil, 36 in Colombia, and 60 in Argentina. In Ecuador, occasional contracts (*contratos eventuales*) that allow firms to hire workers for up to 180 days have a 35 percent surcharge, making hourly wages paid under this contract modality more expensive than full-time workers. Recent changes to labor regulations reduced the probation period from 12 months to 90 days, after which workers are entitled to an indefinite contract.

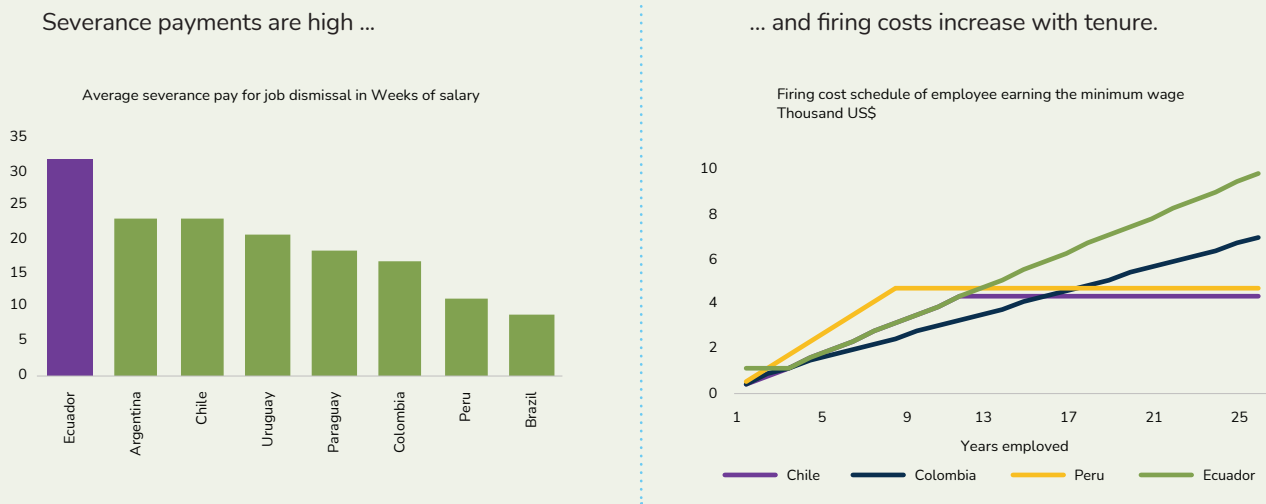


The average public sector wage can be up to 52 percent higher than pay in the formal private sector for individuals with similar socio-demographic characteristics.

These restrictions raise the costs of offering formal employment to workers who value more flexibility, such as parents or primary caregivers for other dependent household members, those who want to combine work with study, or older people who want to remain active without making full-time commitments.

**Ecuador has one of the highest dismissal costs, both in the region and among countries it competes with in export markets.** The average severance payment for redundancy dismissal reached almost 32 weeks of salary, the highest among regional peers (Figure 16). The Labor Code determines that employers must pay severance in all cases, including when workers voluntarily resign. This obligation is calculated as 25 percent of the worker's last monthly wage multiplied by years of service. When a dismissal occurs without a justified cause (i.e., non-disciplinary reasons), the severance payment also includes an additional compensation: three months of wages for workers with less than three years and one month per year of service for those with more than three years, up to a maximum of 25 months.<sup>13</sup> Severance for dismissals increase with workers' length of service. Although the formula is common across countries, Ecuador's ceiling is unusually high. For example, the firing cost schedule of employees earning the minimum wage constantly increases up to 25 years of service; in other countries, the firing cost rises slower (Colombia) or reaches a ceiling (Peru and Chile). This makes dismissing the longest-serving workers expensive relative to dismissing workers with shorter tenures, creating a "last-in-first-out" bias against the newest employees, who in many cases are young. These severance obligations can also hurt firms' competitiveness by constraining their ability to adjust to external shocks or adopt new technologies.

Figure 16. Severance payments are high and increasing.



Note: The average severance pay for redundancy dismissal is the simple average for workers with 1, 5, and 10 years of tenure.  
Source: World Bank's Employing Workers Database and Deloitte.

<sup>13</sup> According to Article 188 of Ecuador's Employment Regulation, workers who is fired and has been employed less than three years will receive firing compensation equivalent to three months' salary. A worker who is fired and has been employed for more than three years will receive firing compensation equivalent to the number of years worked in the company times the monthly salary (up to 25 monthly salaries).



**Ecuador has unique non-wage costs.** Ecuadorian firms' labor costs encompass salaries and various other expenses, such as mandatory employment allowances,<sup>14</sup> compulsory worker participation in firm dividends,<sup>15</sup> and additional obligatory services like childcare for larger firms. In addition, *Jubilación Patronal* is an employer-paid pension for formal workers with over 20 years of service, over and above mandatory social security. It is a monthly payment, which cannot exceed the minimum wage, to retirees or their dependents (for one year after the beneficiary dies). The benefit is highly ineffective because employers skirt it by laying off employees before they can access this benefit, even though this implies losing highly qualified workers. This benefit was implemented nine decades ago as a retirement fund that was supposed to serve as a transitory system to provide pension benefits to people who retired before compulsory social security existed. Rather than being dropped, however, it was extended to all workers by the Constitutional Court in 1983. In conjunction with reserve funds and severance, *Jubilación Patronal* inhibits investing in developing workers' skills, makes hiring workers difficult, and threatens employment stability.

**The public wage premium crowds out the private sector from competing for highly qualified employees.** Depending on the activity, the average public sector wage can be up to 52 percent higher than pay in the formal private sector for individuals with similar socio-demographic characteristics, such as gender, education level, and experience (World Bank, 2020). This discrepancy puts pressure on the private sector to match public sector wages, and it may reduce the pool of workers willing to take jobs in the private sector and the number of potential entrepreneurs.

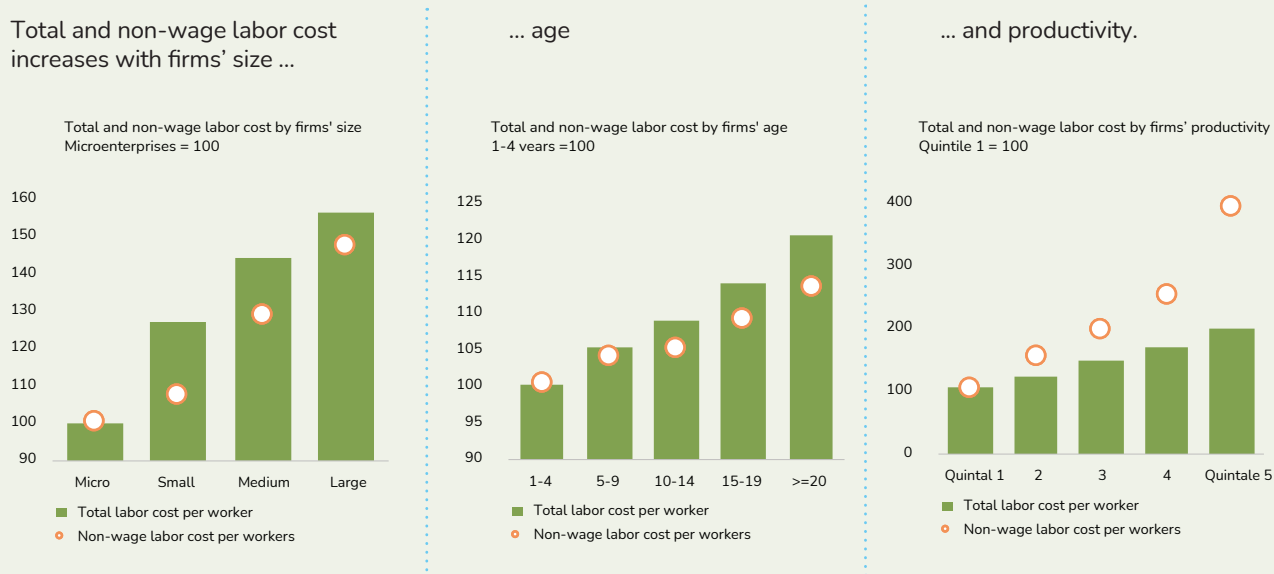
**Increasing labor costs in Ecuador directly correlate with firm size, age, and productivity, indicating the negative impact of labor regulations on firms' development and allocative efficiency.** The combination of these distortionary labor regulations significantly impacts aggregate productivity through the allocative efficiency channel and discourages formalization. Labor costs also display a direct relationship with formal firms' size, age, and productivity, indicating the negative impact of labor regulations on the allocation of resources (Figure 17). One plausible explanation for labor costs increasing with firms' size is that larger firms are more easily monitored and more likely to be under scrutiny to comply with labor regulations. In addition, certain obligatory services are tied to workforce size, such as the requirement for firms with 50 or more workers to provide child daycare services since 2013. Increasing labor costs with firms' age can be linked to the way distortionary labor frictions discourage firm churning, resulting in an aging labor force within firms and higher costs associated with longer job tenure. For example, workers with longer tenure are likely to receive higher compulsory allowances because the extra payments are directly proportional to their wages, which tend to increase over time. Labor costs rising with productivity indicates that labor market frictions disproportionately impact productive firms, hindering their ability to demand more capital and labor.

---

14 Ecuadorian formal firms are legally obliged to pay three compulsory allowances for each worker. The "thirteenth salary" allowance is equal to a worker's monthly salary and paid to all workers during Christmas time (December). The "fourteenth salary" allowance is equal to a minimum wage payment that is paid to all workers before the school year begins (August/September). The "unemployment reserve funds" allowance is paid monthly to every worker and equals 8.3 percent of each worker's salary.

15 According to Article 97 of Ecuador's Employment Regulation, firms are obliged to share 15 percent of their profits with their labor force.

Figure 17. Excessive labor costs undermine firms' development.



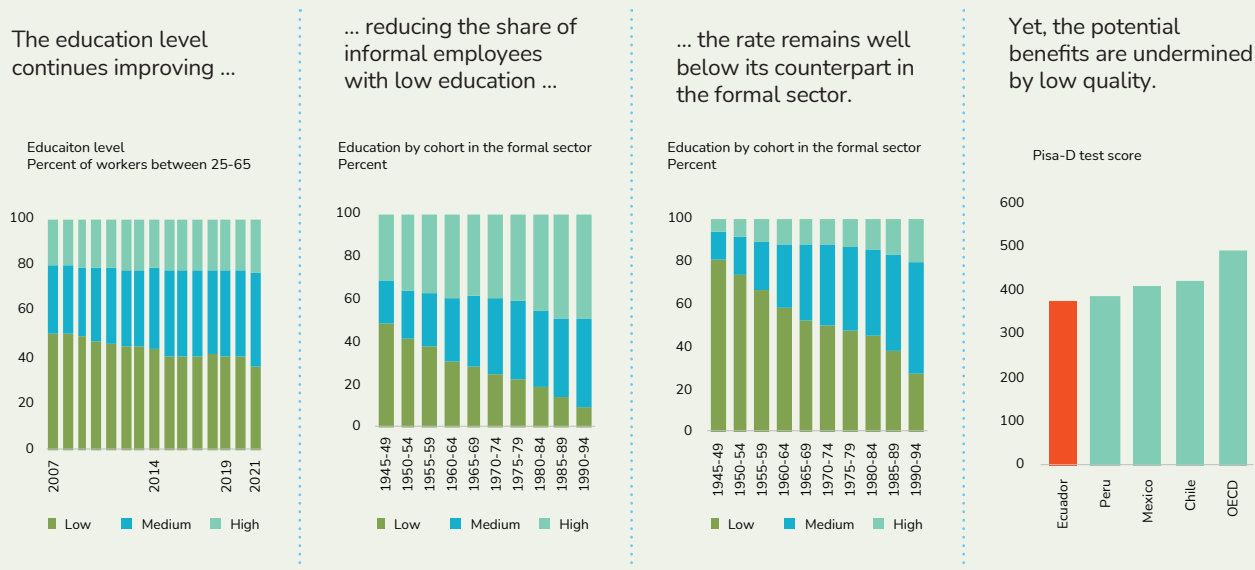
Note: These premiums are estimated from regressions of total or non-wage labor costs per worker on size groups, age groups, and revenue productivity quintiles, including controls for industries and years. Total labor costs consist of wages plus social security contributions, severance pay costs, mandatory compulsory allowances (i.e., "thirteenth" salary, "fourteenth" salaries, unemployment reserve fund), compulsory worker participation in firms' dividends, and other remunerations (i.e., transportation, commissions, bonuses, childcare). Firms' non-wage labor costs include mandatory compulsory allowances (i.e., "thirteenth" salary, "fourteenth" salaries, unemployment reserve fund), compulsory worker participation in firms' dividends, and other remunerations (i.e., transportation, commissions, bonuses, childcare). As an important caveat, data sources do not allow the inclusion of firing costs in the non-wage labor cost measure.  
Source: Patiño Peña and Ferro (2024).

## Improving skills and reducing mismatches could lessen the effects of labor rigidities

In Ecuador, the benefits of improving educational attainment have been dragged down by the low quality of schools and the high levels of tertiary dropouts. Despite significant investment to improve access to education (World Bank, 2018), the share of working-age people with low education only dropped from 50 percent in 2007 to 36 percent in 2021 (Figure 18). However, the share of informal workers with low education decreased from 82 percent in cohorts born in 1945-49 to 27 percent in cohorts born in 1990-94. Furthermore, the benefits of education have been limited by the low quality of education. The Programme for International Student Assessment (PISA) math scores for 15-year-olds in Ecuador are 30 percent lower than in OECD countries, 12 percent lower than in Chile, and 8 percent lower than in Mexico. Due to a high dropout rate in tertiary education, only 11 percent of the population above age 25 received a higher education degree between 2007 and 2017, which is below Mexico (16 percent), Chile (21 percent), and Colombia (23 percent) (World Bank 2018). These structural issues have been compounded by the long-lasting negative

effect of the pandemic-led disruption of the education system.<sup>16</sup> According to the World Bank (2021 and 2021b), learning poverty – the share of children unable to read proficiently when reaching late primary schooling – increased to 63 percent due to the pandemic, 12 percentage points higher than Latin America and the Caribbean and 31 percentage points above upper-middle-income countries. High-Frequency Population Surveys for 2021-2020 show that about one of seven children were learning less than before the pandemic, which could significantly reduce lifetime earnings.

Figure 18. Despite improving education attainment, education quality still needs to improve.



Note: Education levels were defined considering complete years of education as follows: low (0–8 years of schooling), intermediate (9–13 years of schooling), and high (14 or more years of education), following Alaimo et al. (2015).  
Source: National Institute of Statistics and Census (INEC) and OECD

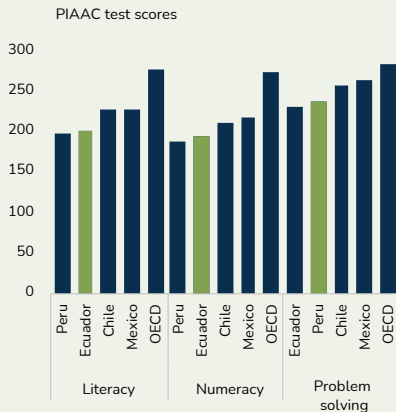
**Low education quality prevents the labor force from acquiring critical cognitive skills, limiting their capacity to learn and innovate.**<sup>17</sup> Compared to OECD countries, Ecuadorian workers' median scores in numeracy and literacy of ages 16 to 65 are about 30 percent lower and 10 percent lower in problem-solving (Figure 19). Seven out of ten of Ecuador's adult workers score below the minimum proficiency level in numeracy and literacy, which only requires demonstrating the ability to perform a basic arithmetic operation or reading brief texts on familiar topics. Only 7 percent of workers in low-skilled occupations have computer experience, 15 percentage points below the OECD. There are no significant gender gaps in numeracy skills, but important discrepancies between people's education and age groups result from skills gained during the education cycle and the medium-term improvement in the education level. As expected, low-skilled employees are more likely to work as self-employees or salaried in small firms and other low-skill occupations and earn less than the minimum wage.

16 According to World Bank, UNESCO, and UNICEF (2021), the generation of students affected by the pandemic could lose about US\$17 trillion (14 percent of today's global GDP) in lifetime earnings in present value due to school closures. Recent learning assessments show that children in many countries have missed out on most or all of the academic learning they would ordinarily have acquired in school, with younger and more marginalized children often missing out the most. Not developing skills on time could limit the ability to learn as one grows older, which could undermine labor mobility, higher earnings, and economic growth.

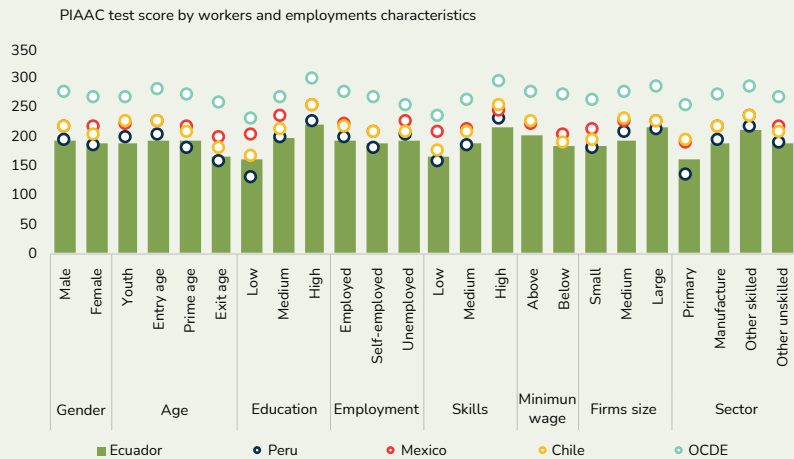
17 Aghion, et al. (2019) find that low-skilled workers in innovative firms could experience a persistent premium throughout their working life compared to other workers in low-skilled occupations. This is because the complementarity between high-skilled workers and some low-skilled occupations increases with the firm's innovativeness. Yet, the share of low-skilled workers in these firms is low.

Figure 19. Ecuadorians have lower cognitive skills than their peers in other countries.

Scores in numeracy and literacy are low ...



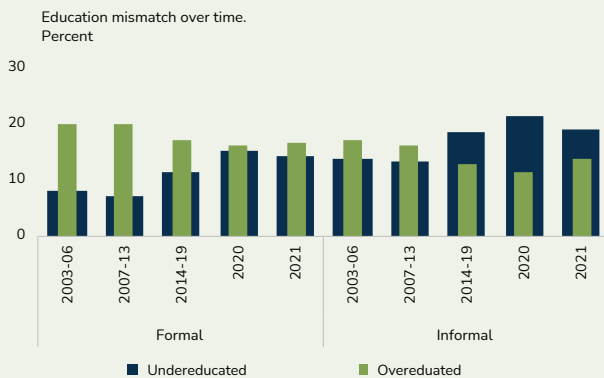
... affecting self-employees or salaried in small firms and earn less than the minimum wage.



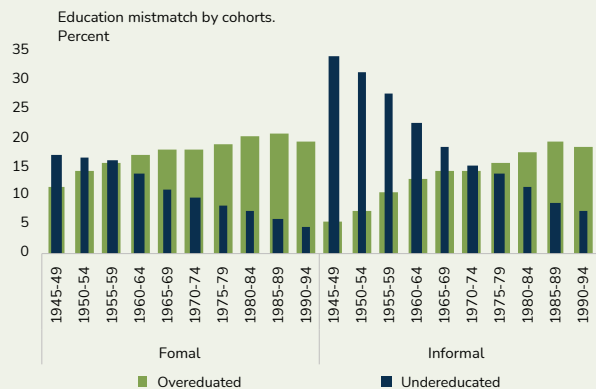
Note: Literacy is defined as understanding, evaluating, using, and engaging with written texts to participate in society, achieve one's goals, and develop one's knowledge and potential; numeracy is the ability to access, use, interpret, and communicate mathematical information and ideas to engage in and manage the mathematical demands of a range of situations in adult life; problem-solving refers to a situation where a person cannot immediately and routinely achieve their goals due to some obstacle or challenge (OECD 2021). Sample workers aged 16 to 65 exclude pupils/students not working, apprentice/internship workers not receiving wages, and those fulfilling domestic tasks or looking after children/-family, unless classified as employed, self-employed, and unemployed. Unskilled services include commerce, trade, hotels, restaurants, transport, and storage. Skilled services include public utilities, financial services, communication, teaching, and other professional services. Plots report median numeracy test scores, which are the most comparable across countries but are similar regardless of the measure of cognitive skills. Firm size reports scores of employees only. The sample is the same as in previous figures. Source: OECD's Survey of Adult Skills (PIAAC).

Figure 20. Educational mismatch is a structural and worsening problem in Ecuador.

The shares of undereducated in formal and informal sector workers are increasing ...



... leading to increasing wage penalties and premiums.



Note: Educational mismatch is defined by comparing workers' years of education with all workers' average years of education within the same International Standard Classification of Occupations Latin American and the Caribbean (ISCO) one-digit occupation category. If years of schooling are one standard deviation lower/higher than the average education in an occupation, workers are defined as under/overeducated. Source: Gachet (2022)



**Low cognitive skills and inadequate worker training are critical concerns for Ecuadorian firm.** The proliferation of low-skilled workers with limited training and jobs in small and low-productivity firms could harm economic growth by making the adoption of new technology more challenging (Busso et al. 2017). Results from the 2017 World Bank enterprise surveys reveal that 34.2 percent of Ecuador's firms identify an inadequately trained workforce as a major constraint, more than double the in OECD average. For instance, manufacturing firms that require highly specialized technical skills, including those in the automotive and machinery industries, are the ones that need help finding skilled workers (Fiszbein, Cosentino, and Cumsille, 2016).

**Undereducated workers increased in the oldest cohorts during the past two decades.**<sup>18</sup> Over the past 20 years, the average share of educational mismatch in Ecuador's labor market has been about 30 percent. Despite improvements in educational attainments, the shares of undereducated workers have substantially increased in both formal and informal sectors (Figure 20). While overeducation implies a direct underutilization of talent, undereducation could reduce wages, increase poor performance layoffs, raise training costs, and inhibit technological adoption (Livanos and Núñez, 2017, and McGowan and Andrews, 2015). The fact that undereducation is more prevalent in older cohorts and overeducation is more frequent among the youngest cohorts suggests that older employees may not have enough opportunities for lifelong learning or that they are struggling to follow the pace of changing labor demand resulting from, for example, technological progress.

**Undereducated workers receive a significant wage premium, while overeducated people suffer a wage penalty.**<sup>19</sup> Wage premiums and penalties calculate the gaps with the salary of a well-matched person. In Ecuador, premiums (10.5 percent) for undereducated workers are almost twice as high as losses (6.4 percent) for overeducated people (Figure 21). The gaps are larger in the formal sector and declined for nearly a decade until 2021. The wage premium has steadily declined across cohorts in the formal sector, suggesting that the sector's young workers may accept low-skill jobs that do not align with their education levels. Premiums and penalties tend to be lower among the most vulnerable segments of the labor force, such as women, workers in the bottom 40 percent of the income distribution, below minimum wage earners, small firms' employees, and workers in low-skill sectors. However, they tend to be higher in the formal sector than the informal one, probably because informal firms tend to comply less with labor regulations. Misallocation leads to job dissatisfaction and limits professional growth opportunities, reducing productivity. Overeducated workers are about 5 percent more dissatisfied with the lack of growth opportunities than well-matched workers. Dissatisfaction with the lack of growth opportunities is higher for formally overeducated workers than their informal sector peers. Undereducated workers in the formal sector are 6 percent more dissatisfied with the lack of growth opportunities than well-matched workers.

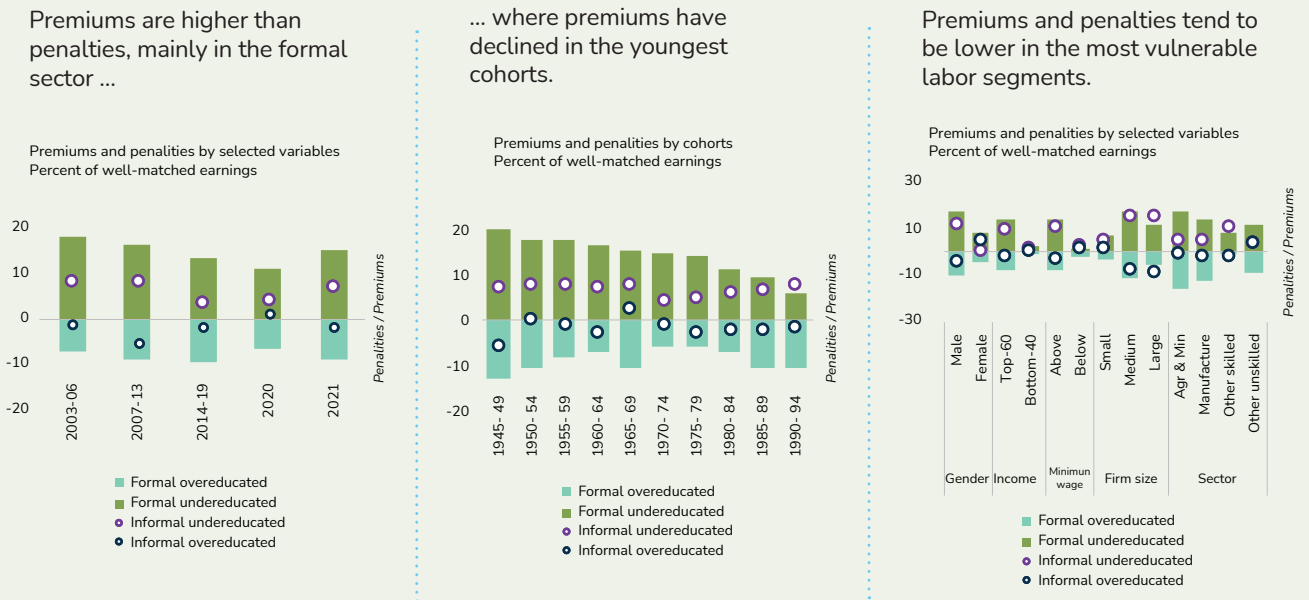
**Mismatches could be even higher if non-cognitive skills are considered.** According to the World Development Report (2016), the skills required for the modern economy go beyond such foundational cognitive skills as basic literacy and numeracy. Today's jobs will require the ability to understand complex concepts, learn from experience, adapt to new situations, and more generally solve problems by using critical thinking. In this context, low-skilled workers in low-skilled occupations performing simpler routine tasks are most at risk of being replaced by technology (World Bank, 2019). Although the time frame for technology adoption is unclear, labor market transformations may happen for many mid-career adults and young cohorts of workers.

---

18 Educational mismatch could result from market imperfections resulting from imperfect information, natural friction in the labor market, and restrictive labor regulations (Handel, Valerio, and Sánchez Puerta, 2016, and Asai, et al., 2020).

19 Overeducated workers earn more than well-matched workers in the same kind same kind of jobs, but less than well-matched workers with the same characteristics (e.g., gender, education, experiences, etc.). This is the opposite for undereducated workers that earn less than well-matched workers in the same job, but more than well-matched workers with the characteristics.

Figure 21. Premiums and penalties have decreased over the past two decades but are still high.



Note: Each plot in these charts shows wage premiums and penalties for undereducated and overeducated workers. Following the standard literature, they were estimated using a Mincerian regression model that includes dummies for overeducated and undereducated workers. Controls include gender, a quadratic polynomial of work tenure, dummy variables for informal, public, wage earners, below-minimum wage workers, and cohorts' fixed effects. As discussed in the literature, one of the main limitations is the potential selection bias partly caused by unobservable factors, such as low ability or degree completion. To partly address this issue with the available information, the estimation tried to control unobserved characteristics with fixed effects and control for workers' demographic and labor market characteristics. Pooled regressions control for firm, industry, year, and cohort fixed effects. Wages were trimmed at the bottom and top one percent of the wage distribution to limit the influence of outliers.

Source: Gachet (2022).



Dissatisfaction with the lack of growth opportunities is higher for formally overeducated workers than their informal sector peers

Although policies to address skill misallocations are second-order options for reducing allocative inefficiencies, restrictive labor regulations are also behind the mismatches, making it difficult for firms to remedy them. Rigid labor regulations could constrain firms' ability to hire workers with the education and skills that align with their job offers because of inflexible contracts, high dismissal costs, short probation periods, and high wages. Some policies inhibit investing in developing workers' skills, including the Jubilación Patronal, an employer-paid pension for formal workers with over 20 years of service that, in practice, leads to layoffs before workers can access this benefit.

## Easing labor rigidities is key but should be joined by efforts to protect the vulnerable, improve human capital, reduce skill mismatches, and fuel the labor demand

**Easing the labor market rigidities requires addressing many issues in current labor regulations.** According to Gachet, Packard, and Olivieri (2020), the three priorities in this area are: (i) eliminating the 35 percent surcharge in occasional contracts, at least for young workers;<sup>20</sup> (ii) changing or eliminating *Jubilacion Patronal* to reduce uncertainty for firms and workers in the long run; and (iii) redesigning unemployment insurance to better support job search, mainly by reducing the two months it can take to access this benefit.<sup>21</sup> Reform could also eliminate mandatory severance payments for workers who resign voluntarily and reintroduce hourly contracts and outsourcing, at least for younger workers. The profit-sharing requirements could be modified to incentivize productivity in workers' efforts or achievements, linking them to transparent performance criteria. Newly established firms could be exempted from mandatory profit sharing until they become established, having made profits for several consecutive years. In the medium to longer-term perspective and contingent on a policy dialogue, Ecuador could consider reforming the constitution to reinstate hourly contracts and outsourcing, at least for younger workers, giving firms flexibility to generate formal jobs.

**The authorities could also reduce the directionality in the minimum wage so that it could consider labor's productivity performance.** Reforming the institutional arrangement to set the minimum wage does not need any change in law, and in the short to medium term authorities could start a dialogue on reducing discretion in minimum wage management. It could be helpful to expand the dialogue to include other parties, including those who do not have access to formal labor opportunities due to labor rigidities, such as young workers. Ecuador has failed to introduce a formula to drive the minimum wage when employers and workers do not reach an agreement. It could be helpful to define a mechanism to guide the dialogue, so minimum wage increases consider the dynamic of critical macroeconomic variables, such as inflation, employment, and productivity.

**These reforms should consider important trade-offs associated with increasing flexibility in the labor market.** Well-designed labor regulations can avoid inefficient and inequitable labor market outcomes; poorly designed and enforced ones can harm workers and keep firms from growing. On the one hand, increased flexibility allows the private sector to adapt more rapidly to changing conditions linked to business cycles and changing production technologies. It reduces the cost of creating new formal positions and encourages workers and firms to find more productive matches. On the other hand, labor market flexibility transfers risk from employers to employees, leaving some workers more vulnerable to shocks. Flexibility must be accompanied by provisions to protect vulnerable workers while alleviating restrictions on firms' development.

**The country could benefit from improving labor demand, starting with reducing malnutrition and improving early education.** Learning and skills development is a cumulative process that starts in early childhood, and improving early education could not only lead to long-term cognitive gains but also close the skill gap in the medium term. Ecuador has one of the highest malnutrition rates in the region. The government is making progress in this area with the Nutrition Secretary, which aims to reduce malnutrition. This is the first step toward improving children's cognitive development and closing Ecuadorian workers' skill gaps in the long run. These efforts should be complemented with rigorous evaluation, and necessary corrections could be made. The Jamaica Early Childhood Stimulation

20 This type of contract allows firms to hire workers for up to 180 days, but hourly wages paid under this *contra modo* is 25 percent higher than full-time workers.

21 Unemployment insurance in Ecuador is ineffective. Eligibility requirements limit adequate coverage even among people who lose formal jobs. Among the formally employed, eligibility is based on having no less than 24 months of contributions, and six of these months must be consecutive before being unemployed for at least 60 days. Unemployment insurance only covers workers laid off from their jobs, and the approval could take up to 45 days. About half of the unemployed from formal jobs will not comply with unemployment insurance's tenure and contribution requirements.

intervention, which consisted of regular visits from health workers to low-income families, has shown a range of long-term cognitive benefits resulting from the intervention. At age 31, participants had significantly greater IQs, improved mathematics and language skills, and larger earnings gains over time (Gertler et al., [2021](#)).

**Technological innovation could be used to develop students' core transversal competencies, such as analytical thinking, problem resolution, communication, and digital literacy.** Active labor market programs to support worker retraining and skills development could be complemented by improved access to quality tertiary education to improve future labor force capabilities. Tertiary education not only imparts the technical skills required for certain occupations but also fosters the development of complex problem-solving, critical thinking, and advanced communications skills that are transferable across jobs and occupations (Beylis et al., [2020](#)). Such innovations as virtual laboratories and computer-assisted learning and remediation also show great promise for technical training, potentially optimizing students' graduation time and skills development and even decreasing educational costs (World Bank [2021b](#)). The evoke project in Colombia uses storytelling, game mechanics, and global social networks through implementation of blockchain technology and crypto-tokens as a means of transparent and traceable value exchange between funders, students, and teachers in an educational system that has proven effective in developing young people's social-emotional skills (Freeman and Hawkins [2017](#)).





**Improving Ecuador's active labor market programs would boost productivity by reducing the undereducation mismatches.** Active labor market programs in Ecuador are usually small, have limited financial and administrative capacity, have a small practical component, and do not meet the private sector needs (World Bank, [2021](#)). Strengthening technical, financial, and administrative capacity and working with the private sector to redesign training programs could be important first steps. For example, the Bank's current education project has promoted private sector involvement in the design of technical education offers. To ensure that the skills workers develop can be maximized once they become employed, Ecuador needs efficient programs that seek to expand worker skills, including career counseling, job placement, and network-building activities like apprenticeships. This program's impact could be enhanced through employment incentives, such as hiring subsidies and social security waivers, to support formal labor demand and re-orientation training policies to help workers upgrade their skills to reallocate or re-enter the labor market (OECD [2021](#)).

**In the same vein, Ecuador could benefit from a program to certify informal workers' abilities, so they can be recognized in the private sector.** To meet the demands for skills and overcome the restrictions on informal workers access to certifications (e.g., time and money), certification could be implemented in a joint effort between universities, technical institutes, and the government. Many countries have already implemented technological solutions to train informal workers. In the region, the virtual platform for agricultural labor training promotes the generation and transfer of specific skills to the agricultural sector through a digital system of interactive courses and content to refresh and update skills (Urquidi, 2022). This could be expanded to other industries.

**These complementary policies are likely to have a limited effect on the economy until the country tackles the constraints to labor demand, including rigid labor regulation.** If the country fails to ignite new sources of growth and quality employment, efforts to improve human capital would only result in higher skill mismatches, additional informality, and stagnating labor earning. Policies to reduce skill mismatch could be ineffective if formal labor demand does not increase and offer suitable employment opportunities.



Such innovations as virtual laboratories and computer-assisted learning and remediation also show great promise for technical training, potentially optimizing students' graduation time and skills development and even decreasing educational costs.



# Chapter 3

## Addressing Other Critical Cross-Cutting Constraints



### Summary

It is possible to set a medium-term agenda to gradually foster the labor demand by enhancing the SOEs' competitive neutrality, reducing the burdens of regulation and entry and exit barriers, and improving the competition policy framework. Productivity could also be enhanced by advancing trade agreements with complementary economies, lowering tariffs and non-tariff measures, and addressing logistics problems, including surging insecurity. The positive impact of these measures could be enhanced by evaluating and sequencing them to reduce possible adverse short-term side effects and improve firms' capacities.

The chapter evaluates the non-labor cross-cutting issues identified in the first chapter. That chapter concludes that Ecuador's lower capital accumulation and productivity losses are driven primarily by allocative inefficiencies associated with cross-cutting issues, such as rigid labor regulation, limited competition, trade barriers, an inefficient insolvency framework, and limited access to finance. The second chapter has already discussed issues related to the labor market and the Financial Sector Assessment Program (World Bank, 2023) discussed difficulties in accessing credit. This chapter will evaluate limited competition and trade barriers.

### Box 3.

Stagnant growth and productivity in the Latin American and the Caribbean region seem related to a lack of competition.

Competitive pressures push well-functioning markets toward a “creative destruction” that fosters entry, innovation, expansion, and churning. The lack of competition keeps markets from enabling growth, facilitating the movement of resources between firms, and fostering allocative efficiency. Ultimately, an economy's competitive forces determine the likelihood of productive firms entering and challenging incumbents, define strategic behavior, shape incentives for firms to innovate (e.g., improve product quality) or pursue anti-competitive conduct, and determine the survival or exit of less productive firms.

Barriers to entry, uneven enforcement of competition policy, and weak institutional capacity limit growth in the region. Productivity has declined since the 1980s, partly due to a lack of competitive pressures. Excessively complex regulations and costly licensing create barriers to entry. Although the region has strengthened antitrust enforcement in recent decades, opportunities remain to remove rules or facilitating factors that enable established firms' anticompetitive behavior, such as collusion and abuse of dominance. Evidence shows that antitrust enforcement and sectoral reforms to remove existing barriers, combined with prosecution and sanctions of cartels and anti-competitive practices, can increase productivity while transferring gains to consumers through lower prices.

**Ecuador lags in these dimensions.** Ecuador has onerous and cumbersome procedures for start-ups, an important barrier to entry. Competition is undermined by price controls, preferential treatment for certain incumbents, and rules that shield the domestic market from foreign competition. Compared to regional peers, some gaps remain in terms of the capacity to monitor markets.





## Enhancing domestic competition can increase productivity

**Competition is critical for unlocking productivity-enhancing markets and growth in Ecuador.** Boosting competition can ultimately promote the entry of new investors, remove undue protections to incumbents, and stimulate the emergence of more productive firms (Box 3). It can create proper incentives toward a dynamic and well-functioning process of “destructive creation” that enables firms to grow, innovate, and foster allocative efficiency by encouraging the exit of less productive firm. In Ecuador, some productivity-enhancing channels are not working well due to a lack of competition, barriers to entry, and preferential treatment for certain market players.

**Competition in Ecuador is relatively low, with highly concentrated markets and signs of increasing market power.** In the 2019 Global Competitiveness Reports, Ecuador performs poorly in terms of domestic competition (ranking 123 out of 141 countries), market dominance (118), and competition services (98). As of 2017, 33.7 percent of the Ecuadorian manufacturing companies in the World Bank Enterprise Survey declared that they operate in highly concentrated markets, about 10 percentage points higher than Kazakhstan (23.9 percent) and four times higher than aspirational peer Tunisia (7.8 percent) (Figure 22). Ecuador’s mean and median price cost margins (PCM), a proxy of market power<sup>22</sup> in manufacturing and services, increased between 2010 and 2017, showing there are barriers to market entry or exit for potential entrants and incumbents.

**Product market regulations are more restrictive in Ecuador than its regional and structural peers.** According to the OECD and World Bank’s Product Market Regulation (PMR) Index, Ecuador’s regulations are one of the more restrictive when it comes to competition, doubling the average OECD country. These restrictions stem from two channels. First, state involvement as a market player through SOEs, particularly in competitive sectors where the private sector is viable. Second, government as regulator and enforcer of market rules that might deter domestic and foreign entry. This includes weak governance, the lack of regulatory simplification and evaluation, high administrative burden on startups, and barriers in services and network sectors.

**SOEs are important market players that operate even in fully competitive sectors, creating a high risk of distorting market dynamics.** The state remains a market player through participation (10 percent or more) across more than 340 firms. Their domestic operating revenues reached 24 percent of GDP, the second highest in the region.<sup>23</sup> About half of SOEs operate in fully competitive sectors where private sector participation under market conditions is viable, such as business support activities, raising animals, mixed farming, construction, rental and leasing, hotels, and accommodation (Figure 23). In addition, 29 percent operate in natural monopoly sectors, such as water collection, sewage, and electricity transmission, and 25 percent in partly contestable sectors, such as urban transport services and wireless communications. Centrally owned SOEs operate mainly in competitive sectors (65 percent at the central level vs. 37 percent at the subnational level), whereas subnational SOEs operate a higher proportion of natural monopolies (5 percent vs. 39 percent).

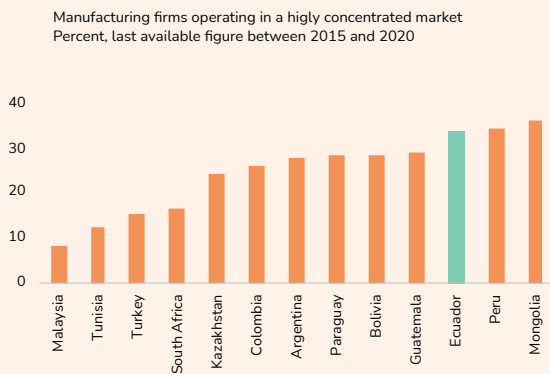
---

22 Under a theoretical market structure of perfect competition, marginal cost pricing prevails, and firms earn just normal profit in the long run. When competition is imperfect, prices deviate significantly from marginal cost. The extent of the deviation captures the extent of a firm’s pricing power in a market. In the absence of information on price and marginal cost, the analysis measures PCM as the difference between sales and total variable costs as a proportion of sales.

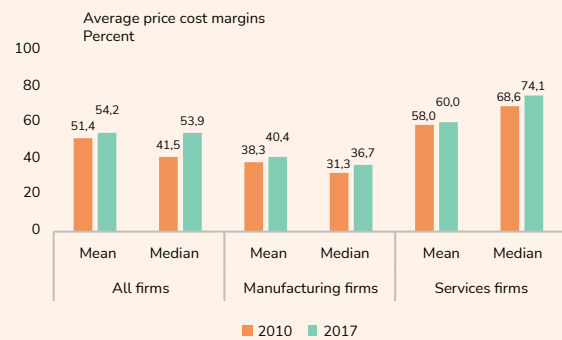
23 Firms denoted as World Bank’s Businesses of the State (BOS) refer to legally independent entities, operating for a financial gain and engaged in market production where either national or subnational governments hold 10 percent or more participation (directly or indirectly).

Figure 22. The lack of competition is evidenced in concentrated structures in the manufacturing sector and increasing price-cost margins and is worsened by burdensome product market regulation.

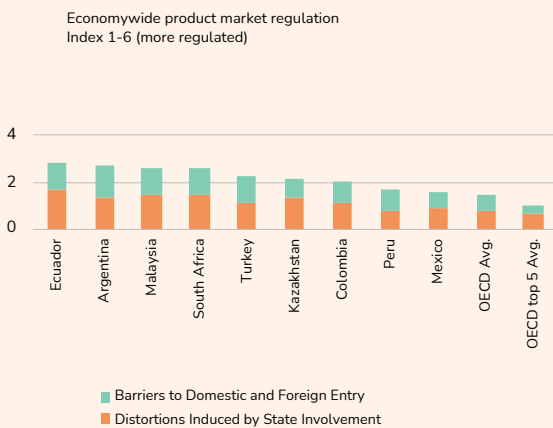
Concentration is evident in Ecuador's manufacturing sector ...



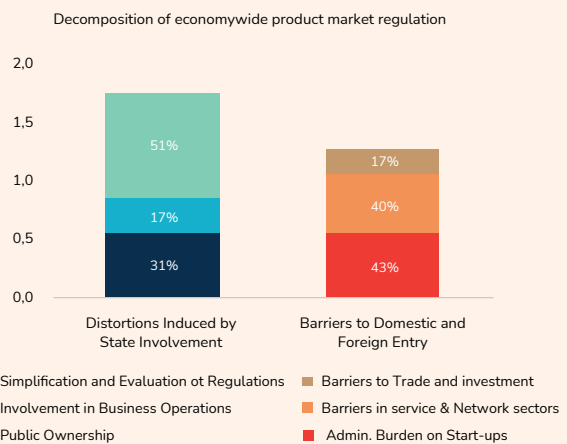
... possibly associated with high and increasing price cost margins.



Product market regulation is restrictive due to ...



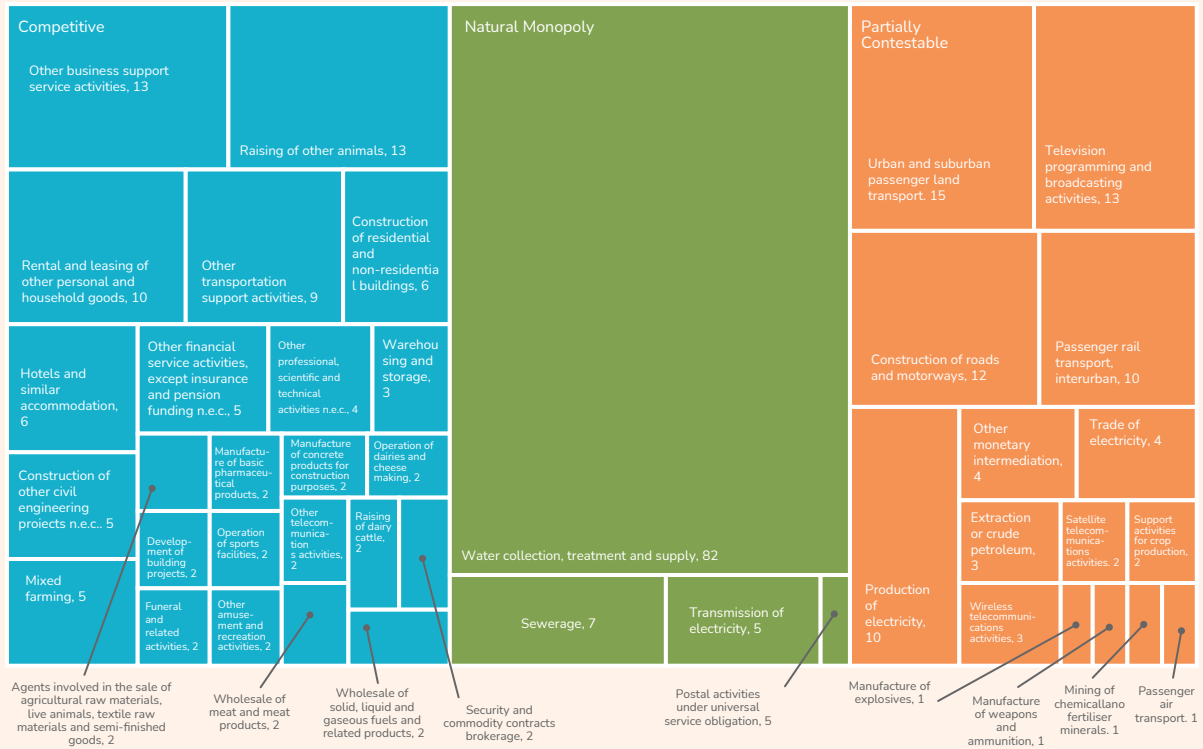
... SOEs operations, complex administrative burden regulation, and limited rules to minimize anti-competitive effect of new regulations



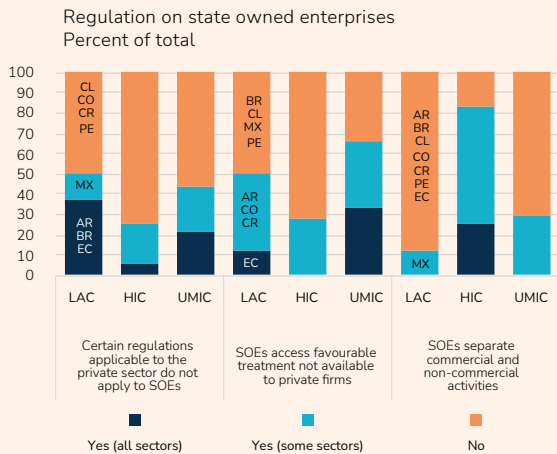
Notes: The price-cost margin (PCM) is defined as: sales - total cost of sales/sales. The total cost of sales includes the costs of materials, finished goods and materials purchased to resell, labor, and electricity. The analysis restricts PCM values to the unit interval and PCM values in the top and bottom percentile of each International Standard Industrial Classification Rev. 3.1 two-digit sector code and year. No survey weights are applied. The World Bank Group's Product Market Regulation (PMR) ranges from 0 to 6, from most to least competition-friendly regulation.

Source: World Bank's Enterprise and OECD-WBG Product Market Regulation Database 2018.

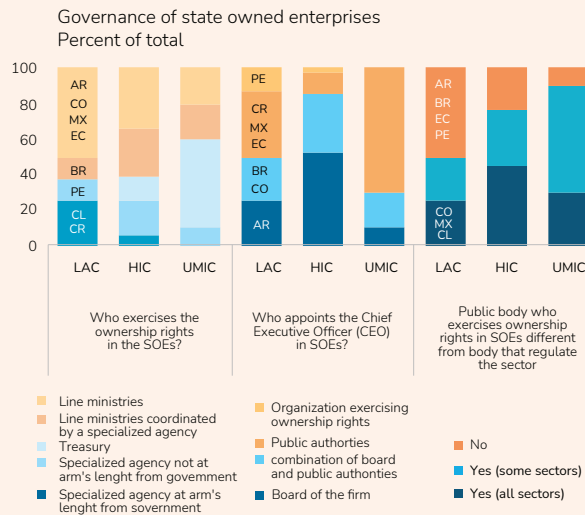
Figure 23. State-owned enterprises operate in a wide range of sectors, including competitive ones. State-owned enterprises operate in a wide range of sectors, including competitive ones that ...



... receive favorable treatment not available to private peers ...



... and face conflict of interest.



Note: Competitive sectors have small entry barriers and can be served by the private sector. Contestable sectors have moderate entry barriers, public goods, or externalities. Natural monopolies have high entry barriers, economies of scale, or sub-additivity cost structures. The World Bank BOS database includes the following Latin America and the Caribbean countries: Argentina (AR), Brazil (BR), Chile (CL), Colombia (CO), Costa Rica (CR), Ecuador (EC), Mexico (MX), and Peru (PE). Source: World Bank Businesses of the State (BOS) database Dall' Olivo et al. (2022) and OECD-WBG Product Market Regulation Database 2018.



SOEs are subject to different labor and bankruptcy regulations, have beneficial tax treatment not available to private firms, and lack separation between commercial and non-commercial functions.

**The risks of distorting competition and potential resource misallocation are enlarged by preferential treatment of SOEs, restricted private competition in network sectors, and conflicts of interest.** Although SOEs' activities do not necessarily translate into market distortions, differential treatment vis-a-vis their private counterparts could hinder competition, crowding out the private sector or impeding underlying market forces that promote entry, survival, and growth of productive firms on a level playing field. These risks for market distortions are evident in Ecuador. Almost half of SOEs are engaged in competitive sectors, and only 19 percent are corporatized under private law. In addition, SOEs are subject to different labor and bankruptcy regulations, have beneficial tax treatment not available to private firms, and lack separation between commercial and non-commercial functions. Some sectoral provisions also grant certain privileges. For instance, telecommunication SOEs have preferential rights to use the spectrum and are exempted from quarterly payments required by their private peers with more than 30 percent market share. Mining SOEs have a preference to obtain a concession title. According to the constitution, electricity, gas, oil, health, and water and sanitation are strategic sectors, restricting private participation and entry to challenge the incumbents even in market segments where competition is feasible. SOEs are subject to competition law, but they are prone to conflicts of interest and political influence because CEOs are appointed by public authorities and entities that exercise ownership rights are sometimes the sector's regulators. Although the government created the *Empresa Coordinadora de Empresas Públicas* (EMCO) in 2015 to unify the supervision of SOEs, the lack of separation between ownership and regulation creates conflicts of interest. As of 2018, EMCO competencies overlapped with those of the line ministries, creating problems for common agencies in controlling the firms.

**Besides their impact on the overall investment climate, these shortcomings could limit Ecuador's capacity to mobilize private investment to further effort to decarbonize the electricity sector.** Electricity SOEs are vertically integrated, even though generation and retail supply are contestable segments. *Corporación Eléctrica del Ecuador* (CELEC) participates across all market segments directly or through other companies (e.g., *Servicios Técnicos Especializados en Electricidad* (SERCOEL) in the electricity trade). Little separation exists in the generation, transmission, and distribution of electricity and gas, making entry more difficult. Although the Electricity Sector Law allows private investors to obtain concessions and entry, private companies face a cap of 39 percent on ownership. Although this law allows the interconnection and access to third parties, some provisions may result in unnecessary restrictions on generation. Low electricity prices do not cover the service's total cost. From a competition standpoint and under the Electricity Sector Law, electricity generation is a segment that could be further opened to private participation, helping lower energy sector emissions by enlarging renewable energy generation and fostering green job creation. In the past few years, the government has passed some reforms to enable the private sector to invest in non-conventional renewable energy and distributed generation. However, legal changes must address entry restrictions and structural measures that guarantee access in the electricity and gas sectors. For instance, the effort would require third-party access regulation in the gas sector and liberalization of the wholesale electricity market, which most countries in the region have implemented. The absence of third-party access rules further reduces incentives for entry because potential generation entrants lack alternatives to state monopoly in demand for electricity.



**Suboptimal product market regulation and excessive government intervention in markets hamper productivity growth by limiting entry, increasing the costs to compete, and imposing discriminatory barriers for certain market players.**<sup>24</sup> Competition is hindered by:

- **Privileges granted to domestic players.** Domestic companies are protected from foreign competition through domestic-content requirements, reserved participation on public tenders, and FDI barriers. These restrictions help explain Ecuador's low level of foreign investment (Figure 24). Among Latin American and the Caribbean countries, Ecuador ranks second after Chile with the highest restrictions on FDI, partly because of a lack of bilateral investment and double taxation treaties with many FDI sources (World Bank, 2021). Despite some improvements in Ecuador's public procurement regulatory framework, the lack of competitive neutrality between domestic and foreign firms remains a barrier to FDI. Although public tenders follow competitive and open procedures, domestic content requirements exist, reserving a share of contracts for domestic firms.
- **Burdensome regulation.** Ecuador requires entrepreneurs to contact as many as six agencies to register a company or sole proprietorship, putting it behind other countries in the region, such as Mexico (5), Argentina (5), Chile (4), and Peru (4). There are no one-stop shops to provide authorizations and permits, nor a website that issues or accepts all notifications and permits. An absence of key simplifying tools in the system of licenses and permits, such as the use of silent consent rules, limits the ability to streamline entry procedures and speed up resolutions for the benefit of firms and citizens. Ecuador is the region's only country where information is available without explicit programs to reduce compliance costs or online platforms that systematically facilitate access to key legislative information.
- **Price controls.** Prices are regulated for several professional services through minimum prices for activities performed by lawyers, accountants, architects, and notaries—engineering is the only professional service in the database without price controls. Additional price controls are found on several goods, such as gasoline, prescription and non-prescription medicines, and liquid petroleum gas, which may discourage entry and favor anticompetitive practices such as price agreements among competitors. Critical prices in the Ecuadorian economy are distorted and do not respond to market forces. Fuel prices are subsidized, interest rates are capped, minimum wages are set high, and agricultural prices are centrally negotiated rather than determined in the market. This distortion compounds the effects of other price-distorting measures, including import quotas, agricultural absorption commitments, or SOE activities.

**Competition could be enhanced by improving Ecuador's dysfunctional insolvency framework.** Ecuador's insolvency framework is fragmented and dispersed, establishing various procedures that are rarely used (Box 4). The system makes it very hard for firms to get adequate and timely access to insolvency proceedings. The current legislation does not allow interference with contracts where both parties have not fully fulfilled their obligations and does not allow the debtor to be rehabilitated unless all debts are fully met. It does not address other important issues, such as informal collective debt restructuring, cross-border aspects, and reorganization and liquidation of MSEs. These shortcomings impede the swift reallocation of unsuccessful enterprises' labor and capital. They not only protract inefficient allocation of resources but also reduce prospects for investors to swiftly react and reorient their capital, increasing the risk of new undertakings and slowing overall business dynamism and private investment growth.

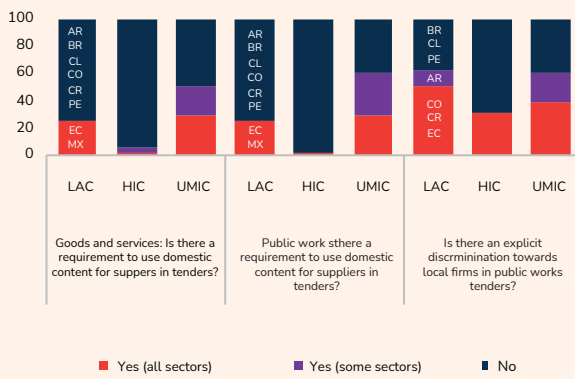
---

24 Although government interventions are sometimes justified and necessary, poor interventions harm market contestability limiting entry, reinforcing dominance, imposing undue burdens, facilitating collusion, or distorting the playing field. This could diminish productivity by: (i) reducing the incentives to innovate and upgrade production (productive efficiency), (ii) causing resource misallocation across firms and sectors (allocative efficiency), and (iii) limiting the entry of more productive firms and the exit of unproductive ones (market selection).

Figure 24. Discriminatory barriers against foreign investors, burdensome procedures, and price controls also hinder competition.

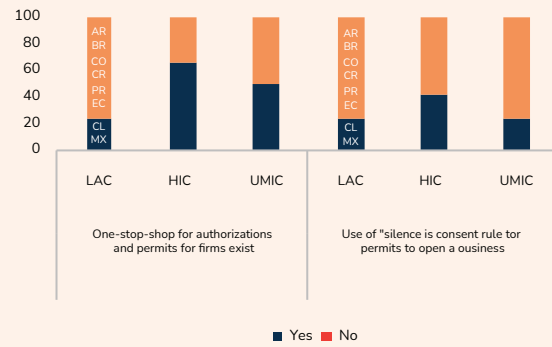
Discriminatory barriers hinder competition from forming investors.

Discriminatory barriers against participation of foreign companies  
Percent of total



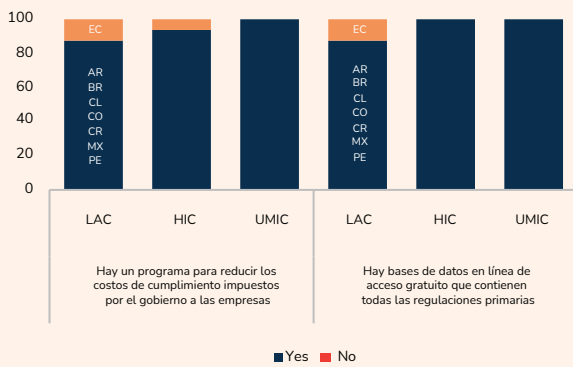
Administrative burdens for startups deter entry and investment.

Entry facility institutions  
Percent of total



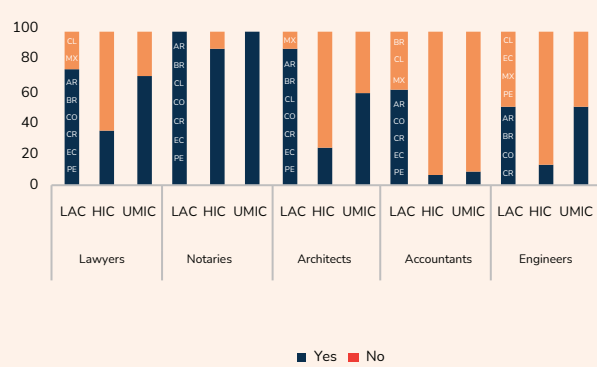
Ecuador lacks programs to support firms in dealing with red tape.

Institutions to deal with regulation  
Percent of total



Price controls are still in place in professional services.

Countries with price regulation  
Percent of total



Note: The WBG-OECD Product Market Regulation Database includes the following Latin America and the Caribbean countries: Argentina (AR), Brazil (BR), Chile (CL), Colombia (CO), Costa Rica (CR), Ecuador (EC), Mexico (MX), and Peru (PE).  
Source: WBG-OECD Product Market Regulation Database, 2018-2022.

**Box 4.**

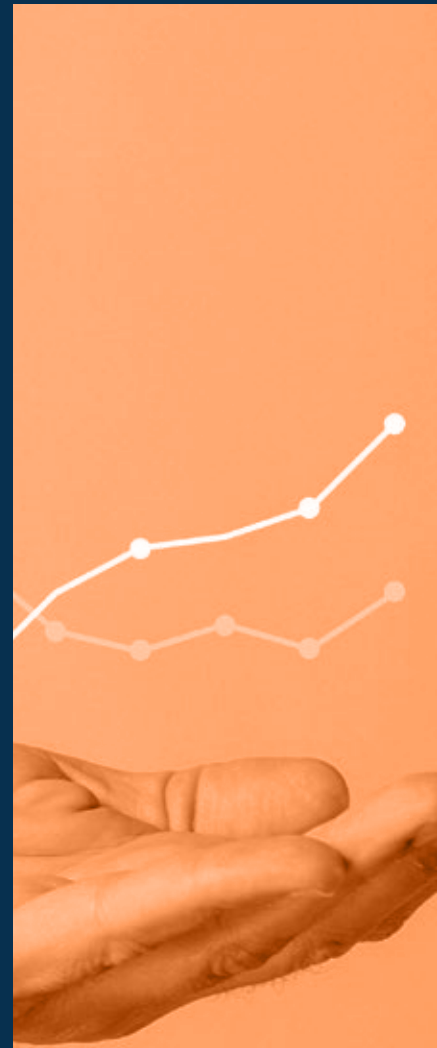
Overhauling Ecuador's dysfunctional insolvency framework could mobilize resources stuck in unprofitable endeavors and encourage risk-taking in new endeavors.

---

**An effective insolvency framework is crucial for improving financial stability, resource allocation, and the overall investment climate. A robust insolvency system provides low-cost procedures for liquidating firms without prospects or rapidly restructuring distressed but viable businesses.** It tackles opportunistic behaviors, releases productive factors tied up by non-viable loans, and ensures viable firms continue to access credit and viable debt is serviced. It provides financial institutions with a means of enforcing their claims, reducing risk perception. In other countries, effective reforms of creditor rights and insolvency regimes reduced the cost of credit, increased access to credit, improved creditor recovery, and strengthened job preservation (Neira, 2017, Armour et al., 2015, Djankov, 2009, and Claessens and Klapper, 2003). Experience from Belgium (Dewaelheyns et al., 2008), Italy (Rodano et al., 2011), and Colombia (Giné and Inessa, 2006) show that insolvency reforms reduced failure rates among SMEs and the liquidation of profitable businesses. Other research has shown that insolvency reform can aid in the quick recovery of an economy during recession—for example, Chile in the early 1980s and Colombia in 1999 (Bergoing et al., 2006).

**Ecuador's insolvency framework is fragmented and dispersed, establishing various insolvency procedures that are rarely used.** The main option is the preventive insolvency proceeding (*concurso preventivo*). During the past 25 years, however, only about 20 preventive insolvency proceedings have been requested and only seven reorganization plans have been implemented. The General Code of Procedures (COGEP) contemplates a judicial reorganization procedure (*concurso preventivo*) that could be used by any debtor—with negligible usefulness. Although COGEP also contemplates a judicial bankruptcy proceeding, liquidations under this proceeding are almost nonexistent. The Organic Law of Entrepreneurship and Innovation set another administrative restructuring procedure that could be used only for firms less than 5 years old; it has not been used since the law was enacted in 2020. As a result, financially distressed companies seek increasingly onerous financing, aggravating their debt problems, while creditors prefer to enforce their claims through individual enforcement procedures.

**The law makes it very hard for firms to have adequate and timely access to insolvency proceedings.** It only allows insolvency proceedings for firms under the control of the Superintendency of Companies with over 100 employees, more than US\$10,515 in assets, more than US\$5,258 in liabilities, and in cessation of payments. The law requires the companies to show at least one of the following: (i) non-compliance for more than 60 days of one or more obligations that represent 30 percent or more of liabilities; (ii) one or more payment orders issued against the debtor that represent 30 percent or more of liabilities remain unsatisfied; (iii) indebtedness for obligations with a term of fewer than two years and exceeding 80 percent of assets; when such obligations cannot be covered promptly; (iv) transfers in payment of assets necessary for the business activity represent more than 20 percent of assets; and (v) losses reach 50 percent or more of the capital and reserves. Neither pre-insolvency filings nor filings past 60 days of entering in cessation of payments are allowed.





**Insolvency proceedings are difficult to kick off by debtors or creditors.** The creditor's petition is not sufficiently effective to commence a reorganization proceeding. The procedure is terminated if the debtor expressly opposes or does not answer the creditor's request. The debtor's petition requires putting together complex information before filing. Both debtor and creditor petitions take four to six months to be accepted, while more advanced insolvency systems take a few days—three in Colombia and five in Argentina.

**The system does not allow interference with the performance of contracts where both parties have not fully fulfilled their obligations.** The Ecuadorian law only specifies that an insolvency petition or the proceeding commencement may not be invoked as a reason to end a subscribed contract or reject the subscription of an adjudged contract. An adequate system should allow the insolvent debtor's manager to elect to continue or reject contracts based on a cost-benefit analysis of the creditors' best interest. Where costs exceed benefits, rejecting contracts allow insolvency administrators to carry out their duties to maximize recoveries by minimizing losses and fixing claims that can be measured and equitably treated as of the insolvency proceedings' commencement. Even in a rehabilitation proceeding, where the intended outcome is continuing the business, reorganization prospects are often enhanced if rejecting burdensome contracts is allowed.

**Liquidation proceedings are generally regarded as inefficient, unpredictable, and slow.** The law does not prohibit the sale of a business as a going concern but does not expressly contemplate it either. As a result, this liquidation method is rarely used due to the uncertainty caused by the lack of rules. Once a bankruptcy proceeding is concluded, Ecuadorian law says the debtor will be rehabilitated only if all debts are fully met. Otherwise, it is up to creditors to decide whether unpaid debts will be extinguished, a provision at odds with international trends.

**Current legislation does not address other important issues, such as informal collective debt restructuring, cross-border aspects, and reorganization and liquidation of MSEs.** Informal collective debt restructuring mechanisms (out-of-court agreements or "workouts") are also undeveloped. The current legislation does not establish rules about jurisdiction, recognition of foreign judgments, cooperation among courts in different countries, choice of law, and other challenges of cross-border insolvency. Unlike international standards, the law does not establish a simplified process for reorganization and liquidation of MSEs.



**The competition authority lacks financial and procedural independence.** SCPM, Ecuador's competition agency, was created in 2011 as an independent and autonomous entity that regulates most sectors except those regulated by sectoral bodies—energy, mining, and telecommunications (Figure 25).<sup>25</sup> Yet, this competition agency is among the region's least independent, behind Bolivia, Jamaica, Colombia, and Argentina. Besides the lack of political and procedural independence, the competition agency's budget depends on the general state budget and needs to be approved by the National Assembly.<sup>26</sup> This arrangement is not exclusive to Ecuador, but it exposed the country's competition authority to budget cuts that led to a high staff turnover and unfulfilled vacant positions. The average budget for competition agencies in OECD countries was about US\$23.6 million in 2019 (OECD, [2020](#)); the SCPM's budget for 2021 was US\$5.3 million, nearly half the regional average. Recent regulatory changes imposed additional burdens on SCPM without providing a supplementary budget.<sup>27</sup>

**Ecuador lacks instruments to prevent the influence of interest groups on regulatory decisions and public officials' conflicts of interest.** Unlike other countries in the region, Ecuador does not have lobby regulations and rules to break conflicts of interest. It does not have specific rules to regulate the interaction between public officials and interest groups, including professional consultancies, companies, and business associations. There are no requirements to disclose the identity of the interest groups, consultants, or advisory bodies involved in each regulatory process. Stakeholders are not informed as part of the regulatory processes, and regulators are not formally required to consider stakeholder consultation comments. There are no regulations on conflict of interest regarding the cabinet members or cooling-off periods. Unlike other countries in the region, such as Mexico ([2018](#)) and Chile ([2016](#)), Ecuador has not adopted the ex-ante Regulatory Impact Assessments (RIAs) framework to evaluate the impact of regulations on market competition.

**Despite ongoing efforts, implementation gaps limit the competition agency's capacity to monitor markets.** As of 2022, evidence from the new anticartel enforcement database (ACED) indicated the SCPM had not sanctioned any hard-core cartels related to price-fixing or restricting output/dividing markets despite the prevalence of these cases across the region. Instead, the SCPM sanctioned only four bid-rigging agreements. This contrasts with the growing importance of dismantling long-standing harmful cartels in peer countries like Brazil, Chile, Mexico, and Peru. SCPM only prosecuted one case of abuse of dominance between 2015 and 2018, compared to an average of four decisions a year among well-established authorities. Regarding mergers, Ecuador has review periods ranging from 65 to 128 days, compared to an average of 29 days in Brazil and 25-107 days in Chile and 39-118 days in Colombia. As a result, anticompetitive practices such as price fixing or abuse of dominance do not face a credible enforcement threat in Ecuador, and sector regulators set prices that do not reflect costs (e.g., in electricity).

---

25 The SCPM investigates and sanctions abuse of market power and restrictive agreements, approves mergers and acquisitions, investigates unfair competition, and promotes competition. All companies, whether private or SOEs, are subject to SCPM jurisdiction in the areas of abuse of market power and mergers or acquisitions. In telecom, operators freely set their final prices within the price caps or rates established by the *Agencia de Regulación y Control de las Telecomunicaciones* (ARCOTEL), which also grants concessions, permits, and authorizations. In energy, ARCERNNR determines the costs of generation, transmission, distribution, and commercialization as well as the cost of public lighting, all of which are applied to electricity transactions and serve as the basis for consumer tariffs. In water and sanitation, the *Agencia de Regulación y Control del Agua* (ARCA) establishes guidelines to set tariffs for service provision. In transport, the *Ministerio de Transporte y Obras Públicas* (MTO) sets price caps and access charges for public transport infrastructure (i.e., highways, ports, and airport) and the guidelines for toll fees.

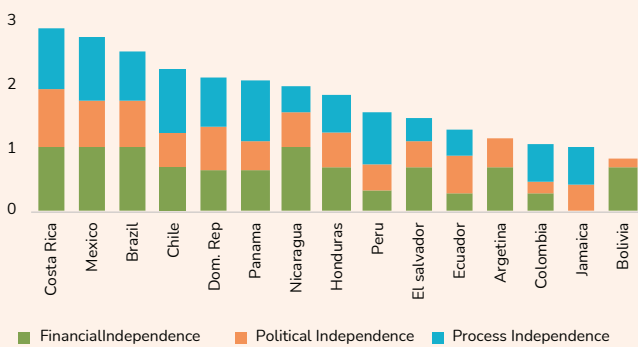
26 This is also the case in other countries in the region, including Panama, Dominican Republic, Peru, and Mexico.

27 In 2022, Decree No. 570 ruled the SCPM should demonstrate the actual effect on consumers to prove anti-competitive practices and established that sanctions and thresholds for merger notification should be determined for the specific relevant market (*Centro Competencia*, [2022](#)).

**Figure 25. Some legal arrangements do not favor the independence and efficiency of the competition agency.**

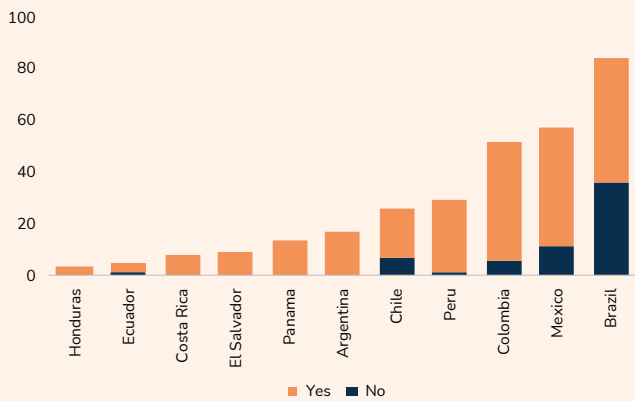
Institutional and legal arrangements in Ecuador do not favor the independence of the competition agency.

Independence of competition agencies  
Each score 0-1 (best)



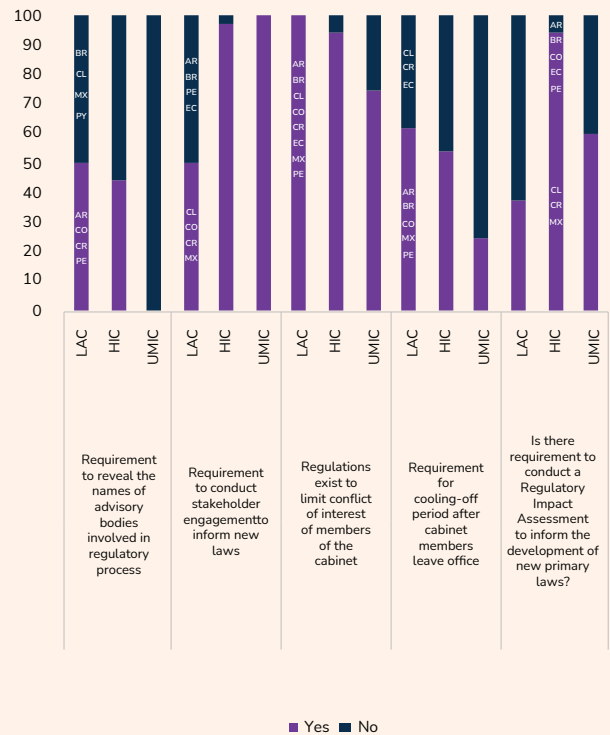
Compared to regional peers, Ecuador has some opportunities to strengthen anticartel enforcement.

Number of hard-core cartel conducts sanctioned by competition agencies



Ecuador can improve its regulatory framework to mitigate conflicts of interest and conduct regulatory impact analysis.

Regulatory framework to reduce conflict of interest  
Each score 0-1 (best)



Note: Financial independence reflects the budget allocation and self-financing sources; political independence encompasses, among other things, ministerial oversight, the nomination/appointment process, and rules against conflicts of interest; procedural independence covers the separation of powers between prosecutorial actions and first-instance decisions.

Source: World Bank (2021) and WBG-OECD Product Market Regulation Database, 2018-2022.

**Proper competition enforcement mechanisms can prevent anticompetitive practices to ensure markets function properly, minimizing potential hard-core cartels and the adverse effects of mergers.**

In recent years, the SCPM has made significant efforts to promote competition, including: (i) updating relevant regulations in the mergers and acquisitions approval process (a fast-track procedure); (ii) targeting market research and competition promotion programs; (iii) initiating a peer review process with the OECD and the InterAmerican Development Bank (IADB); and (iv) updating the leniency program. Yet, the SCPM has prosecuted and sanctioned fewer cases of anti-competitive conduct, such as abuse of dominance and bid rigging, than other established authorities in the region, and it takes the SCPM longer to analyze mergers. Progress in these areas is critical to ensure proper market functioning that can enhance productivity growth. Hard-core cartels have been detected in Latin American markets for fertilizers, cement, fuels, freight transport, and construction, many of them transnational in nature and disproportionately affecting the poor. In less developed economies, price overcharges due to cartels may be close to 49 percent on average, reaching up to 80 percent (Connor, [2020](#)). Solid merger control frameworks to prevent excessive concentration can generate significant consumer benefits. For example, the Spanish competition authority estimates that merger enforcement generated consumers savings of about US\$134 million between 2011 and 2018 (CNMC, [2018](#)).

**Trade openness could help to enhance efficiency and productivity**

**Ecuador's exports continue to be dominated by primary and resource-based products.** Although Ecuador added 115 products to its export portfolio between 2014 and 2021, the number of exported products (2,677) remains below regional peers (Figure 26). By 2021, oil exports accounted for about 30 percent of exports, and the top eight non-oil exported products for roughly 50 percent. The concentration of exports, measured by the HHI, is above the level expected at Ecuador's per capita GDP and the highest among regional peers. Excluding oil exports, the HHI rose from 0.08 in 2014 to 0.13 in 2021 due to the sizable growth of shrimp and mining exports, further reducing export sophistication, already the lowest among regional peers.

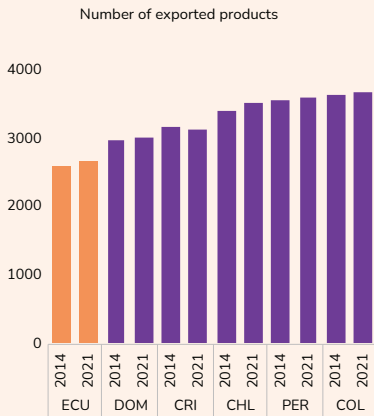
**Ecuador's participation in the global value chains has stagnated at a very low level since early 2010.** As with other commodity exporters such as Peru and Colombia, forward participation dominates Ecuador's GVC. After the oil boom increased it, Ecuador's GVC participation has stabilized since the early 2010s because some non-oil commodity exports, like bananas and shrimp, offset the drop in oil exports.

**Although there are more non-oil exporters, non-oil exports became more concentrated in a few big firms.** Non-oil exporters rose from 2,834 in 2014 to 3,658 in 2021. Large exporters (over US\$100 million annually) were less than 1 percent of the non-oil exporters, but they increased their share of non-oil exports from 85 percent to 90 percent (Figure 27). The top 20 firms increased exports by US\$4.5 billion between 2014 and 2021, four-fifths of the total expansion of non-oil exports; six of them did not export in 2014 and exported over US\$100 million in 2021. Two firms operated in mining, making up 35 percent of the US\$4.5 billion of additional exports. Thirteen were involved in the blue (i.e., ocean-based) economy, making up 52.7 percent. The other firms came from the wholesale of fruits and vegetables, including one wood exporter.

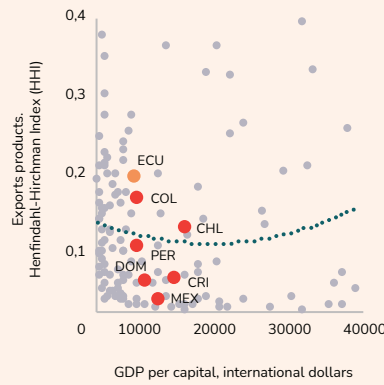
**The poor performance is partly related to the fact that Ecuador remains relatively closed to trade due to high import tariffs.** Among peer countries, the country's trade openness, the sum of goods and services exports and imports as a share of GDP, trails only Indonesia and Egypt (Figure 28). Ecuador's import tariffs remain slightly above the lower-middle-income countries' average, more than tripling high-income countries' average. The MFN tariff is still above all peers, although it declined from 10.8 percent in 2014 to 8.2 percent in 2021 on the back of some trade agreements and unilateral tariff reductions on capital and intermediate goods. Although Ecuador has competitive advantages in agriculture, MFN tariffs for agriculture products (2.2 percent) remain above all regional peers due to high protection on dairy, animal products, coffee and tea, and beverages and tobacco; each of these sectors has average tariffs higher than 20 percent. Despite their aim of protecting national production, high and persistent tariffs could lead to factor misallocation and increase the cost of imported inputs, undermining competitiveness.

Figure 26. Resource-based products continue to dominate exports.

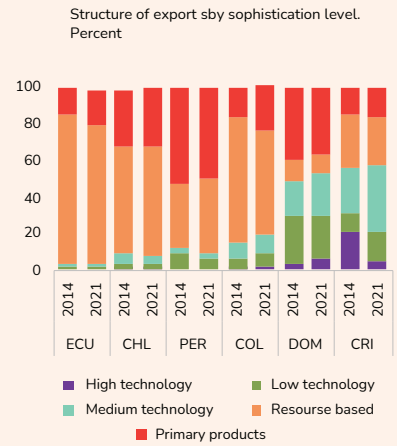
Ecuador is still exporting few products ...



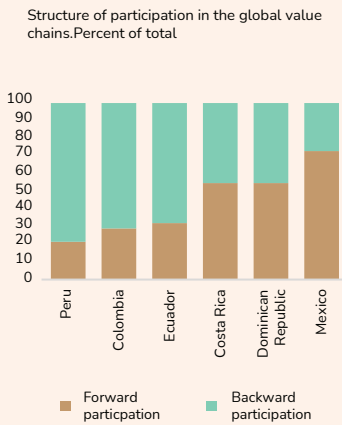
... its exports continue highly concentrated ...



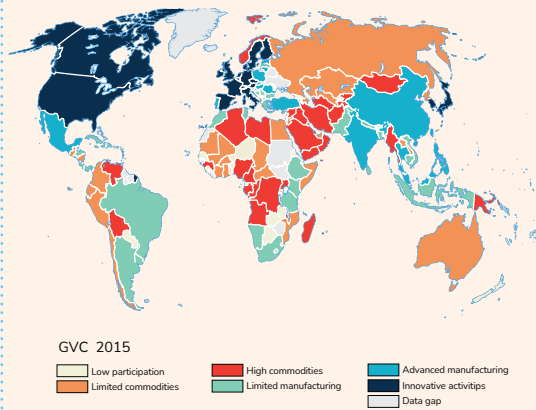
... in primary and resource products.



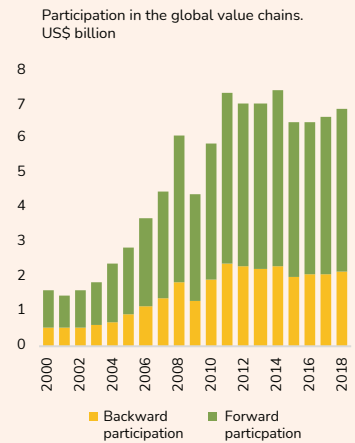
Ecuador has limited backward participation in the GVC ...



...keeping it a commodity exporter like other Andean countries.



Ecuador's participation in the global value chains has stagnated.



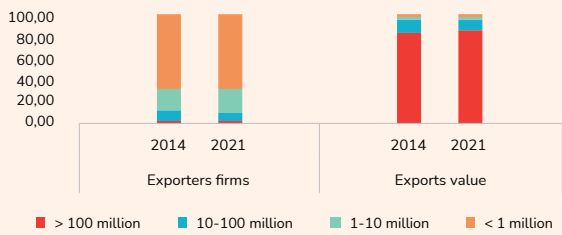
Note: Lall (2000) classification consists of three categories of technological content (high, medium, and low) and two categories classifying the rest of the goods into primary and resource-based products. In forward, GVC participation exports may not be fully absorbed in the importing country; instead, they may be included in the importing country's exports to third countries. Ecuador belongs to the second subcategory, which includes countries with primary goods' share of total domestic value added in exports between 20 percent and 40 percent.  
Source: COMTRADE, World Integrated Trade Solution (WITS), Eora Global Supply Chain Database, and World Development Report, 2020.



Figure 27. Non-oil export level and growth are concentrated in a few firms.

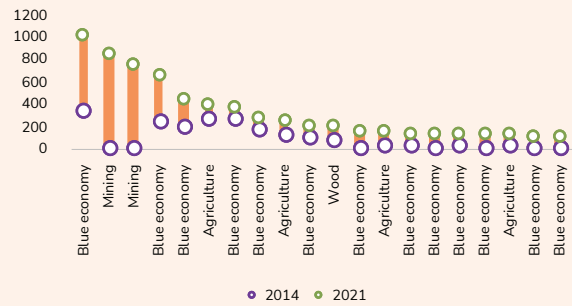
Most non-oil exports are carried out by a few firms that ...

Structure of non-oil exporters firms and their exports value  
Percent, by exports value per years



... also explain the bulk of non-oil export growth after the oil boom.

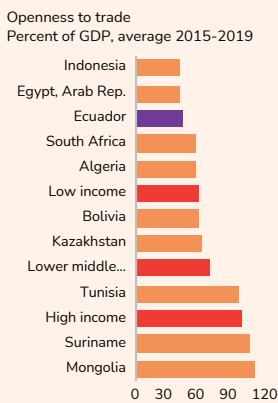
Expansion of exports among the 20 top non-oil exporters  
US\$ million



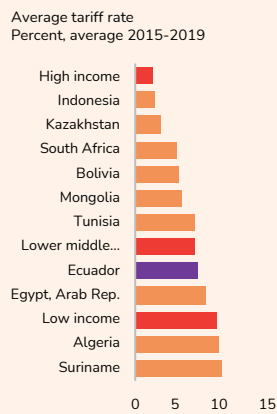
Source: Central Bank of Ecuador (BCE).

Figure 28. Ecuador remains a relatively closed economy despite some recent progress.

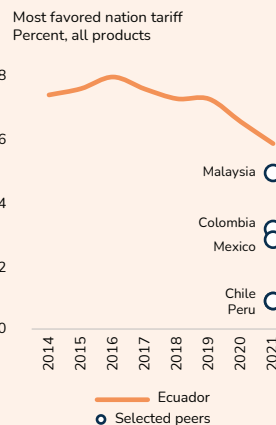
Trade openness is low ...



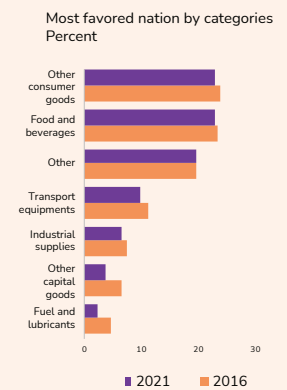
... partly due to high import tariffs



which, despite some reduction, remain above most peers



... particularly in consumption goods and finance.

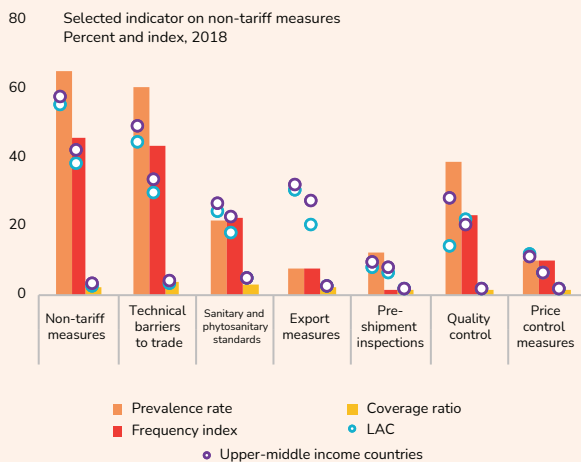


Note: MFN tariffs are tariff rates applied to imports from trading partners that are members of the World Trade Organization (WTO) unless the country has a preferential trade agreement that stipulates lower duties (often zero) for other members of the preferential trade agreement.  
Source: World Development Indicators (WDI) and World Integrated Trade Solution (WITS).

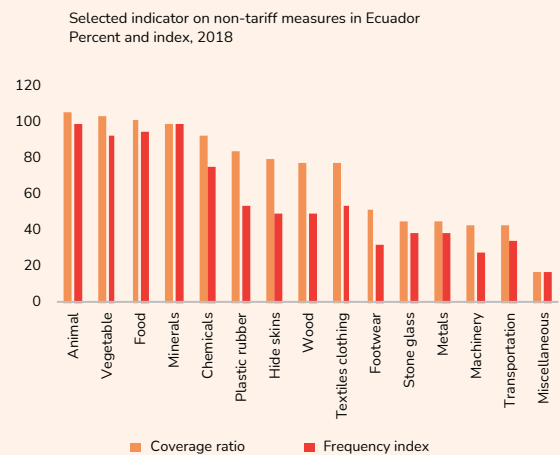
**Non-tariff measures (NTMs) are high due mainly to technical barriers and quality controls.** In 2018, 46 percent of imported products had to comply with at least one NTM (frequency index), accounting for 65 percent of imports value (coverage ratio) (Figure 29).<sup>28</sup> By both measures, Ecuador is substantially above the averages for Latin America and the Caribbean (38 percent and 55 percent) and upper-middle-income countries (41 percent and 57 percent). Among various types of NTMs, technical barriers to trade and quantity control measures have the highest frequency index (60 and 38 percent) and coverage ratio (43 percent and 23 percent), substantially above the standards of regional and upper-middle-income countries. Just 22 percent of imported products, mainly agri-food products, must meet at least one sanitary and phytosanitary measure—in line with the standards of the two peer groups. As in other countries, these NTMs affect agri-food products, such as animal and vegetable products and foodstuffs, the most, with frequency indexes close to 90 percent. In other words, the frequency and coverage of phytosanitary measures are similar to other countries with similar incomes but tend to be higher for food and agriculture products. The results suggest that Ecuador's NTMs are either more trade-restrictive than required to pursue non-trade objectives or purely protectionist. Easing restrictions, particularly for intermediate goods, could lower production costs and increase productivity as cheaper and higher-quality inputs become available. This is consistent with the robust finding in the literature that liberalizing inputs can make firms more productive and contribute to diversification.

Figure 29. Non-tariff barriers to trade are also high.

Non-tariff measures are high due mainly to technical barriers and qualitative controls ...



...affecting agri-food products the most

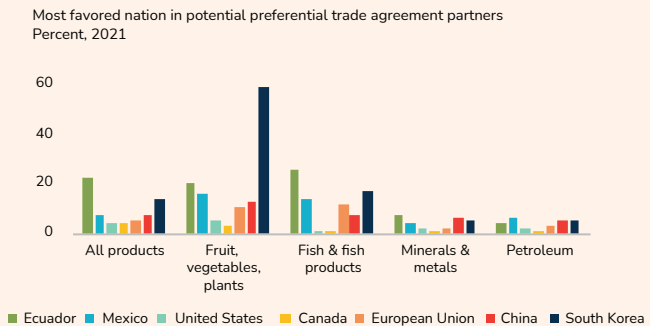


Note: The frequency ratio is the proportion of Harmonized System six-digit (HS6) products covered by at least one NTM. The coverage ratio captures the percentage of imports subject to one or more NTMs. The prevalence score indicates the average number of NTMs that apply to a product (Cadot, Ferrantino, Gourdon, and Reyes, 2018). LAC countries included: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, Uruguay, and Venezuela. Upper-middle-income countries: Argentina, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Malaysia, Peru, Paraguay, and Thailand. Source: United Nations Conference on Trade and Development (UNCTAD) South-South Trade Database. The latest available data is from 2019 but includes fewer countries than 2018.

28 The coverage ratio uses to be higher than the frequently ration as highly traded products tend to be more often regulated by non-tariff measures.

**Exports can benefit from improved access to markets resulting from preferential trade arrangements (PTAs), which could also support institutional changes to enhance medium-term growth.** Ecuador recently signed agreements with China and Costa Rica, and it is currently negotiating PTAs or seeking to do so with various countries. PTAs can promote growth, attract investments, and create jobs through different mechanisms, including market access. They can allow Ecuadorian exports to gain market access through preferential tariffs in partner countries with high tariffs on Ecuador's main export products (Figure 30). Except for Canada and the United States, for instance, average tariffs other potential PTAs partners apply to fruits, vegetables, plants, and fish products are still high, suggesting that well-negotiated PTAs could benefit Ecuador's exports. Among potential partners, South Korea has the highest tariffs, averaging 57 percent on agricultural products and 17 percent on fish products. Beyond market access, PTAs could promote a wide-ranging reform agenda because they include additional aspects of trade policy, such as trade in services, non-tariff measures, and other areas beyond trade, such as international flows of investment and labor and protection of intellectual property rights and the environment. To better take advantage of opportunities arising from trade liberalization, Ecuador needs to address other cross-cutting issues, such as reducing the labor regulation rigidities, enhancing domestic market competition, and improving firms' managerial capacities to face external competition.

**Figure 30. Trade agreements could help increase market access for Ecuadorian exports.**



Source: CONTRADE.

## Policy options to address non-labor cross-cutting constraints

### Improving market regulation to enhance competition gradually

**Strengthening the effectiveness of Ecuador's competition policy framework and enforcement capacity will require combining measures in three areas.** International evidence shows that product market regulations and reforms that foster a stronger and more dynamic competition environment can lead, on average, to an increase of 0.2 percent to 2.8 percent in annual growth (Box 5). In the case of Ecuador, enhancing competition will require combining measures in three areas (Annex A):

- **Addressing the competitive neutrality of SOEs to ensure a level playing field.** Ecuador may review the role of SOEs, particularly in competitive sectors, and enhance competitive neutrality. Separating SOEs' commercial and non-commercial activities—at least with accounting separation—would be an important first step that secondary legislation may achieve. Companies in fully competitive sectors (e.g., manufacturing of textiles, food, and agriculture) with losses could be prioritized. It does not necessarily mean that Ecuador should follow a divestiture strategy, but it could consider alternatives to bring in the private sector, such as concessions or management arrangements to enhance competition without ownership changes. SOE activities that operate under legal monopolies can be unbundled opened to private competition in some market segments, such as electricity generation. This reform would require complementary measures to ensure a level playing field, including reviewing FDI restrictions and regulatory provisions in network industries (e.g., implementing third-party access in electricity and gas). The reform

of primary laws may also be considered to limit privileges and protections granted to SOEs, including such economywide instruments as the Law of Public Enterprises and sectoral laws in telecom (Organic Law of Telecommunications) and mining (Mining Law). Furthermore, reforms to the Organic Law of the National Public Procurement System and further implementation of guidelines developed by the SCPM in 2022 will be essential to remove requirements on domestic content that hamper participation of foreign firms.

- **Reducing the burden of regulations and entry barriers, including in network industries.** Removing burdensome regulations for startups and price regulations can favor competition and productivity, particularly if they facilitate entry by mostly low-productivity firms.<sup>29</sup> To this end, critical measures include the creation of a national database with primary regulations and streamlining procedures for new businesses by introducing one-stop shops or amending the Code of Territorial Organization, Autonomy, and Decentralization to standardize licensing procedures at the subnational/local level. Further reforms could be implemented to eliminate price controls in regulated professional services (e.g., Law of the Federation of Lawyers) and certain products to prevent risks of collusion. Finally, implementing the “silence is consent” rule would reduce uncertainty and limit wait times for firms to enter the market.

#### Box 5.

International evidence confirms that competition reforms are key to fostering economic growth.

**General competition reforms have had positive impacts in other countries.** Estimates from Loayza et al. (2004) provide robust evidence that reducing barriers to competition and promoting more pro-competitive regulation can increase the annual growth rate by 1.3 percent of GDP. The experience of 25 OECD countries shows that past reforms in product market regulations led to an average increase of 9 percent in GDP per capita over 10 years. According to Barnes et al. (2011), product market regulations that enable a more competitive environment accounted for most of the gains in GDP per capita growth, even above the results from taxation reforms and labor market policies.

**Some sectoral reforms in key enabling and network sectors, such as energy and telecom, can also foster significant growth gains.** In Croatia, De Rosa et al. (2009) found that reducing regulatory restrictions in the energy, transportation, and communications sectors to the EU15 standard would raise GDP per capita 1.4 percent to 2.8 percent. In Paraguay, pro-competition reforms in service and network sectors may increase gross value added and economic productivity, with a potential addition to GDP growth of 0.2 percentage points (US\$700 million) of additional value added in one year.



<sup>29</sup> According to the World Bank (2023), regulation should set quality and administrative standards to prevent deregulation from deterring productivity by facilitating entry by mostly low-productivity firms.



- **Improving institutions to strengthen enforcement capacity in competition law.** Reinforcing the regulatory and institutional framework of market institutions would help foster efficient market dynamics both economywide and in key sectors. Agencies with competition mandates (e.g., competition agencies and sectoral regulators) require more independence, stronger safeguards to limit conflicts of interest, and additional resources to fulfill their roles and effectively enforce *de jure* regulation.<sup>30</sup> Ecuador could also benefit from a stronger legal framework to manage relationships between regulators and interest groups, including disclosure of members of advisory bodies involved in the regulatory process and progressive implementation of RIAs, mainly covering the competition impact of regulations.

**The potential positive impact of these reforms could be maximized after addressing restrictions to factor mobility and enhancing firms' capacity to face competition.** Competition can help to improve productivity by reactivating “creative destruction” in Ecuador, the innovation mechanism by which new and more productive firms replace outdated ones. However, this churning effect could be hindered by restrictions on factor mobility, such as rigid labor regulations and the lack of a functional insolvency framework (Box 6), that could prevent the country from reallocating resources to emerging opportunities that accompany a better competition framework. According to the World Bank (2023), increasing competitive pressures do not automatically translate into faster productivity growth; much depends on firms' capacity to respond to competition. Leading firms with better productivity, management, financing, and technical capabilities are more able to innovate in response to greater competition. The positive impacts of enhanced-competition policies could be boosted by increasing the share of leading firms by, for example, introducing managerial consulting programs, strengthening local innovation, supporting standards compliance, fostering technology adoption, and ensuring access to longer-term finance (World Bank, 2023), all of these subject to fiscal constraints.

### Enhancing trade to improve productivity

**Ecuador could benefit from continued efforts to reduce tariffs and increase trade.** A good starting point would be to examine the rationale for tariffs higher than 25 percent and ponder the effects of tariff reductions, including their fiscal and distributional impacts, especially for products with the highest tariffs. Ecuador could also benefit from moving forward with trade agreements with other countries, particularly those with more complementarities. The recently signed agreement with Costa Rica is a model (Box 7). However, these efforts should be based on an in-depth evaluation to guide the negotiation, identify potential short-term negative side effects, and set up mitigation and complementary measures.



30 According to the World Bank (2023), competition authorities could be effective at identifying and investigating problematic sectors and firms and effective competition regimes promote productivity growth in addition to protecting markets and consumers.

**Box 6.****Overhauling Ecuador's dysfunctional insolvency legal framework.**

**Ecuador could consider replacing its outdated, fragmented, and dysfunctional insolvency framework with a new and unified regime consistent with international best practices.** A new regime is critical to remove inconsistencies between different proceedings and reduce the insolvency stigma. It could also strike a proper balance between reorganization and enterprise liquidation. Where an enterprise is not viable, the law could allow an efficient liquidation to maximize recoveries and quickly reallocate the assets to more productive uses. Where an enterprise is viable, the rescue of such businesses preserves jobs, provides creditors with a greater return based on higher going concern values of the enterprise, and potentially produces a return for owners.

**Firms could be rescued through formal proceedings or hybrid and informal procedures.** A new regime could permit quick, affordable, and easy access to reorganization proceedings; protect all those involved; provide for separate voting of reorganization plans by classes of creditors; allow approval of the plan by an appropriate and realistic majority of creditors; empower the judicial or administrative authority to impose the plan to dissenting creditors or classes of creditors, with appropriate safeguards; and ensure adequate supervision to ensure that the process is not subject to abuse. A new regime should also allow debtors to use rehabilitation proceedings even before insolvency or cessation of payments; the earlier a company seeks a possible rehabilitation, the higher the chances such an outcome could be achieved, especially for micro and small enterprises.

**The legal framework could also benefit from a streamlined insolvency regime for MSEs.** This could be implemented by adjusting some features of the ordinary regime or establishing a separate legal framework for MSEs, aimed at reducing complexity and encouraging early use of out-of-court restructuring procedures, hybrid procedures, and simplified in-court proceedings. MSEs regimes could also establish favorable conditions, adequate safeguards for debt discharge, and fresh starts for entrepreneurs. Other key objectives of an MSE insolvency regime could be: (i) reduce the insolvency stigma; (ii) promote entrepreneurship and growth, with increasing access to credit; (iii) maintain basic safeguards for protecting the rights of all parties; (iv) prevent and sanction fraud and abuse of MSEs insolvency proceedings; (v) establish mechanisms of assisting MSEs in identifying early signals of financial distress, and (vi) enhance financial and business management literacy among MSE owners and managers.

**Both cross-border considerations and discharge are also necessary to incorporate into a new legal framework.** To promote coordination between jurisdictions and facilitate assistance in the administration of insolvency proceedings originating abroad, the law could contemplate modern rules on cross-border insolvency, including the recognition of foreign proceedings and cooperation between foreign and local courts. To this end, the country may consider incorporating the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Cross-Border Insolvency, adapting it to the Ecuadorean legal system. This Model Law is considered a best practice in international insolvency law and has been successfully adopted by 53 countries. A new insolvency law could also adopt the emerging trend of broader, less restricted access to discharge and swifter, less burdensome requirements for honest (good faith) debtors to obtain that discharge. Access to discharge should not be barred by cost, excessive formalities, or other obstacles. The period before discharge is granted should be short enough to reduce the stigma associated with insolvency proceedings and allow the prompt return of debtors to productive activities ("fresh start").



**The country could undertake a strategic review of NTMs with the goal of streamlining them.** Since many NTMs have legitimate purposes, eliminating them without inquiring what purpose they serve may not be the best path to reform. Dealing with existing measures has the advantage of responding to immediate needs and focusing on measures with known effects. Technical assistance on regulatory improvements, whether by development agencies or consulting firms, has tended to focus on quick wins to gather short-term political support and momentum. However, a more sustainable institutional setup would ensure continuity in improving firms' trade competitiveness as the business environment evolves and the stock of regulations grows. As suggested by Cadot et al. (2018), the process of regulatory improvement should be based on the three pillars of dialogue, analysis, and broad participation, implemented by: (i) a body dedicated to public-private dialogue (an NTM committee) that serves as an entry point for the private sector to flag problems and contribute to solutions; (ii) a technical team dedicated to carrying out substantive analysis (a permanent secretariat for the NTM committee), with analytical capabilities akin to those of a productivity or competition commission to lead the dialogue into policy action.

#### Box 7.

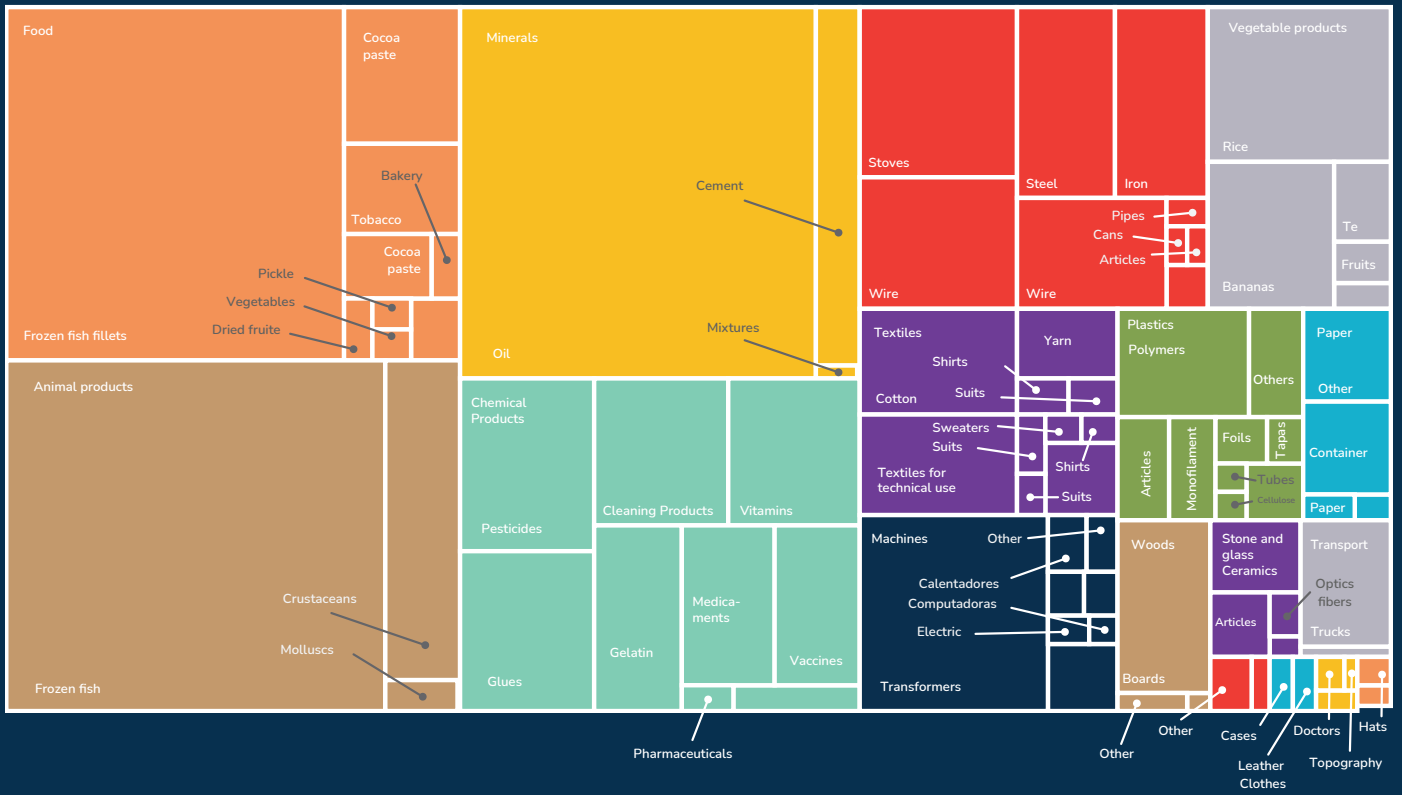
The trade agreement with Costa Rica is likely to benefit both countries.

---

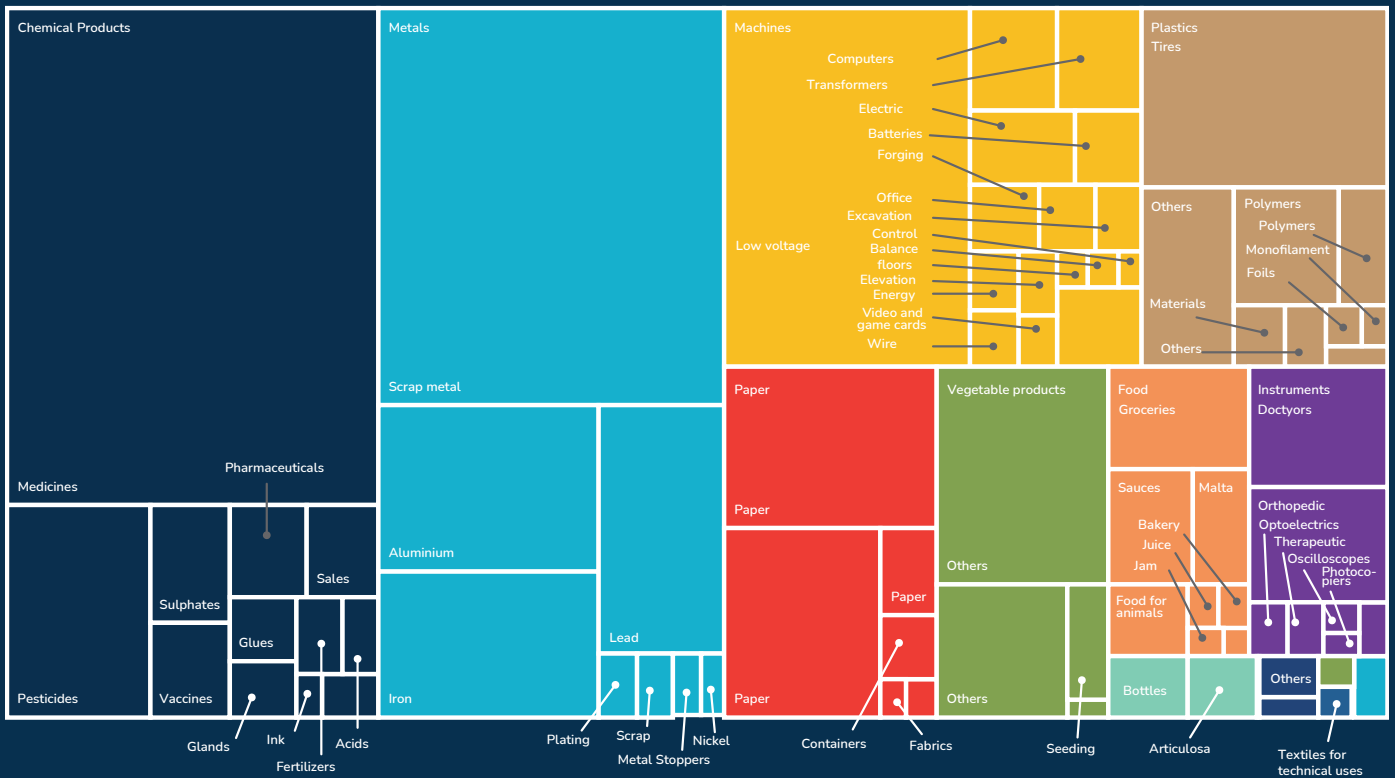
**Ecuador and Costa Rica reached a broad trade agreement on March 1, 2023.** Besides reducing tariffs for 97 percent of Ecuador's products and 90 percent of Costa Rica's export products, the deal includes agreements related to services, NTMs, trade facilitation, investments, public procurement, and intellectual property rights. It also incorporates provisions related to gender equity, good regulatory practices, and the strengthening of MSEs. The agreement still needs to be ratified by legislative bodies; in the case of Ecuador, this will not be possible until the new National Assembly is elected and starts functioning in late 2023.

**Due to the complementarity of the export offers, the trade agreement would benefit both countries without causing major disruptions to their production chains.** Commercial exchange between Costa Rica and Ecuador in 2021 reached US\$74.6 million—US\$49.8 million of Costa Rican exports and US\$24.8 million of Ecuadorian ones. The main products Costa Rica exports to Ecuador are scrap metal, medicines, electronic materials, tires, cardboard, and other industrial materials. Ecuador mainly sells prepared and preserved fish, fresh fish, steel wire, medicines, textiles, and shrimp to Costa Rica. Ecuadorian exports are expected to increase by 10 percent; manufacturing exports are expected to benefit the most from the agreement, particularly the fabric, electrical appliance, steel, and metal-mechanic sectors of Ecuador. For Costa Rica, the leading gainers include medical device, medicines, manufacturing, and agricultural sectors. Dairy products, bananas, pineapples, and other fruits were excluded from the treaty.

Ecuador's exports to Costa Rica



Costa Rica's exports to Ecuador





**Addressing cross-cutting structural issues is critical to realizing trade policy's potential positive effects, but some quick wins could come from enhancing export promotion programs and improving logistics and security.** Although trade policy could enhance competitiveness, its potential positive effects could be magnified by complementary policies that allow the reallocation of factors from sunsetting to emerging sectors and enhance private investment. In this context, trade policies could be an element of a long-term development strategy that could include policies to address other cross-cutting issues. While the country strives for a consensus to address these structural issues, Pro-Ecuador could work closer with other ministries and public entities, such as BanEcuador and *Corporación Financiera Nacional* (CFN), to promote tools and services to improve export diversification and the survival of new products. Several tools are available, including the promotion of export services, improvement of value chains in emerging products, and financing for working capital. Another way to improve competitiveness in the short to medium term is reducing logistics costs arising from growing insecurity. Legal and reputational risks rise when cargo is intercepted by cartels or contaminated with illegal substances. In response, authorities could implement comprehensive risk-based compliance strategies by developing a unified and enriched risk profiling. Other potential actions to improve trade flows include enabling simultaneous inspections; expanding the use of before-arrival processing and release of merchandise; expanding the scanner program at ports and strengthening it with complementary equipment; exploring advanced cooperative arrangements between Customs and other border agencies, including the establishment of a national targeting center and joint enforcement operations; and implementing programs that have been successful in other countries, such as Colombia's Authorized Economic Operators program (i.e., it can be started as a pilot, subsequent expansion to all traders of successful practices based on risk management).

**These reforms require some time to pay off, and they should be carefully evaluated with regard to reducing or mitigating potential adverse short-term side effects on existing activities and employees.** International trade has been proven to increase aggregate productivity in the long run. However, only a small fraction of firms can respond to import competition, and trade liberalization could have adverse side effects on employment and productivity in the short to medium term, particularly if market efficiency continues to be hindered by rigid labor regulations, a dysfunctional insolvency framework, and restrictions to competition. In this context, trade liberalization should be undertaken after carefully evaluating how to reduce or mitigate the short-term effects on existing activities and employees by, for example, prioritizing trade agreements with highly complementary countries or liberalizing input markets first. As with other competition-enhancing policies, high-capability firms are more likely to innovate in response to competitive import pressures, and the potential positive impacts of these reforms could be enhanced by improving firms' capacities. For that reason, according to the World Bank (2023), raising the capabilities of domestic firms and their access to resources is an important complement to pro-competition policies, including trade liberalization.



# Chapter 4

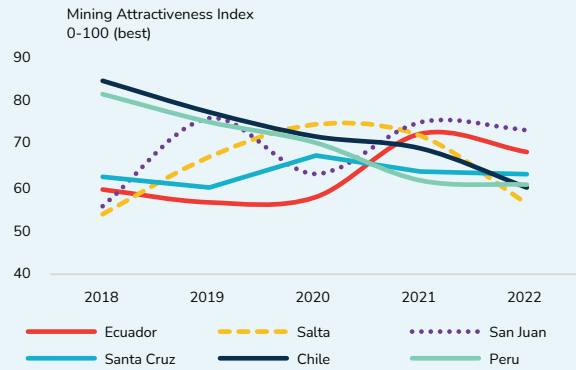
## Making Mining Work for Development



### Summary

**M**ining has become an engine of growth in Ecuador, but strong social and political opposition is eroding the prospects for formal mining, increasing the risk that the mining sector might be condemned to face the negative effects of illegal mining, including growing insecurity. In this context, the country would be well served by addressing environmental, social, and governance challenges to make mining a springboard for the country's development. To do so, the country would benefit from implementing reforms to ensure that mining's fiscal revenues translate into the development of local communities, establish a functional Consulta a los Pueblo process, improve the environmental licensing process with adequate safeguard mechanisms, and strengthen institutions to oversee the sector.

Figure 31. Ecuador is seen as an attractive and competitive mining province.



Source: Fraser Institute and SolAbility.

**International mining companies are attracted to Ecuador by its natural endowments and some policy improvements.** Ecuador's rank on the Fraser Institute's Investment Attractiveness Index<sup>31</sup> has improved from 56th among 83 nations in 2018 to 27th among 62 nations in 2022 (Figure 31), making the country the region's second most appealing destination for mining investment. In addition to the natural endowments, this perception resulted from reforms initiated in the early 2010s that triggered some medium- to large-scale investment projects (World Bank, 2016 and World Bank, 2021). The optimism is supported by Ecuador's geologic potential, with world-class deposits of high-grade ores and low-strip ratios, with less than 10 percent of the territory explored and recent improvements in transport and power infrastructure (Ministerio de Minería, 2016).

**The mining industry in Ecuador has experienced significant growth in recent years.** Mining exports have increased over seven times in the past

four years—from US\$282 million in 2018 to US\$2.2 billion in 2022—making it the fourth largest export sector after oil, bananas, and shrimp (Figure 32). This growth is mainly due to the production of two large-scale mines, *Fruta del Norte* and *Mirador*, that began production in 2019 and are currently operating at full capacity. The main mining products are gold, silver, and copper. Mining generated 37,000 jobs in 2021 (*Ministerio del Trabajo*, 2022), with approximately US\$600 million in salaries paid.

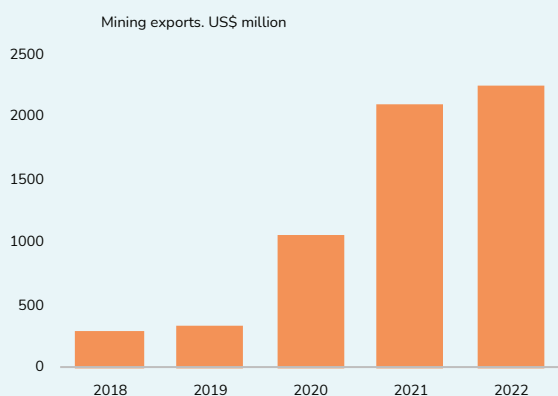
**The industry has the potential to continue expanding.** Ecuador has a pipeline of medium- and large-scale mining projects expected to begin this decade, including two operations and nine projects classified as strategic and second-generation (Annex B). This portfolio mostly includes gold and copper, which were key for neighboring Peru's sustained growth between 2001–2013. The fact that the portfolio does not involve any major industry players other than National Copper Corporation of Chile (CODELCO) indicates significant potential, with several top mining companies developing early-stage exploration projects in Ecuador. Three of the nine strategic and second-generation projects are expected to become operational within the next three years – the Rio Blanco, Loma Larga, and Llurimagua. The government estimates that mining's accumulated investment will reach US\$4.3 billion between 2022 and 2025, increasing exports to US\$13 billion. Fiscal revenues from mining projects are expected to grow from US\$350 million in 2021 to US\$1.3 billion in 2025. Projections indicate that the industry will hire 273,180 direct workers by 2025, and an additional 80,000 indirect jobs will be created.

31 This index is constructed by combining the Best Practices Mineral Potential index, which rates geologic attractiveness, and the Policy Perception Index, a composite index on government policies toward exploration investment.

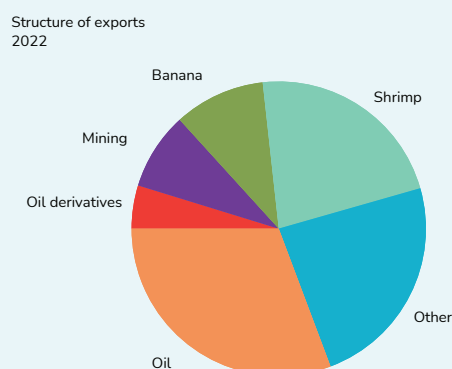


Figure 32. Ecuador is seen as an attractive and competitive mining province.

Mining exports multiplied by over seven between 2018 and 2020 ...



... becoming the fourth-ranked export sector after oil, shrimp, and bananas.



Source: Central Bank of Ecuador.

**Mining presents an opportunity to diversify Ecuador's exports in a decarbonizing world, increase fiscal revenues, and build trust with local communities.** Increased mining production could partly compensate for the decline in fiscal revenues, foreign exchange, and jobs resulting from falling oil exports. Moreover, sustainable mining could become more important as some critical metal prices increase due to global efforts to reduce carbon emissions. According to the International Energy Agency, demand for copper is expected to grow 25 percent by 2030, largely due to the global energy transition driven by increasing demand for low-carbon energy and transport.<sup>32</sup> Many of the 157 metallic mineral occurrences identified in Ecuador show undeveloped deposits of critical minerals for the energy transition, especially copper and molybdenum but zinc and nickel as well.<sup>33</sup> The Ministry of Energy and Mines has envisaged (Vera, 2022) that Ecuador could take advantage of the opportunities derived from free trade agreements with China (signed in May 2023) and the United States (under negotiation). Due to tax incentives provided by the U.S. Inflation Reduction Act (IRA), the latter agreement could open additional opportunities, which could include copper.

32 The copper market could see a deficit of 1.5 million to 9.9 million megatons by 2035, depending on the supply scenario (S&P Global Market Intelligence, 2022). The speed at which the green transition needs to happen to meet 2030 and 2050 commitments for replacement of coal and gas generation capacity and the phasing out of oil for automobiles means the consumption of copper could double. Another study finds that copper prices could increase 60 percent in the next decade (Boer, Pescatori, and Stuermer, 2021).

33 Considering the small fraction of territory already explored, intensified research is expected to identify many other critical reserves (San Martin, 2022). This expectation has led Ecuador to set the goal of expanding the studies of aluminous formations that form lateritic bauxites as well as tertiary and Jurassic intrusive rocks, mainly related to copper porphyries, along with exploration in search of other critical minerals (Chunga, 2023).



## Shortcomings in formal mining have ultimately fueled illegal mining

**The authorities have taken steps to attract mining investment since early 2010, including through some distortive and fiscally costly measures, such as tax incentives and energy subsidies.** Building on tax reforms initiated in the early 2010s,<sup>34</sup> the 2018 Organic Law for Productive Promotion, Investment Attraction, Employment Generation, and Fiscal Stability and Balance eliminated wind-fall taxes and made the royalty regime more flexible. It also set tax exemptions for new investments of up to 15 years for basic industries, including smelters. The Mining Public Policy introduced tax incentives, simplified administrative procedures, and created the Geological Information Bank. In 2021, Decree No. 151 defined a 100-day action plan to develop efficient and responsible mining through a framework of legal stability and the eradication of illegal mining.<sup>35</sup> While the plan's implementation has been limited, it sent a positive message to mining actors. The Ecuador Open for Business strategy has also been used to promote mining throughout business rounds held in various countries. In the same vein, to underpin these efforts, the authorities have not evaluated any option to reduce the electricity and fuel subsidies that artificially increase the sector competitiveness at the expense of a substantial fiscal cost.<sup>36</sup>

**At the same time, various popular consultations and demonstrations have aimed to restrict mining investments.** In 2018, a popular consultation agreed on a constitutional amendment prohibiting metallic mining in all its stages in protected areas, intangible zones, and urban centers (Figure 33). In 2020, popular subnational consultation contained investment in some provinces and cantons. In 2023, a national consultation rejected a government initiative to include the hydrological protection areas in the National System of Protected Areas (SNAP), and regional consultations restricted mining in

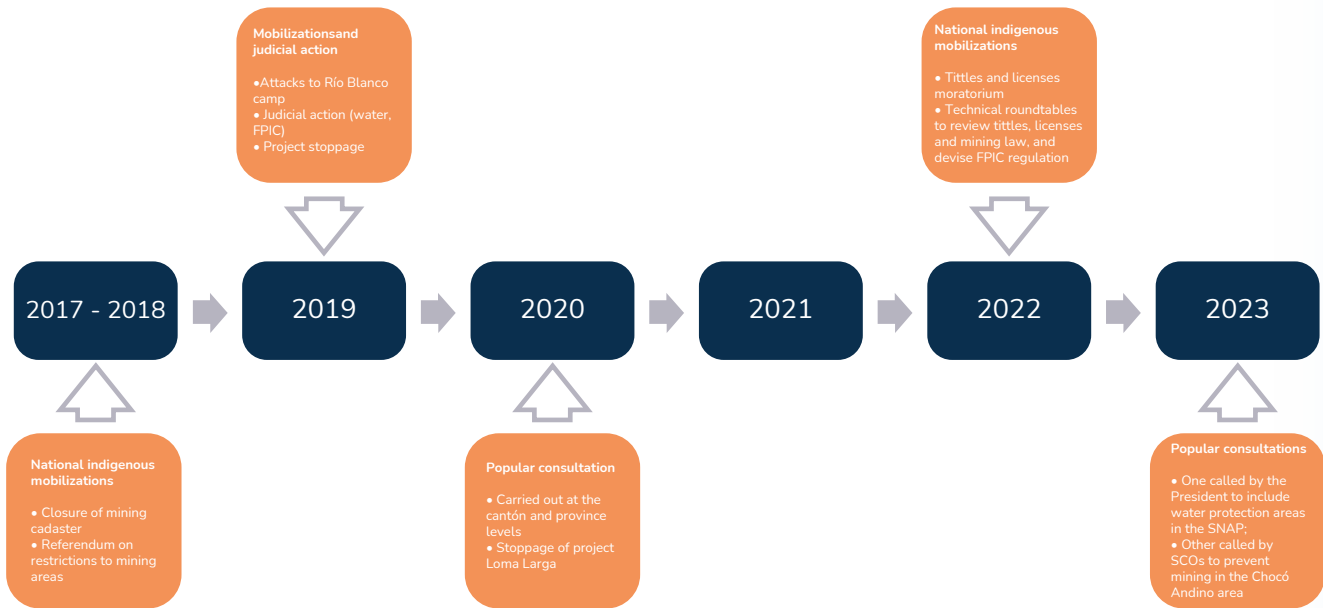
34 As oil prices began to fall in 2014, the government prioritized large-scale mining development. In 2015, an independent Ministry of Mining was created. In 2016, the mining cadaster was reopened, eight years after it closed. A flexible tax regime was introduced to make taxes more comparable to regional peers—Ecuador's corporate income tax is slightly lower, but profit sharing and royalties are slightly higher than the peers. An innovative auction system was introduced in 2016, leading to the approval of 275 new concessions between 2016 and 2017. In terms of legal and regulatory reform, the government adopted a new mining policy in early 2020. However, the piecemeal approach to regulatory reform and frequent changes, sometimes in contradictory directions, create legal uncertainty. In October 2020, Ecuador joined the EITI, taking an important step toward transparency, a key factor in attracting private investors.

35 Decree No. 151 set a plan to: (i) improve the regulatory framework and legal security by streamlining administrative procedures, including concession granting, approving regulation of the Consulta de los Pueblos processes, establishing the mining Advisory Council, and implementing conflict resolution mechanisms; (ii) foster mining development and new concessions by improving management of mining rights, reopening the mining cadaster, implementing associate agreements for private investment in the state mining enterprise projects, introducing competition on pending environmental licenses, expediting strategic and second-generation mining projects, and allowing formalization of artisanal mining; (iii) eradicate illegal mining by activating the Special Commission for the Control of Illegal Mining and boosting effective control of mining rights; (iv) enhance transparency by publishing detailed reports on current mining rights and investments in strategic and second generation projects and releasing information on the use and destination on mining revenues; and (v) promote legal and responsible mining through programs to directly benefit the communities in the mining projects' areas of influence and through the dissemination of mining policies.

36 According to the pricing framework for August–September 2021, Ecuador subsidizes up to US\$0.675 per gallon of diesel; subsidies rose to US\$1.723 per gallon in 2022. Industrial electricity costs are around US\$0.066/kWh less than in Peru, Ecuador's closest mining competitor. The subsidies and differential prices result in cost savings for mining companies that, in the case of Fruta del Norte, are equivalent to 3.8 percent of 2021 net income.

the Choro Andino Region. In parallel, mining investment was further constrained by judicial actions against some investment projects and social demonstrations that resulted in attacks on the mining project camps and changes and delays in the public policy toward new investment in the sector.

Figure 33. Social conflict has been a constant in Ecuador’s mining scenario.



As in other countries, the political economy of the mineral sector displays a division within political forces regarding the issue of mining and natural resource extraction. A part of the political class opposes the development of the mining sector and has influenced decisions of the Constitutional Court and other judicial bodies. A significant portion of the population holds an anti-mining ideology, expressed through popular consultations and elections with question on mining projects. In Ecuador, the mining issue is complex and influenced by economic, social, and environmental considerations. While some argue that mining can generate employment and resources for the country’s development, others are concerned about its potential adverse effects on the environment, community health, and the protection of indigenous rights. This situation is aggravated by the fact that some institutional shortcomings constrain the potential positive effect of mining activity, including the flow of mining’s fiscal resources to local communities. On top of that, some segments of illegal mining, particularly those colluding with organized crime, are opposed to the development of formal mining, not only for the preservation of mining resources but also for the development of large formal activities and the consequent government oversight in their area of influence. This reflects the diversity of opinions within Ecuadorian society regarding the mining industry and its impacts. However, politics and public opinion on this matter can change over time and respond to various factors, including political events and assessments of specific projects.

The *Río Blanco*, *Loma Larga*, and *Llurimagua*, the largest projects expected to come on stream in the next three years, are currently halted due to strong local opposition based on environmental concerns. The *Río Blanco* project was stopped in 2018 due to community accusations of impacts on water sources and the absence of a *Consulta a los Pueblos* process; the accusations led to attacks on the



Although illegal mining is practiced in at least 10 provinces, the hotspots are near the borders with Peru and Colombia that, with the protection of local and international organized criminal bands, facilitates the smuggling of illegal gold, mercury, explosives, and firearms.

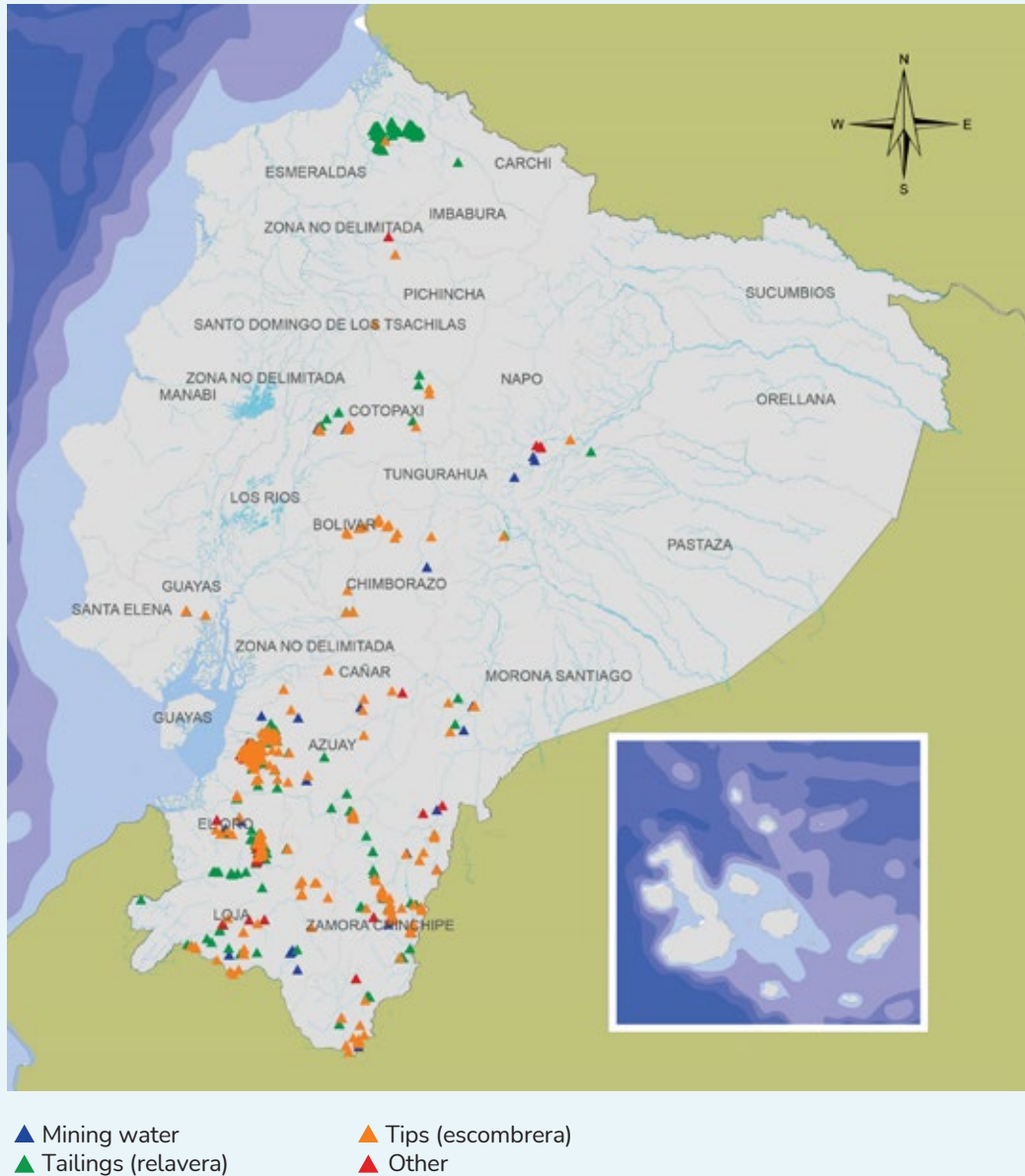
camp and a judiciary process. The court ruled in favor of the community in the second instance, legitimizing the stoppage. A popular consultation in 2019 showed that most of the population opposed the *Loma Larga* project, and the government's declaration that the results were not applicable because subsoil resources belonged to the state was ineffective. INV Metals, the project's operator, moved the camp outside the canton and redesigned the project to exclude the impacted canton. A second consultation, held at the province level, voted to exclude the whole basin from mining. Finally, the *Llurimagua* project was halted due to controversies between Ecuador's state-owned National Mining Company (ENAMI) and CODELCO regarding societal issues that led to arbitration that was stopped in 2022 to reestablish direct negotiations. After that, a local court revoked the project's license after community organizations sued the company for not conducting an environmental consultation and violating the agreement to protect nature.

**Negotiations after the 2022 mobilizations added a new layer of social and legal uncertainty for mining investment.** The 2022 mobilization, led by the Confederation of Indigenous Nationalities of Ecuador (CONAIE), has significantly impacted the country's mining policies. The protest platform had 10 points, including the call for a moratorium on expanding the extractive mining and oil frontier, an audit and integral reparations for socio-environmental impacts, and the abolishment of Decree No. 95 (promotion of oil investment) and Decree No. 151. The mobilization resulted in negotiations between the government and CONAIE that agreed to abolish Decree No. 95 and reform Decree No. 151, effectively banning mining in protected areas, intangible zones, ancestral territories, and archeological zones.<sup>37</sup> The agreements created uncertainty because they did not depend on the executive, and the technical tables had no defined end date. There were doubts about the constitutionality of the Binding Technical Roundtable and its scope, with uncertainty over whether it would evaluate the titles of the two operations in operation and the projects in the portfolio with permitting processes already started.

**This effort has discouraged investment in the sector, undermining formal mining prospects that would contribute more to the fiscal revenues and would better manage social and environmental risks.** In a challenging political and institutional context, the sector has stopped being the main magnet for attracting foreign investment into the country. The upshot has been a decline in mining investment of US\$61 million in the first half of 2022. This reduction resulted from increasing restrictions on mining introduced in the past few years and growing uncertainty over whether restrictions would continue mounting up, making any new formal project in the sector unviable.

<sup>37</sup> The negotiation agreed on: (i) a temporary moratorium on the granting of new mining titles to new petitions for 12 months or until all necessary regulations are in place for implementing the *Consulta a los Pueblos*; (ii) a moratorium on issuing environmental licenses for initiation of new mining activities until the regulations for the Environmental Consultation are in place; (iii) the formation of a Technical Roundtable to elaborate the *Consulta a los Pueblos* law with social and indigenous peoples' organizations and the advice of the UN Rapporteur on the Rights Indigenous Peoples or the Inter-American Commission on Human Rights (IACHR); (iv) the formation of a Technical Roundtable with indigenous organizations to review the Environmental Consultation proposal, with submission for pre-legislative consultation prior to enactment; (v) the formation of a Technical Roundtable for Integral Evaluation, with a binding character, to review oil contracts, mining rights, and environmental licenses as well as socio-environmental, legal, and operational impacts and identify remediation and reparation mechanisms; (vi) the formation of an Environmental Technical Committee to identify and remediate environmental liabilities; (vii) the formation of Technical-Legal Roundtables for the development of projects to reform the Hydrocarbons Law and the Mining Law. Requests to suspend the opening of the mining cadaster, repeal Decree No. 151, and place a moratorium on or nullify mining concessions were not accepted.

Figure 34. Illegal mining has generated more than 4,000 contaminated sites.



Source: Ministry of Environment, 2020.

**Illegal mining is thriving, generating precisely those adverse side effects that fuel people’s suspicion about mining activities, including the legal industrial mining promoted by the government.** Small-scale and artisanal mining, which accounts for 22 percent of the registered gold production, is typically conducted through multiple associations of four or five individuals sharing a concession that contributes little to the fiscal accounts and local development and generates precarious jobs.



Yet, these operations often extend beyond the formal concessions and are almost impossible to regulate, making them environmentally and socially damaging. Although illegal mining is practiced in at least 10 provinces, the hotspots are near the borders with Peru and Colombia that, with the protection of local and international organized criminal bands, facilitates the smuggling of illegal gold, mercury, explosives, and firearms. Without proper oversight from the public sector, illegal mining has substantial environmental impacts on water, soil, and air, with more than 4,000 contaminated sites nationwide, including the use of mercury (Figure 34). Operations are in at least 10 protected areas, leading to the degradation of fragile ecosystems. Contamination from heavy metals and poor working conditions have led to health problems. Illegal mining has put the cultural heritage of the colonial city Zaruma (El Oro) at risk, with several public services, infrastructure, and private properties collapsing due to tunneling.

**Illegal mining has entered into a symbiosis with organized criminal gangs that are behind the recent surge of insecurity, becoming the main concern of formal mining stakeholders.** The mining sector faces security concerns due to organized crime's participation in illegal mining that conflicts with legal operations. Criminal gangs act as financiers, security providers, and extortion collectors. Illegal mining is linked with other illicit activities, such as drug trafficking, human trafficking, corruption, money laundering, and spreading violence, becoming a serious threat to formal mining activity. The mining sector's insecurity is also a product of Ecuador's security crisis. Several spin-offs of the Los Choneros gang have been fighting for power, leading to violence in prisons and on the streets. The illegal activities have begun competing for territorial control with legal companies in areas such as Buenos Aires (Imbabura) and the concessions of Rio Blanco. Besides Buenos Aires and Rio Blanco, the Warintza and Curipamba projects suffered violent incursions during the 2002 mobilizations.

## **Without addressing inclusion and sustainability, Ecuador's mining sector would be condemned to face the negative effects of growing illegal mining**

**Without a policy to enhance the impact of mining on local communities, the sector will likely be dominated by illegal mining.** The restrictions introduced by popular consultations, judicial decisions, and social unrest could limit formal investment in the mining sector, reducing the presence of companies more likely to respect local regulation and positively affect the economy. The high profitability of informal mining, linked to high commodity prices and lack of compliance with labor, tax, and environmental regulations, makes it difficult to limit the surge of illegal mining, with all its negative spillover effects on the environment and security. Addressing this conundrum requires Ecuador to reach an agreement to allow the development of formal mining and address people's concerns about the limited benefits of this activity on local communities and the potential negative effect on people and the environment. However, this challenge is constrained by traditionally weak resource governance,<sup>38</sup> exacerbated by the lack of

---

38 Ecuador's score on the Resource Governance Index was only 54 (out of 100), indicating the country has weak governance in attractive sectors due to severe problems in licensing, information disclosure, and registry of rights and license details. Ecuador also has the biggest score difference between law and practice in extractive governance among its structural peers (22 points), ranking 76th out of 89 assessments.

fully functional mechanisms to manage mining to prevent the imbalances that typically accompany natural resource booms. Ecuador needs to adopt legal and institutional reforms that ensure the sustainable development of a mining sector that is compliant with the highest environmental protection standards and contributes to the community's economic and social progress.

### Institutional shortcomings limit the potential positive impact of mining on surrounding communities

**The mechanism to transfer revenues from mining operations to local governments is not functional, blocking opportunities to generate local development and improve mining's acceptability.** Mining companies are required by law to allocate 15 percent of net profits to social investments and territorial development projects. Of this, 12 percent is allocated to national and local governments, and the remaining 3 percent is distributed to workers in medium- and large-scale mining operations. In addition, 60 percent of the royalties must be allocated to local development projects. However, distribution mechanisms for these resources require further definitions, and *Ecuador Estratégico*, the institution in charge of prioritizing projects, no longer exists. As a result, US\$90 million—60 percent of the advanced royalties paid by *Fruta del Norte* and *Mirador*—that should have been invested in local development has not reached local governments.

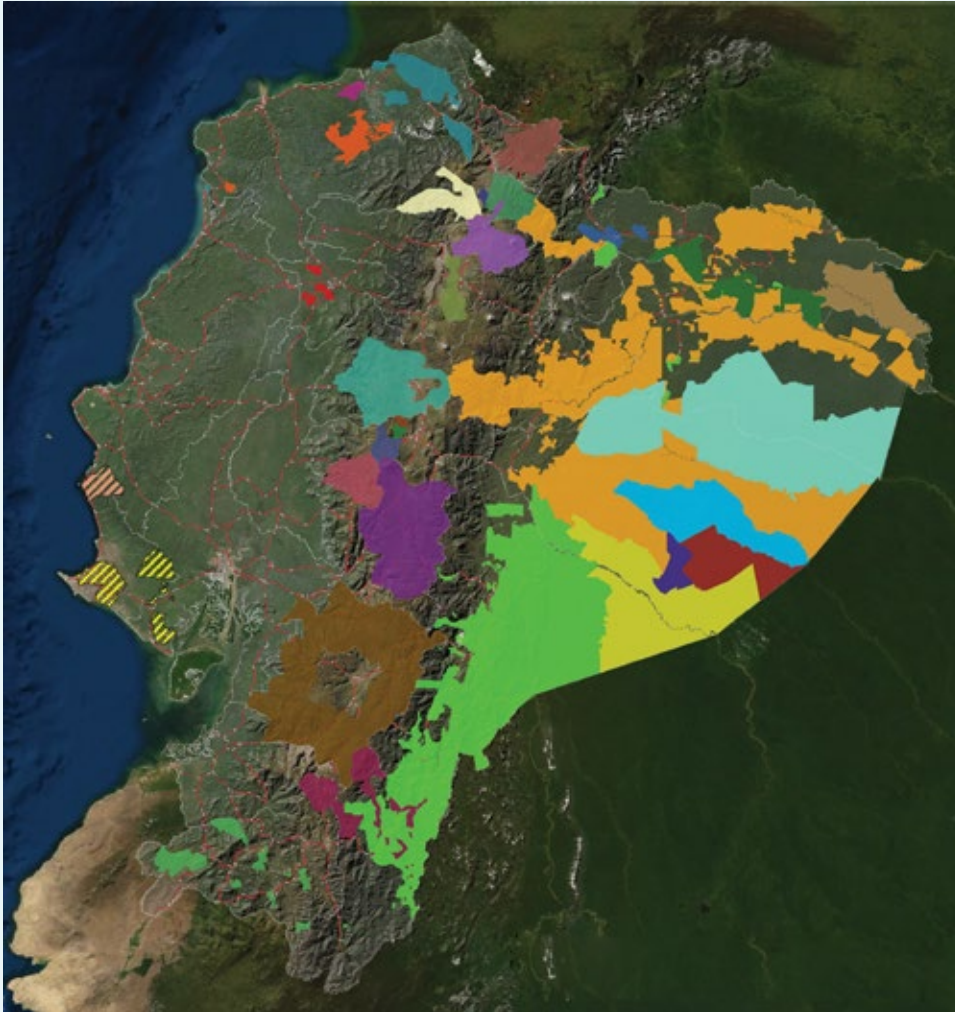
**Local authorities' capacity is limited, undermining the potential benefits of mining.** A large part of mining's potential impact on communities depends on local governments with limited capabilities for designing, implementing, and controlling development programs and projects. Government actions to strengthen these capacities have been largely insufficient. This institutional weakness is worsened by corruption, which various interviewees pointed out persists at different levels of the state apparatus.

### The underdeveloped consultation mechanism increases vulnerability and uncertainty

**Although the *Consulta a los Pueblos* has been introduced by mining and water legal frameworks, it has not been implemented, and communities and courts are demanding its retroactive application.** The constitution recognizes the collective right of indigenous, Afro-Ecuadorian, and Montubio populations to free, prior, and informed consultation (*Consulta a los Pueblos*) regarding the exploitation of non-renewable natural resources on their lands. They also have the right to be consulted before adopting laws that can affect their collective rights, a process known as pre-legislative consultation. Despite its inclusion in mining laws and the Organic Law of Citizen Participation and being a recurrent demand in social mobilizations, the National Assembly has not approved a specific law to make *Consulta a los Pueblos* applicable. In the absence of such a law, mining projects moved forward without *Consulta a los Pueblos*, preventing communities from being properly informed and adding a new layer of uncertainty to mining operations. The lack of this consultation mechanism has triggered several lawsuits and related civic actions (for example, *Rio Blanco*).

**Ancestral territories are central to current discussions on areas excluded from mining activities, but mapping is incomplete and controversial.** The constitution recognizes the collective land rights of indigenous peoples, Afro-Ecuadorians, and Montubios, including the imprescriptible ownership of community land, possession of ancestral lands and territories, and the right not to be displaced from ancestral lands. However, the process of identifying specific territories is unfinished and expected to be contentious. On the one hand, the Organic Law of Rural Land and Ancestral Territories narrows the concept of ancestral territory to land occupied by indigenous communities "currently and from immemorial times." On the other hand, the Council for the Equality of Peoples and Nationalities has developed a map based on a logic of territorial dispersion that covers most of Ecuador, potentially eliminating half the country for areas suitable for mining, including places with important projects in the current portfolio (Figure 35). The Ministry of Agriculture is responsible for inventorying indigenous peoples and granting them lands and territories for free but has not made any provision for it.

Figure 35. The Council for the Equality of Peoples and Nationalities map identifies half of Ecuador as indigenous.



SYMBOLOLOGY

State road network      Provincial Limit

LEGEND

- |          |             |            |          |
|----------|-------------|------------|----------|
| ACHUAR   | COFAN       | KICHWA     | PALTA    |
| ANDOA    | EPERA       | KISAPINCHA | PANZALEO |
| AWA      | HUANCABILCA | KITU KARA  | PASTO    |
| CHACHI   | KARANKI     | MANTA      | PURUWA   |
| CHIBULEO | KAYAMBI     | NATABUELA  | SALASAKA |
| SARAGURO | KAÑARI      | OTAVALO    | SAPARA   |
| SIEKOPAI | SHIWIAR     | SHUAR      | SIONA    |
| TOMABELA | TSACHILA    | WAORANI    | WARANKA  |

Source: Consejo Nacional para la Igualdad de Pueblos y Nacionalidades.

## Environmental protection mechanisms are not fully functional

**The environmental licensing process is rigid, unrealistic, and lags far behind the timeframes in the regulated schedule.** The permitting process for mining activities involves an environmental register or license and a water permit (Annex C). The environmental permitting process is a bottleneck, with up to 11,000 requests delayed, some for up to eight years. Even strategic projects, such as *Fruta del Norte* and *Mirador*, took nearly three years to be completed. The holder of a mining concession has a four-year deadline to complete initial exploration, four for advanced exploration, and two for feasibility studies (which can be extended for two additional years). Given the cumbersome permitting process, mining companies regard this as unrealistic, especially for advanced exploration. The government has made efforts to expedite the permitting process, such as workshops and task groups, but there remains a wide gap in delayed and processed requests.

**Regulatory voids on water protection areas and recharge zone status delay the water permitting process.** In Ecuador, water bodies are considered public goods and property of the state, which grants permits to use them through the Hydrographic National Authority. The process includes a technical inspection and, if the project occurs in indigenous territories, a *Consulta a los Pueblos* process, followed by the National Assembly's approval. The review process has a huge backlog, with over 25,000 requests, some submitted more than eight years ago. There is a regulatory vacuum on the status of water protection areas because the Constitutional Court has ruled the Law of Hydric Resources unconstitutional. In this law, water protection areas were declared part of the SNAP, but repeal and the absence of an explicit mention in the constitution meant the SNAP had not officially included them. The February 2023 consultation did not resolve the issue, reinforcing the need for a formal declaration before a protected area is recognized and becomes excluded from mining activities. Up until now, such a process has been implemented for 15 water protection areas covering 284,000 hectares.

**Plans to increase the land under conservation or environmental management could conflict with plans to boost mining.** There are no specific regulations for assessing, managing, and monitoring biodiversity except for the constitutional prohibition of extractive activities in protected areas. However, concerns have been raised about mining concessions being granted within protected areas, such as *Chocó Andino*, that are currently facing public opposition and undergoing consultation processes. Future investments and extensions of current investments may be at risk due to Ecuador's commitment to increase continental land under conservation or environmental management from 18 percent to 36 percent by 2030, or from 4.4 million to 9.0 million hectares. Although current mining rights would be respected, any additional permits after declaring an area protected could be challenged or denied, paralleling Colombia's paramos and tropical dry forest conservation areas.

## The institutional setup to control mining operations is still underdeveloped

**Mining titling stopped in 2018, and there is no realistic possibility of reopening it soon.** Mineral resources are owned by the state and managed through ENAMI. Private third parties are granted mining rights (concessions) via public auctions. Ecuador has been very active in granting titles since 2012, when a thorough title review was performed. However, the mining cadaster has been closed since January 2018 as part of the process related to public consultation. No mining titles have been issued since then. The government has announced the reopening of the cadaster several times, but it has yet to happen and is unlikely to happen in the near term because of a moratorium agreement with indigenous organizations. In the meantime, only "ghost petitions" are being purged and stalled files are processed.

**No integrated, functional, and comprehensive information system supports mining management, control, and policy decision-making.** Information management is a major constraint in Ecuador's mining sector and an obstacle to informed decisions. Entities record information on Excel sheets in unconnected computers or even on paper, and information is not stored in a common repository but on

specialists' computers. Sharing information between agencies can take up to two weeks, and there is little software support for analysis. Real-time information on sensitive issues, such as water management, is non-existent. There is no integrated and comprehensive information system for mining management to cross-check information—for instance, production and taxes. Plans to implement such a system have been in place since 2020, but there has been insufficient progress.

**Various branches of government have different and contradicting visions about mining that shape decisions that negatively affect the sector.** According to interviewees, the conflicting views have negatively impacted the sector and its potential to contribute positively to the country's development. These differences arise from misinformation about mining activities, their impacts, and approaches to mitigating them. In addition, substantial differences regarding mining activities arise within the executive branch, stemming from inconsistent objectives and a lack of a shared vision about mining and development. Although efforts have been made to improve coordination between key players in the sector, such as MAATE, they are seen as insufficient and require wider integration of the mining sector and its institutional environment.



Information management is a major constraint in Ecuador's mining sector and an obstacle to informed decisions

**Significant staff cuts and know-how losses are worsening substantial gaps in implementation capacity.** ARCERNNR and MAATE, two key institutions for mining governance, have suffered staff cuts, resulting in a loss of operational capabilities for licensing and control. The environmental licensing process has stagnated, and MAATE cannot reliably determine which mining activities have environmental permits, with 151 concessions canceled due to the absence of environmental licenses. MAATE must review and approve 32 regulated environmental monitoring mechanisms, leading to a high administrative workload and less capacity for field inspections. Insufficient material and financial resources hinder inspections and efforts to fight illegal mining and facilitate relations between mining companies and local communities. These operational limitations create a negative image of the mining sector and pose obstacles to investment.

**Ecuador struggles to manage and audit mining operations.** The tax-collecting agency SRI has had difficulties managing and auditing the increased information and taxes generated by the *Fruta del Norte* and *Mirador* projects. It is expected that difficulties will increase when other large mining projects begin production. Moreover, tax officers are not specialists in mining taxation and tax evasion in transnational companies. The Large Taxpayers Directorate has been created to fill this gap, and a training process has been initiated. Yet, this directorate still requires additional resources and capabilities to deal with existing and new projects.

## Addressing social and environmental issues associated with mining activities would help Ecuador to protect economic value and growth in the long run

**Continued social conflicts and risk scenarios suggest unrealized potential exports and taxes, with estimated losses ranging from 30 percent to more than 60 percent.** Looking forward to 2030, four scenarios have been developed and analyzed: (i) base scenario – no new projects enter into operation; (ii) likely



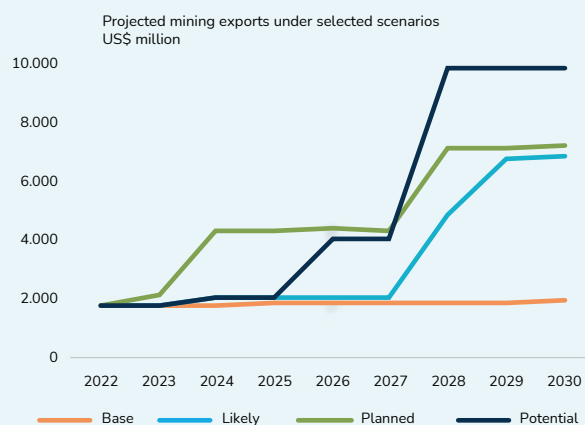
scenario – no substantial change in the social, political, and institutional environment; (iii) planned scenario – things develop aligned with governmental projections; and (iv) potential scenario – the key policy measures described above are implemented (Figure 36, Annex D). The differences between those scenarios derive from the expected start of operations of the *Curipamba El Domo*, *Llurimagua*, *Cascabel*, and *Cangrejos* projects, the advanced projects with less social and environmental pressures. In the base scenario, cumulative exports are estimated at US\$16.5 billion and tax collection at US\$4.4 billion. The planned scenario would generate US\$42.6 billion in cumulative exports and US\$11.2 billion in taxes, with the potential scenario raising exports to US\$45.0 billion and taxes to US\$11.803 billion. In each case, the potential-value loss exceeds 60 percent. Even in the likely scenario, lost value would be around 30 percent. This adds to the urgency of implementing short-term policy measures, with particular emphasis on: (i) enactment of the Law on *Consulta a los Pueblos* and its regulations, (ii) a legal and consensual way out of the bottleneck of popular consultations and citizen regulatory initiatives; (iii) a significant improvement in the efficiency in processing environmental licenses and water permits; and (iv) implementation of measures that allow for the safe operation of strategic and second-generation projects.

**Preventing formal mining from waning and illegal mining from dominating the sector requires short-term measures to foster a supportive environment for mining that considers the interests of all stakeholders, including indigenous communities, local governments, civil society organizations, and mining companies.** First, securing broad citizen participation in drafting legislation related to *Consulta a los Pueblos* and environmental consultation, with the active and visible participation of indigenous organizations, will ensure the laws are inclusive and effective (Table 2). The lack of functioning mechanisms and institutions to facilitate agreements with indigenous communities can hamper Ecuador's geological potential, making broad participation even more important. Second, an improved CEC-MI is critical to prioritizing the fight against insecurity related to illegal mining by deploying public forces, breaking the logistical, financial, and criminal circuits of illegal mining, and isolating mining projects from security risks. Third, there are opportunities to improve tax collection and enable mining revenues to reach local governments and ensure that they are invested appropriately, following, for example, Colombia's General Royalties System model (Box 8). This will facilitate the formation of national and local public opinion by communicating and increasing transparency in information, particularly regarding environmental licenses, control, and mining revenue. In this regard, the experience of Moquegua, Perú, is relevant (Box 9).



Figure 36. The sector's development requires decisive action to protect mining value in the medium term

Not addressing mining challenges could prevent mining exports from growing, ...



... negatively affecting a potential source of fiscal revenues.









Note: The planned scenario assumes the current sociopolitical landscape does not enter a new critical phase and institutional capabilities continue strengthening, allowing Curipamba El Domo to start in 2024 and Cascabel and Cangrejos in 2028. However, Llurimagua might be expected by 2029 if the controversy between ENAMI and CODELCO gets resolved and the recent license suspension gets reversed. Based on the efficient implementation of key policy measures, the potential scenario would bring forward the expected start of operations of Llurimagua to 2026 and ensure that the other key projects do not fall behind.  
Source: Staff estimates.

**For these public policy measures to be effective, they must be implemented by public institutions that have strengthened their technical, financial, and human capacities.** The indicated reforms cannot be successfully implemented unless institutional capacities are up to the job. For this reason, an integrated capacity development plan within the public sector is important to manage the new scenario of large-scale mining operations. Within these agencies, it is critical to recover the operational capabilities of ARCERNR and MAATE. In parallel, it is important to accelerate and intensify the process of adapting and preparing the SRI to the new tax scenario with the entry of new industrial mining projects. Integrating environmental licensing processes through a single window, which involves important institutional rearrangements, is also a necessary part of the institutional reforms for mining to take off in Ecuador. Finally, strengthening transparency mechanisms, especially the Extractive Industries Transparency Initiative (EITI), could improve public knowledge and perception of the contribution of mining to development.<sup>39</sup>

<sup>39</sup> The EITI implements the global standard to promote the open and accountable management of oil, gas, and mineral resources and strengthen public and corporate governance. According to the World Bank's Feasibility Study to Inform Ecuador's Decision to Adhere to the EITI, the public is well behind in the availability and quality of mining information, compared to an oil and gas industry with a longer tradition in the country. Current practices are below EITI Standard requirements and the list of areas that could be improved is long. Information to be disclosed includes license allocation, contracts, beneficial owners, exploration activities, production and export data, artisanal and small-scale mining, SOEs, revenue collection and distribution, the environmental impact of extractive activities, and data on social and environmental expenditures. As part of the EITI incorporation process, Ecuador has set up a Multi-Stakeholder Group (MSG), made up of a wide representation of civil society organizations, the government, and companies in the sector. The group developed an ambitious Work Plan for 2020-2022 that includes concrete actions and deadlines to comply with EITI requirements. The plan aims to strengthen systematic disclosures and address technical aspects of reporting, such as comprehensiveness and data reliability. In addition, it addresses some legal and regulatory obstacles to EITI implementation, especially regarding contract and beneficial ownership transparency.

**Table 2. Short-term policies for sustainable mining**

 <b>OBJECTIVES</b>	 <b>KEY ACTIONS</b>	 Sector growth	 Discourage illegal mining	 Address social issues	 Address environmental issues
Promote broad participation for free, prior, and informed consent and environmental consultation drafting and implementation.	<ul style="list-style-type: none"> <li>• Implement the participatory process.</li> <li>• Take political actions to promote approval by National Assembly.</li> <li>• Create an implementation task force.</li> </ul>				
Fight insecurity head-on and isolate mining projects from security risks.	<ul style="list-style-type: none"> <li>• Develop the regulatory framework for security agreements between private companies and public forces.</li> <li>• Implement a wide training in human rights for the public forces involved in the security of mining areas.</li> </ul>				
Ensure that mining revenues underpin local development by preventing their diversion and strengthening local governments.	<ul style="list-style-type: none"> <li>• Reformulate the royalties distribution criteria and mechanisms.</li> <li>• Explicitly assign to the Planning Secretariat the responsibility for the distribution of royalties to GADs.</li> </ul>				
Communicate the benefits of regulated mining vs. illegal mining and intensify communication with mining actors.	<ul style="list-style-type: none"> <li>• Develop a communication and participation plan for indigenous communities.</li> <li>• Implement hands-on, participatory communication mechanisms for the citizens.</li> </ul>				
Capacity building on public management of large-scale mining.	<ul style="list-style-type: none"> <li>• Intensify training program.</li> <li>• Strengthen cooperation with mining countries.</li> <li>• Define funding mechanisms commensurate with the growth of the activity and independent from political swings.</li> </ul>				
Strengthen the operational capacity of public agencies, both in human and material resources.	<ul style="list-style-type: none"> <li>• Define funding mechanisms commensurate with the growth of the activity and independent from political swings.</li> <li>• Put in place flexible hiring procedures to allow for temporary reviewers.</li> </ul>				
Strengthen the SRI.	<ul style="list-style-type: none"> <li>• Intensify training program.</li> <li>• Strengthen cooperation with mining countries.</li> </ul>				
Implement a one-stop shop for environmental licensing.	<ul style="list-style-type: none"> <li>• Adjust regulatory framework to integrate procedures.</li> <li>• Create and implement licensing and supervision authority.</li> <li>• Develop a risk-based approach to, and plan-based validity of, environmental licensing.</li> </ul>				
Strengthen EITI.	<ul style="list-style-type: none"> <li>• Improve report sharing.</li> <li>• Widen civil society participation.</li> </ul>				



**Box 8.**

Colombia's royalty system is a model to follow in generating benefits and reducing inequalities.



Despite some regional and sectoral heterogeneities, this royalty system has generated significant welfare benefits while reducing regional inequalities. Since 2011-12, Colombia's General Royalties System established that: (i) royalties will benefit all regions whether they are producing or not; (ii) the producing regions might receive additional resources as direct royalties; (iii) access to funds will be via investment plans that will pass a process of review and approval; (iv) a substantial amount of the royalties will be allocated to funds aimed at promoting specific public policy priorities, such as science, technology and innovation, pensions, fiscal stabilization, and implementation of the peace agreements (Hadad, Bonet-Morón y Pérez-Balbuena, 2022).

**Box 9.**

Moquegua is an example of progressively deepening trust and dialogue.







**A shared vision to develop the mining sector and enhance its contribution to sustainable development is possible.** In 2019, the Peruvian Ministry of Energy and Mines created the Center for the Convergence of Good Practices in the Mining and Energy Sectors, known as Rimay ("to talk" in Quechua), to develop a shared medium-term mining vision. Ten sessions over nearly two years with more than 30 key representatives from the public sector, private companies, civil society, and academia culminated in a vision document. After that, the ministry tried to replicate this process in all the mining regions. However, the process was only completed by Rimay Moquegua. During 2021, more than 50 actors from the Ministry of Energy and Mines, the regional government, the mining companies established in the region, the local civil society, and the local universities defined the vision and priorities for mining to contribute to the region's development.

**Dialogue should be a sustained effort rather than a one-off event.** Building on the momentum created by Rimay, Results for Development (R4D) and the Brookings Institute, as part of the Leveraging Transparency to Reduce Corruption (LTRC) project, launched the Community of Learning and Practice (CLP) on Mining Governance initiative, implemented by CCPM Grupo Consultor. The CLP is a space for dialogue and collective multi-stakeholder learning, where key actors from civil society, companies, and the public sector exchange knowledge and experiences, aiming to improve governance and the effective, efficient, and strategic management of mining revenues in the region. The CLP has created its purpose, objectives, and procedures, a driving group has been consolidated, and a mining income monitoring group has been created.

The sustained implementation of long-term policy measures is also key to ensuring that mining contributes to Ecuador’s sustainable and inclusive economic growth. First, developing a comprehensive, multisectoral, and participatory national mining policy in Ecuador is necessary to provide direction and priorities for the sector, align expectations, promote accountability, and empower sector authorities (Table 3). It is an opportunity to implement comprehensive legislative reforms focused on social and environmental sustainability, put into place incentives and controls to promote “green” mining processes, and implement land-use planning and strategic environmental assessments to support a comprehensive and participatory approach to the territory and its potentials (Box 10). Second, the integration of consultation, participation, and regulatory initiative processes is also crucial for reducing legal vulnerability and insecurity throughout the life cycle of mining projects, leading to company-community agreements aligned with international best practices (Box 11) and focused on the development of human and business capital for local communities to make the most of mining. Third, the reopening of the mining cadaster and the expansion of the coverage of geological information are important to generating confidence in the sector, promoting investment, improving profitability and, together with a progressive tax structure, generating greater competitiveness, investment attractiveness, and diversification of the mining portfolio without compromising tax revenues. Formalizing artisanal mining is also an important step toward sustainable mining in Ecuador. A tax reform with progressive tributes would benefit such endeavors by making small formal projects viable. Finally, additional long-term investment in institutional capabilities is required. Strengthening and integrating the environmental assessment and oversight system is key to ensuring sustainability and accelerating implementation of the Integrated Mining Management System to improve efficiency across the board.

**Tabla 3.**  
**Long-term policies for sustainable mining**

				
	Sector growth	Discourage illegal mining	Address social issues	Address environmental issues
Set a comprehensive, multisectoral, and participatory National Mining Policy.				
Enable the option to set company-community agreements.				
Implement phased reopening of the mining cadaster and expand coverage of geological information.				
Implement a land-use planning process and strategic environmental assessments within the framework of the National Mining Policy.				
Implement a progressive tax structure to capture windfall revenues and make small formal projects viable.				
Set a land-use planning process and strategic environmental assessments.				
Strengthen and integrate the Environmental Assessment and Oversight System.				
Encourage formalization of artisanal and small-scale mining.				
Accelerate the implementation of the Integrated Mining Management System.				
Foster information sharing, alignment of incentives, and collaborative among the actors in the system.				



**Box 10.**

Chile is an example of a broad participatory process to define the National Mining Policy.

---

**Participatory processes can help establish national priorities for developing a world-class mining sector.** In January 2022, Chile's Ministry of Mines published Mining 2050–National Mining Policy after a three-year consultation. The policy establishes eight values that Chilean mining should follow on what society asks of the sector, the objectives to be attained, and the development of a new mining model to achieve the goal of being an industry leader worldwide, recognized and valued by society. To achieve this purpose, three pillars and a base are proposed: (i) The economic pillar: To be a world leader in responsible, sustainable, competitive, and innovative mining, with world-class standards; (ii) The social pillar: To improve the quality of life for our workers, develop in a harmonious relationship with territories, and add value to communities; and (iii) The environmental pillar: To be at the forefront in the management of resources and the environment in ways that address mining's impacts and generates a net gain in biodiversity. As part of the institutional base, the government committed to setting the conditions for the industry's sustainable development by developing solid institutions, generating an enabling environment, and providing guarantees to attract investment.

**This process requires the government to encourage the broad participation of all relevant shareholders.** Even more important as a benchmark for other Ecuador and other countries is that the government made a serious effort to ensure the vision for mining is collective, involves all the actors, and aligns commitments. It took a three-year co-creation and consultation process with total direct participation of more than 3,500 citizens. Participants included public and private sectors, academia, civil society, sector experts, local authorities, indigenous peoples, and other interested citizens through territorial workshops, micro-workshops, committees, regular meetings, and a public consultation round.

**Box 11.**

Implementing the Impact-Benefit Agreements approach could strengthen trust and predictability.

**Impact-benefit agreements (IBAs) are one of the most efficient mechanisms to ensure the activities of extractive industries generate direct local benefits.** Canada is the first country to implement IBAs, which are pacts between mining companies and local communities that establish the expected social, economic, and environmental impacts of the mining activity and the benefits the mining company will provide to the local community as a counterpart for consenting to the activity. IBAs ensure that local communities benefit from mining activities and reduce negative impacts on those communities. These agreements often include commitments by the mining company to provide employment, training, business opportunities, community development programs, financial compensation, and environmental protection. IBA-like mechanisms have been implemented in Australia with the Indigenous Land Use Agreements (ILUAs) and South Africa with the Social and Labor Plans (SLPs). Companies in Peru (Framework Agreements) and Chile (Economic Complementation Agreements) have voluntarily implemented similar mechanisms.

**This mechanism does not substitute for taxation, environmental compliance, and auditing by the government.** However, IBAs generate direct, immediate, and mandatory benefits to local communities. They also reduce territorial inequities from an unbalanced distribution of mining income that hugely favors producing territories – as in the case of Peru’s mining canon.



**These measures could be more relevant than distortive tax measures, such as tax incentives or subsidized inputs.** Ecuador’s mining competitiveness relies on its great geology, world-class deposits, and high grades. Tax incentives or subsidies, including fuel and electricity payments, represent a cost to the fiscal coffers and distort the adequate allocation of resources. Just as important, they fuel animosity against the mining sector.





## Chapter 5

# Enhancing Agriculture Productivity and Market Linkages to Foster Resilience and Competitiveness



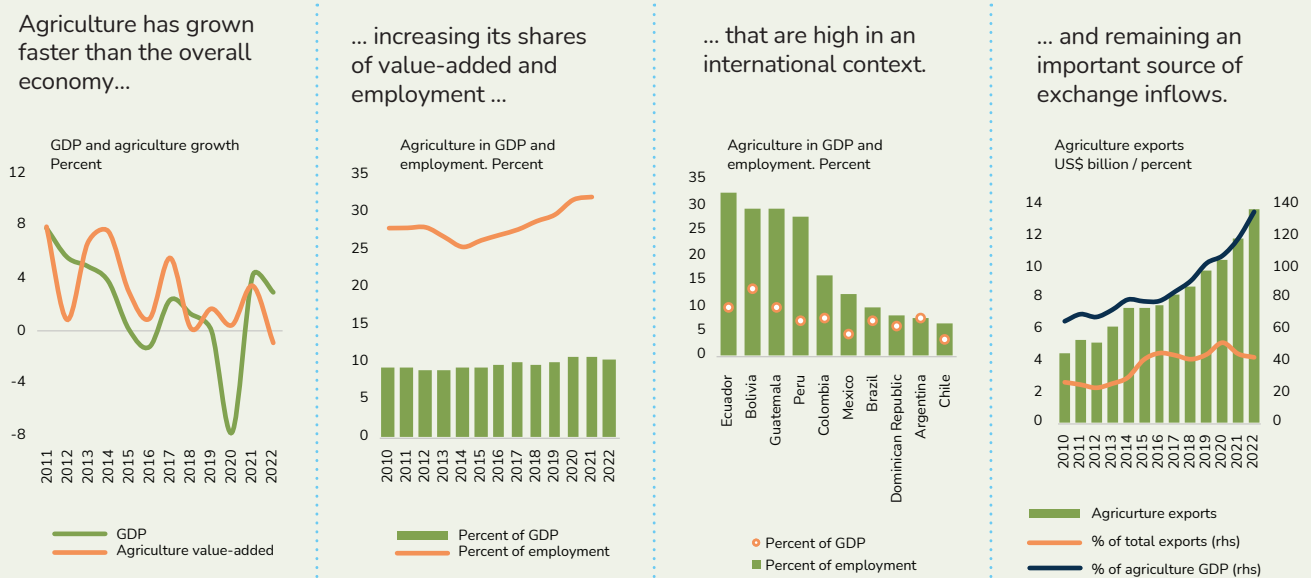
### Summary

**D**ue to fertile soil and favorable agroclimatic conditions, agriculture is a key driver of income, employment, and exports in Ecuador. However, without important productivity gains, agricultural growth based on intensive use of inputs such as fertilizer, pesticides, and, to a lesser extent, deforestation could be environmentally unsustainable. It is critical to improve small farmers' productivity and resilience by reallocating public funds and mobilizing private investment to address structural challenges, including low R&D public expenditure, limited irrigation, lack of agriculture insurance, and infrastructure bottlenecks. More efficient land, labor, and capital allocation could require removing distortions caused by minimum prices or absorption commitments. Productive alliances could complement this effort by providing associated small farms with technical and financial support and linking them to buyers to take advantage of emerging opportunities in foreign and domestic markets. However, these measures should be accompanied by conservation efforts to prevent higher productivity from undermining the country's efforts to reduce deforestation.



**Agriculture is a key driver of Ecuador’s income, employment, and exports.**<sup>40</sup> During 2010-2022, agriculture maintained a higher growth rate than the overall economy, partly offsetting the post-oil boom slowdown and the pandemic-led recession (Figure 37). Agriculture’s share of GDP increased after the oil-price boom, remaining among the highest among regional peers after Bolivia. With other sectors softening after the commodity boom, agriculture has become a growing source of jobs, accounting for one-third of employment, the highest among peers. During 2010-2022, agricultural export value increased substantially, reaching US\$13.7 billion in 2022, equivalent to 42 percent of exports and 134 percent of agriculture value-added. In addition, agriculture drives agroindustry, an important segment of Ecuador’s manufacturing sector.<sup>41</sup>

Figure 37. Agriculture is a key sector in the economy.



Source: National Institute of Statistics and Census (INEC), Central Bank of Ecuador (BCE), World Development Indicators (WDI), OIT, and Food and Agriculture Organization (FAO).

40 The fertile soil and favorable agroclimatic conditions allow off-season production of a wide variety of high-value crops. Ecuador has a well-established revealed comparative advantage in exports of fresh fruits and vegetables, fisheries and aquaculture. Its main agriculture products are bananas, coffee, cocoa, rice, potatoes, manioc, plantains, sugarcane, cattle, sheep, pigs, beef, pork, dairy products, fish, and shrimp.

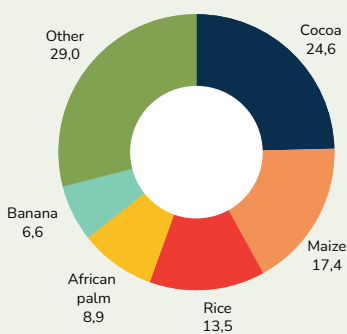
41 Food processing is concentrated in the major urban centers of Quito, Guayaquil, Cuenca, and Manta and accounts for 6.0 percent of GDP and 12 percent of non-oil exports.

**Agriculture is concentrated in a few products and regions, increasing its vulnerability to external, climate, and phytosanitary shocks.** Despite Ecuador's comparative advantage in a wide range of crops,<sup>42</sup> 70 percent of its cultivated area is used for only five crops: maize, rice, cocoa, African oil palm, and bananas (Figure 38). Leaving aside shrimp exports, almost two-thirds of agriculture exports are bananas, flowers, and cocoa, all bulk products with low value-added. Cacao, maize, rice, oil palm, and bananas account for 60 percent of agriculture employment. Moreover, more than half of agricultural value-added is concentrated in Guayas, Los Ríos, Pichincha, and El Oro provinces, which house the largest number of enterprise-level and certified farms. These areas also have the most tractors, irrigated areas, and producer organizations. High product and spatial concentrations expose the sector and rural population to price volatility, climate disasters, and sanitary and phytosanitary risks,<sup>43</sup> pointing to the need for increasing genetic and agricultural export diversification. The incipient surge of non-traditional agricultural exports, such as tropical fruits, points to viable opportunities to diversify into high-value-added crops.

**Figure 38. The agriculture sector in Ecuador is highly concentrated in a few regions and mostly low-value-added products.**

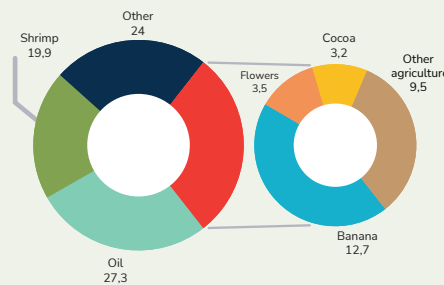
The bulk of the sown area is concentrated in five products.

Structure of sown area by product  
Percent



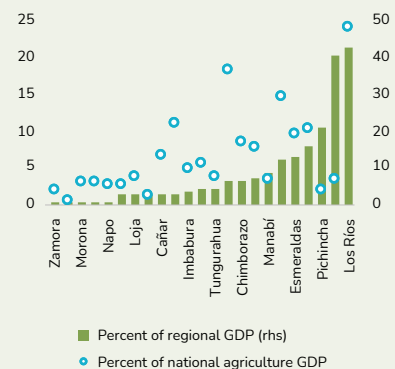
Agriculture exports are also concentrated in a handful of products.

Structure of exports  
Percent of total exports



The result is a high geographic concentration of agricultural output.

Agriculture GDP by region. Percent agriculture GDP / Percent of regional GDP



Source: Central Bank of Ecuador (BCE), Ministry of Agriculture and Livestock (MAG).

42 Ecuador is divided into three agricultural regions: The Sierra (the mountainous Andean area); the Costa (the Pacific coastal plain), and the Oriente (the eastern slopes between the Andes and Amazon). Most production takes place in the Sierra and the Costa regions. Food crops like maize, soybeans, potatoes, and vegetables are cultivated in the Sierra, while cash crops like coffee, bananas, sugarcane, cacao, palm oil, and rice are grown in the Costa.

43 Banana production is largely based on Cavendish. This variety is extremely sensitive to fungus diseases, not only Black Sigatoka but also Fusarium TR4, which has already appeared in Peru and Colombia. Ecuador has taken measures to prevent damages, including setting up disinfection stations near the borders, offering free laboratory testing, and training border officials. The Cavendish production chain's resistance to diversification and the lack of investment in genetics and plant breeding mean that genetic solutions are currently limited for replacing the Cavendish with market-acceptable and resistant varieties from different genetic backgrounds. In addition, the world market for bananas is increasingly contested by new entrants and intense export and production programs in competing countries, such as China, Cambodia, Philippines, Cameroon, and India.

**Agriculture is critical to fostering growth and employment in the short to medium term.** Although Ecuadorian agriculture is still concentrated on a few low-value products, it could underpin Ecuador's development by securing the domestic food supply and improving its quality to meet increasing demand for high-quality food products. The sector could generate income opportunities for the rural population and people leaving declining non-tradable sectors. It could also reduce the country's dependency on oil exports, critical in a decarbonizing world, and foster urban employment through the food processing industry.<sup>44</sup> With conservation efforts, higher agriculture productivity could reduce pressure on the forests, helping reduce emissions without sacrificing income opportunities. Realizing these opportunities requires improving agriculture productivity, agriculture expenditure efficiency, and linkages to external and domestic markets.

## Without important productivity gains, agriculture growth could not be sustainable

**Agriculture growth is constrained by low and declining labor productivity.** Agriculture has the potential to grow faster, given Ecuador's conducive agro-climatic conditions and favorable geographic location for exports. Measured against regional averages, rice and maize have lower yields, but bananas, oil palms, and cacao have higher yields (Figure 39). However, Ecuador's labor agriculture productivity, value-added per worker, is the lowest after Bolivia and Peru among regional peers, perpetuating high rural poverty.<sup>45</sup> After the oil price boom faded, agriculture's labor productivity decreased because people with few opportunities in other tradeable sectors left non-tradable sectors and moved to agriculture.

**Agriculture growth has been driven by higher input intensity rather than productivity gains.** Between 2000 and 2015, Ecuador's agriculture total factor productivity (TFP) grew around 0.5 percent per year, below Chile, Brazil, Bolivia (all above 2 percent), Peru, Mexico, and Argentina (between 1 and 2 percent). These modest gains were driven by technological change rather than higher technical efficiency and managerial capacity (Pfeiffer, 2003, Ávila and Evenson, 2010, Nin-Pratt, 2015, Trindade and Fulginiti, 2015).<sup>46</sup> In addition, formal firms' administrative records suggest TFP has not improved in key agriculture and food processing subsectors, such as fruits, processed products, flowers, and cocoa (Box 12).

---

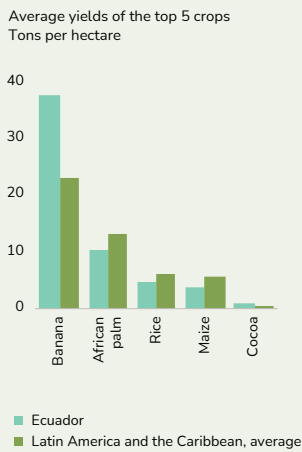
44 The food processing sector has seen steady growth due to increased demand driven by population and income growth and increased acceptance of processed food products (e.g., pre-cooked or easy-to-prepare meals). Ecuador's large food and beverage processors are highly industrialized and technically sophisticated and represent over 95 percent of the sector's net sales. Yet, they only account for 14 percent of firms in a sector dominated by micro (49 percent) and small (23 percent) firms.

45 In Ecuador, 41 percent of the rural population was considered poor in 2022, well above the 17 percent for the urban population.

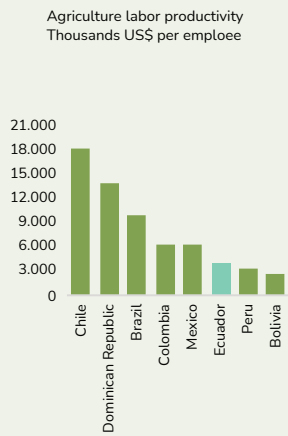
46 TFP and labor productivity are closely related because efficiency gains will raise both. The two measures can diverge because labor productivity is affected by the intensity of use for other factors of production (i.e., land and capital).

Figure 39. Agriculture is constrained by low productivity.

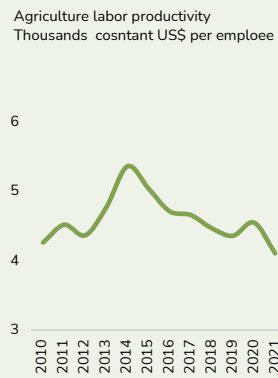
Although yields of some crops are high ...



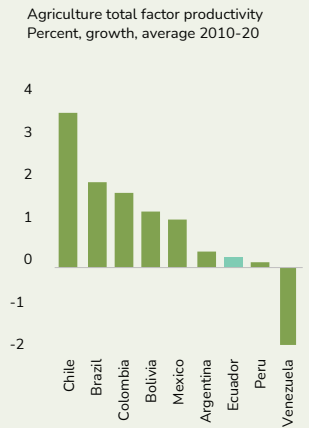
... agriculture labor productivity is low and ...



It declined since the end of the commodity boom, and ...



... the total factor productivity gain is one of the region's lowest.



Source: Central Bank of Ecuador (BCE), Ministry of Agriculture and Livestock (MAG), and World Development Indicators (WDI).



© Paul Salazar



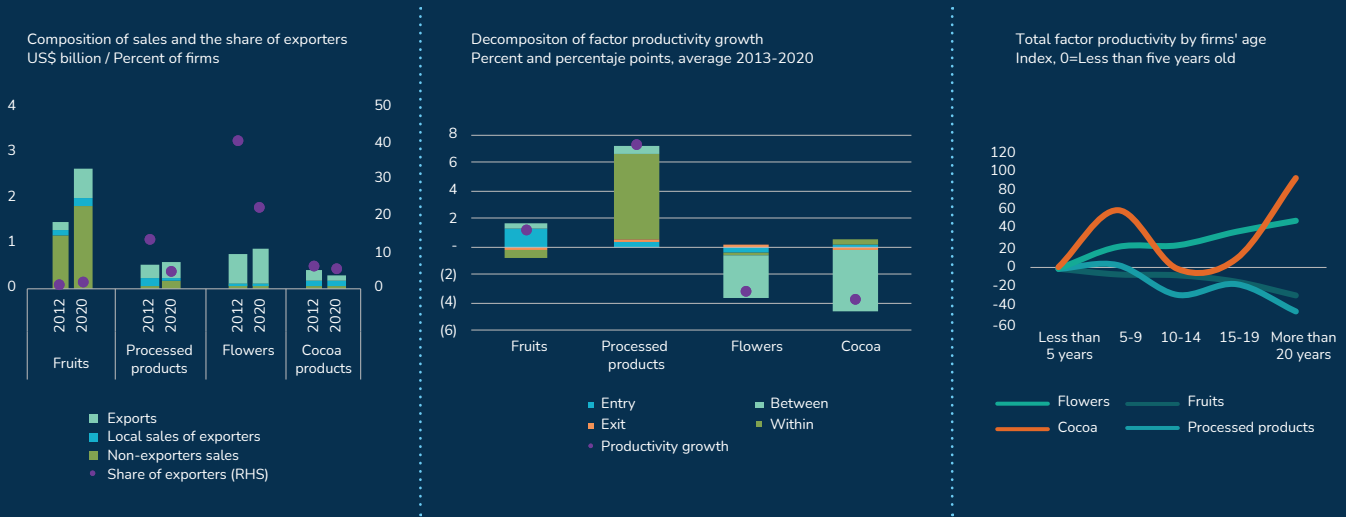
**Box 12.**

**Agriculture firms' productivity has barely improved in recent years.**

**Exports are gaining prominence in critical agricultural products, but they are increasingly concentrated in a small share of firms.** Firm-level data from administrative, tax, and social security was used to evaluate the firm productivity in four agricultural and agroindustry subsectors: (i) tropical and subtropical fruits (fruits), (ii) processed and preserved fruits and vegetables (processed products), (iii) other non-perennial plants (flowers), and (iv) cocoa, chocolate, and confectionery products (cocoa products). This data show that most processed products, flowers, and cocoa products were exported between 2013 and 2020, but only fruits had an increase in exports' share of overall sales. In the other products, exports did not drive growth.

**Most sectors had negligible productivity gains or even losses due to allocative inefficiencies and almost nonexistent technical improvements, except in processed products.** In the case of fruits, TFP barely improved through modest gains from the entry of more productive firms. In the case of flowers and cocoa products, TFP declined due to inefficient allocation of resources (i.e., labor and capital) to less productive firms. These results suggest a poor allocation of resources caused by rigidities in labor, capital, and product markets that do not allow resources to move freely to more productive firms. On the other hand, processed products attained important productivity gains through technical or managerial improvements within surviving firms.

**Total factor productivity barely improves throughout the life cycle of firms in most of these sectors.** The limited productivity gains in most sectors complements the finding that firms' technical efficiency does not grow over time. TFP in processed products and fruit declines as firms age. TFP performance in cocoa products was erratic across the firm's life cycle, suggesting that only middle-aged and very old firms show some productivity gains, possibly due to the consolidation in the local market and entry into the export market. Flowers, a sector dominated by exporters, is the only sector that shows steady TFP increases across the firms' life cycle, possibly due to the development of new linkages with export markets.



**Ecuadorian agriculture growth has relied heavily on fertilizers and pesticides.** Output increases for major crops—such as powdered milk, dragon fruit, potato, soybean, quinoa, bananas, cacao, passion fruit, and grapes—has been driven by higher input intensity, particularly chemical fertilizer and pesticides. Many small farmers cannot afford fertilizers and pesticides, but large farmers can and, not fully aware of appropriate techniques, they tend to overuse them. Ecuador's fertilizer use increased 2.3 times between 2000 and 2018, rising from 164,400 to 374,400 tons, well above the 1.7 times increases in Colombia and Peru. Fertilizer application grew from 55.2 to 159.1 kilograms per hectare of arable land. In the Amazon region, the rapid transition of dragon fruit from wild to commercial cultivation has resulted in pesticide overuse.

**Fertilizer and pesticide overuse generates critical environmental issues.** Fertilizers and pesticides have obvious yield benefits and are often necessary to maintain competitiveness (Cooper and Dobson, [2007](#)), but they also generate undesirable externalities. When misused, inorganic fertilizers can have harmful environmental impacts, including nitrate leaching, eutrophication (caused by deposits of nitrate and phosphate that lead to excessive algae growth), greenhouse gas emissions, and heavy metal uptake by plants. Pesticides may generate several negative effects (Calzada, Gisbert, and Moscoso, [2021](#)). A study of Ecuadorian banana plantations found that newborns exposed to high use of pesticides during gestation have birthweight deficits of 80 to 150 grams and an increased likelihood of preterm delivery. Studies in Costa Rica (Hans, Wesseling, Uytewaal, and Stoorvogel, [1998](#)) and Ecuador (Cole, Carpio, and Leon, [2000](#)) found relatively limited short-term economic costs of pesticide exposure among banana and potato workers, but long-term negative effects of pesticide use, including increased probability of cancers, diabetes, depression, blindness, or even death were not addressed. Estimates regarding environmental damage caused by pesticides in other countries are mostly limited to quantifiable water decontamination costs while ignoring direct or indirect damage to animals, plants and microorganisms, and soils (Bourguet and Guillemaud, [2016](#)).

**The expansion of cultivated areas has substantial negative environmental effects.** Official statistics show that Ecuador's forest cover was 55 percent in 2000, suggesting a net loss of approximately 8.4 percent of forest between 2000-2018 (Kleemann et al., [2022](#)). A combination of government efforts, such as SNAP and the SocioBosque program, decreased deforestation since the 2000s. More recently, shifting agriculture has accounted for about 97 percent of deforestation, which averaged 61,000 hectares annually between 2015-2020. For instance, producers often cut down trees in the coffee subsector, leading to environmental degradation in major coffee-producing regions (Sharma, [2020](#)). Besides that, agriculture and land-use change are the primary sources of greenhouse gas emissions in Ecuador (Ritchie, Roser, and Rosado, [2020](#)).



Many small farmers cannot afford fertilizers and pesticides, but large farmers can and, not fully aware of appropriate techniques, they tend to overuse them.

## Small farmers face important constraints that drag down overall productivity

**With few large farms, Ecuador's agriculture is characterized by small farmlands and little paid work.** Only a few large farms, mainly tied to export markets, have high technological and organization levels.<sup>47</sup> The bulk of Ecuador's agriculture is dominated by smallholder farmers who sometimes continue practicing subsistence farming. The country's 630,000 small-scale agricultural units (less than 10 hectares) use one-tenth of the cultivated area despite accounting for three-quarters of total units. As a result of this agriculture duality, paid workers make up only 28 percent of the sector's labor, and only 30 percent of them are permanent workers. Except for bananas, where permanent jobs prevail, employment is unpaid, temporary, or part-time.

**Small producers face many constraints, resulting in poor agricultural practices and low productivity, profitability, and sustainability.** As in most developing countries, small farms cannot attain economies of scale to reduce costs and improve market linkages.<sup>48</sup> They are affected by inequality in access to land, poor access to financial services (particularly credit), and low levels of technology use (Vasco and Tamayo, [2017](#) and World Bank, [2021](#)). Smaller farmers face greater challenges from poor access to irrigation and improved technologies, degradation of soils and ecosystems (such as moors, mangroves, and forests), and climate change effects (increasing frequency of floods and droughts, less reliable rainy seasons) (Procel, [2018](#)). Despite the gradual adoption of modern practices (such as crop rotation), most small farmers lack adequate know-how on modern cultivation practices and machinery, resorting to inappropriate and labor-intensive techniques (Vaca, Gaibor, and Kovacs, [2020](#)).

**Limited access to credit prevents small farmers from investing in production and post-harvest and offsetting risks.** Ecuador's financial services are concentrated in Quito, Guayaquil, and Cuenca, reducing access among small-scale producers in rural areas (Alvarado et al., [2017](#)). Agriculture lending's share of total lending is about the regional average in Ecuador, but most of it goes to medium and larger farms, forcing small farmers to rely mostly on their own resources (Figure 40).<sup>49</sup> Lack of access to formal credit for working capital and assets hinders farmers' access to high-quality seeds, fertilizers, and mechanical equipment. For example, small farmers lack adequate equipment for aerial spraying of agrochemicals such as fertilizers and pesticides, so they apply them manually, increasing labor costs and overuse risks. Poor access to finance also constrains small farmers' capacity to deal with plant diseases, a major threat to crops such as bananas, plantains, coffee, and cocoa.

---

47 According to the Agriculture Area and Production Surveys (ESPAC), banana output is highly concentrated among large farmers; they also dominate cocoa and coffee production. For example, only half of cocoa production comes from small farms of less than 10 hectares.

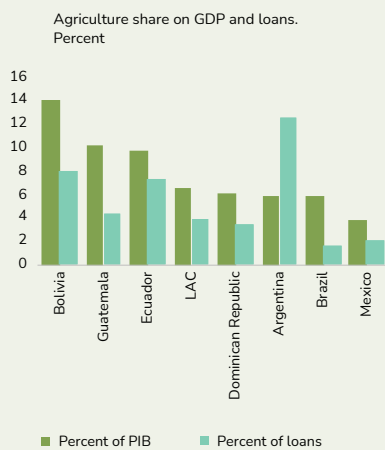
48 Langedyk ([2001](#)) finds a positive relationship between farm size and TFP. The profitability of maize, a highly important product in national consumption, is positively correlated with the production scale due to improved inputs (such as better seeds) and technologies (such as agronomic techniques). Los Ríos, one of the most important maize-producing areas, with 40 percent of national production, has low profitability due to low access to irrigation, inadequate implementation of agronomic and fertilization practices, and limited organization and association.

49 In 2017, 94 percent of farmers used their own funds to finance agricultural activities, 3 percent used funds borrowed from private commercial banks, and less than 1 percent used funds borrowed from cooperatives.

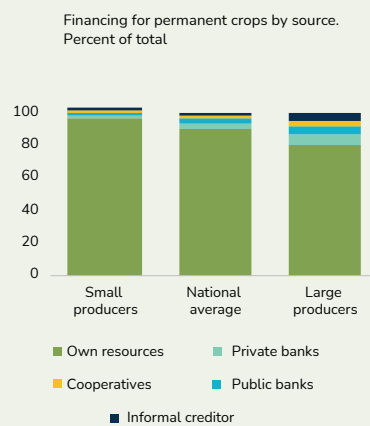
After Ecuador dismantled its public-sector-supported agriculture insurance system in 2018, low access to insurance has made small farmers more vulnerable to climate change.<sup>50</sup> Between 2010 and 2017, Ecuador had AgroSeguro in place, a state-subsidized agriculture insurance system for small and medium farmers with a premium subsidy of up to 60 percent. However, the system turned out to be inefficient, mainly due to asymmetric information problems that resulted in payouts larger than premium earnings, making the system unsustainable. Between 2013 and 2021, the share of the insured cultivated area declined in most regions where AgroSeguro operated, except in Guayas.

Figure 40. Access to financial services is low

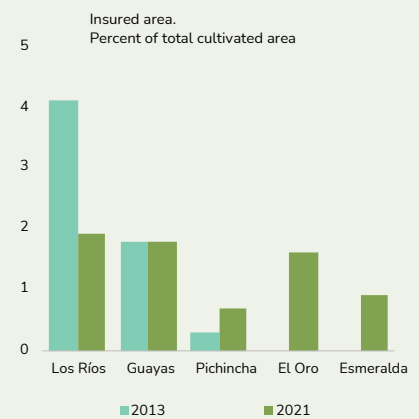
Although agriculture loans are above the regional standards...



... most of these loans go to large producers.



The insured cultivate area dropped after a public issuance scheme was dismantled.



Source: Central Bank of Ecuador (BCE) and Ministry of Agriculture and Livestock (MAG).

**Limited irrigation constrains small farmers' productivity and climate resilience.** Small farmers use inefficient irrigation techniques, such as flood irrigation (World Bank, 2017). This leads to soil erosion and inefficient water use in a country where agriculture consumes nearly 80 percent of available water. Productivity suffers because less than 19 percent of agricultural land receives irrigation, compared to almost 30 percent in Peru. Using a stochastic frontier approach, Ashwini (2020) showed that farmers with irrigation are more efficient. The relatively low percentage of irrigated land amplifies the impact of droughts, one of Ecuador's most frequent climate disasters, making small producers vulnerable to climate change.

**Small farms' productivity is also constrained by limited technical knowledge needed to achieve the quality standards demanded by high-paying markets.** Among the smallholder farmers able to afford fertilizers and pesticides, for example, the lack of awareness about proper procedures leads to excessive usage. Similarly, cocoa farmers lack training in cultivation and farm management, severely hampering quality. Smallholders face constraints on commercializing their products, including

50 Ecuador is vulnerable to climate change, but its readiness leaves much to be desired. Ecuador's Notre Dame Global Adaptation Initiative score is 44.4, behind Colombia (48.06) and Peru (48.56), due to a high vulnerability score (77th among 192 nations) and a low readiness score (134th).



insufficient linkages between supply (producers) and demand (processors and traders), limited handling and processing capacity, and insufficient associative activity. In this context, most smallholder farmers struggle to meet quality standards and obtain required quality certifications, restricting the export potential of their products.<sup>51</sup>

## Public expenditures distort agricultural markets and contribute little to addressing structural challenges

**The bulk of public agriculture spending goes to support prices, which benefits large farmers the most and leads to allocative inefficiencies.** Unlike other countries and regions, Ecuador's agriculture expenditures support minimum prices (often with a bandwidth) for producers of rice, bananas and plantains, coffee, maize, quinoa, soy, wheat, cotton, sugar cane, and milk (Figure 41). With an estimated annual cost of US\$950 million, these transfers do not target small producers; instead, they are captured by medium-sized and larger-scale producers that should be able to deal with market volatility (Egas, Shik, Inurritegui, and De Salvo, [2018](#)). These transfers are concentrated in a handful of primary food products, and they distort incentives, discourage quality improvements, and retard switching to higher-value crops with significant potential in the domestic or external markets, such as fruits, vegetables, or meat. Moreover, these transfers are financed by food consumers who pay domestic prices above international prices, particularly low-income households that tend to devote a larger share of their income on food, including key staples such as rice (FAO, [2019](#)).<sup>52</sup>

**Other distortive measures compound the adverse effect of supporting minimum prices.** Domestic crop absorption commitments are in place with the political objective of ensuring local agroindustry purchases rice, maize, quinoa, soy, wheat, and coffee production. There are import quotas for rice, coffee, maize, quinoa, soy, and wheat, and the state-owned National Storage Unit buys such products as rice, yellow flint corn, and soy, guaranteeing farmers minimum support prices. With minimum support prices, public procurement of excess agri-produce distorts market prices, discourages quality improvements and the switch to higher-value but riskier crops, leads to oversupply, and limits the competitiveness of upstream value chain segments.

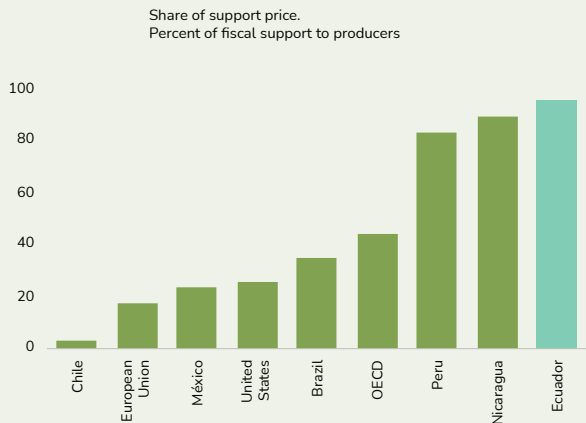
---

51 The lack of certification restricts traditional export products, such as bananas and cacao, from selling in high value export markets, such as Western Europe. In 2020, the main banana export markets were Russia, the United States, Turkey, Italy, Germany, China, Netherlands, Argentina, Algeria, and Saudi Arabia. The main cocoa bean markets were the United States, Indonesia, Malaysia, Netherlands, and Germany.

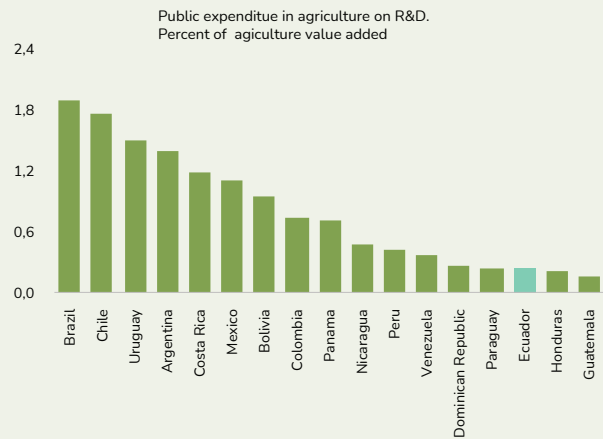
52 While households in the lowest income decile allocate 31 percent of their consumption to food and beverages, households in the highest decile allocate 9 percent to the category.

Figure 41. Agriculture expenditure is low and inefficient.

The bulk of total support to producers goes to support prices and ...



... public agriculture expenditure on agricultural R&D is low.



Source: World Bank, IADB, OECD, and <https://www.asti.cgiar.org/benchmarking/LAC>.



© Paul Salazar

**Public expenditure on agriculture R&D is low.** The public sector is the primary source of agricultural R&D funding. Besides financing core activities, the funding is allocated to research agencies through competitive funding schemes.<sup>53</sup> The National Institute for Agricultural Research (INIAP) has made important contributions to national agricultural development through the generation, testing, adaptation, and transfer of improved technologies.<sup>54</sup> However, Ecuador spends only 0.11 percent of agricultural GDP (US\$10.5 million) on R&D (Stads and de los Santos, 2023), well below Brazil (1.8 percent), Colombia (0.8 percent), or Peru (0.35 percent). As a result, the number of Ecuadorian agricultural researchers per capita or per farmer is among the lowest in South America. Low salaries and benefits result in high staff turnover in R&D institutes, inadequate research system capacity, and a dearth of qualified researchers. Moreover, bureaucratic resistance and constantly changing requirements for competitive funding schemes (one of the largest means of R&D funding in the country) disincentivizes researchers from applying for such grants. In the same vein, centralized management of donor funds delays the disbursement to R&D agencies, disincentivizing donors to fund Ecuadorian agricultural R&D.

## Ecuador has been unable to fully unleash its potential in high-value crop exports






**Ecuador has a comparative advantage in several agricultural export products.** Fertile soil and favorable agroclimatic conditions allowed Ecuador to cement competitive advantages in well-established products such as bananas (consolidated export product), cacao, shrimp (rising exports), and to a lesser extent coffee (Table 4). Ecuador also can increase other agricultural exports, such as horticulture products. A first step in promoting these export opportunities would be to remove distortive policies, such as minimum prices for selected products and absorption commitments that discourage efficiency improvements and shifts away from low-value crops. Small producers play an important role in producing the high export products and taking advantage of this potential requires the country to address the productivity constraints that affect small producers by improving the efficiency of agriculture expenditure, enhancing small farmers' access to finance and critical inputs, and improving production and processing methods used by small producers. In the short term, the most viable option to connect small farmer outputs to international markets is through productive alliances with new and existing large agriculture exporters.

53 Compared to other South American countries, the non-profit sector plays an important role in Ecuadorian agricultural R&D, particularly CINCAE (Centro de Investigación de la Caña de Azúcar del Ecuador) and ANCUPA (La Asociación Nacional de Cultivadores de Palma Aceitera). The for-profit sector also plays an important role, with many multinationals involved in R&D for fruits.

54 The INIAP accounts for 73 percent of the country's agricultural research workforce and is at the forefront of introducing the Farmer Field School (FFS) methodology in collaboration with the FAO, the International Potato Center (CIP), and national institutions. In addition to central offices in Quito and Guayaquil, INIAP operates seven field stations, one research center, and five experimental farms. Six other higher education agencies are involved in agricultural R&D (14 percent of the research workforce), the most prominent being the Catholic University of Santiago de Guayaquil and the Faculty of Agriculture of the University of the Americas.

INIAP Extension activities are carried out through its National System of Technology Transfer (STDT), which has Technology Transfer Units (UTT) at the regional and provincial levels. They are responsible for developing and implementing knowledge/technology transfer and diffusion plans through the training of trainers. In addition, the Ministry of Agriculture, Livestock, Aquaculture, and Fisheries (MAGAP) is the key public sector institute responsible for providing agricultural extension services to producers. These services are provided free of cost, in a gender-sensitive manner, under the System of Participatory Agricultural Technological Innovation (SIPTA) through Agrarian Revolution Schools. Several non-public and civil society institutions, such as private sector, universities, and NGOs, are also involved in the delivery of extension services.

Table 4. Address critical challenges to fully take advantage of its strong agriculture export potential.

	 Bananas	 Shrimp	 Cocoa	 Coffee	 Horticulture
<b>Export profile</b>	Consolidated export. Ecuador is the largest exporter globally.	Raising export. Exports have been consistently increasing in recent years.	Raising export. Exports have been consistently increasing in recent years.	Limited export potential. High quality could help to attract higher prices.	Potential export. It is mostly consumed domestically despite its export potential.
<b>Product profile</b>	Low value added.	Low value added (especially if frozen instead of fresh).	High value added (if processed and high quality).	High value added (if processed and high quality).	High value added.
<b>Producer profile and employment</b>	Small enterprises (383,000 people).	Medium and small producers (261,000 direct and indirect jobs).	Mainly small producers (600,000 jobs).	Mainly small producers (60,000 farmers).	Mainly small producers.
<b>Will additional investments in this subsector add value to Ecuador?</b>	High. Reduce fertilizer costs, price distortions, pest attacks, and diseases; invest in certifications.	High. Investments in intensive farming systems and technical assistance to farmers in adopting them.	High. Regulate cadmium content, promote investment in processing, upgrading technology, maintenance of plantations, and training.	High. Investments in the renovation of plantations, development of vertical linkages, and capacity building of farmers with farm management practices.	High. Investments in modern irrigation systems, high-quality pesticides and mechanization, access to finance, transport and logistics, irrigation, and export promotion.
<b>Does this subsector offer an attractive proposition for investors?</b>	Global. Ecuador is the world's largest banana exporter, with a high yield and market quality perception. Top markets are the European Union, Russia, and the Middle East.	Global. The global market is attractive, with high demand for Ecuadorian shrimp in the United States and Asian countries, such as Vietnam and China.	Global. The global demand for cocoa beans and processed products is high, with strong demand in the United States, China, Indonesia, and India.	Global. High demand for coffee from the United States, Germany, France, Italy, and Canada. There is also a well-established soluble coffee industry that relies on imports of cheaper beans from Vietnam and Brazil.	Global. The global demand for horticulture produce is high, with strong demand in the United States, Netherlands, Canada, and Japan.
<b>Does Ecuador offer competitive supply conditions for investors in this sector?</b>	High. Based on natural endowments, high productivity, and mature production and logistics.	High. Based on natural endowments, adoption of modern feeding technologies, and good standards.	High. Based on natural endowments and government support.	High. Based on natural endowments and distortive government incentives.	Medium. Based on natural endowments. Higher fruit productivity than the regional average.
<b>What distortive policies would need to be removed?</b>	Minimum prices, fuel subsidies.	Fuel subsidies which were recently removed for large shrimp farmers.	Fuel subsidies.	Crop absorption commitments, import quotas, minimum prices, and fuel subsidies.	Fuel subsidies.
<b>How competitive is this subsector under future environmental trade regulations?</b>	Highly competitive. Exports are not affected by environmental trade regulations.	Highly competitive. Exports are not affected by environmental trade regulations.	Weakly competitive. Exports are likely to be affected by carbon border adjustment mechanisms proposed by the European Union and the United States.	Weakly competitive. Exports are likely affected by carbon border adjustment mechanisms policies proposed by the European Union and the United States.	Highly competitive. Exports are not affected by environmental trade regulations.



**Non-traditional products, mainly fruits and vegetables, have shown the greatest dynamism over the past decade.** Although value chains and market linkages for bananas, cacao, coffee, and other commercialized crops are already well established, Ecuador's potential to increase exports of many fruits and vegetables remains largely unrealized. Some traditional agriculture exports, such as banana and cacao, have contributed to the recent expansion of agriculture exports, but other top expanding agriculture exports include broccoli, dragon fruit (pitahaya), and apples as well as a variety of flowers and plants, such as anthuriums, orchids, taro, and cut flowers (Figure 42). Some of these export products, such as pitahayas, orchids, and taro, are new, with very low or inexistent exports as recently as 2014. Many of these high-value crops are exotic fruits for the northern hemisphere and could cater to niche markets in the United States, Canada, the European Union, and other regions. The Presidencia (Office of the President) has prioritized some of them, including avocado, hemp, dragon fruit, pineapple, soursop (*guanabana*), blackberry, gooseberry (*uvilla*), blueberries, and passionfruit (*maracuyá*).

**This growth of traditional and emerging agriculture exports has brought about the entry of many new agriculture exporters, but exports remain concentrated among few firms.** Organic bananas registered the highest increase in the number of exporters, almost doubling between 2014 and 2021, due to changes in logistics organization allowing different exporters to share refrigerated containers. Similarly, the number of exporters has also shown significant increases in non-traditional agriculture products, such as cocoa beans, dragon fruit, apples, and anthuriums, cocoa paste. However, this increase in the number of exporters has not reduced concentration, with few exporters accounting for the bulk of export of these products (Fernandes et al., 2015). For example, the top 5 percent of larger exporters concentrated more than 40 percent of exports in most cases, reaching 80 percent in the case of cocoa paste.

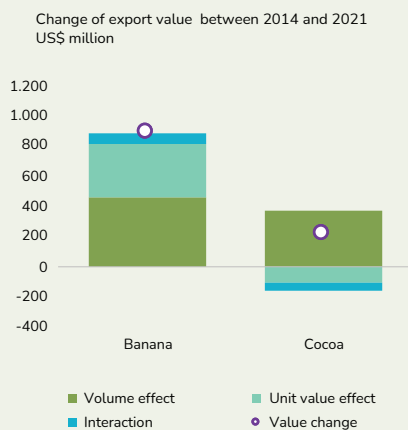
**Besides improving farm productivity, this new agriculture export impetus would require improving post-production and distribution management.** Consolidated products such as bananas, shrimp, and cocoa have developed adequate post-production standards to reach export markets, but other products require additional aggregation, storage, and transport improvements. For perishable products, reaching high-value chains is constrained by inadequate cold-storage infrastructure, leading to significant post-harvest losses. Although there are various public storage facilities in Ecuador,<sup>55</sup> poor storage techniques, including the lack of adequate cold-storage infrastructure, exposed output to bacterial infections, pest infestations, and rodent attacks. For instance, the Quito airport lacks adequate cold-storage infrastructure, resulting in substantial delays and losses. In addition, there is limited specialization in services, specifically cold-chain management, picking and packing processes, and inventory management in distribution centers, partly because of a lack of consolidation centers and associated infrastructure. A lack of training in cold-storage management, inventory control, and refrigeration technology limits the efficient use of existing infrastructure.

---

<sup>55</sup> The Agriculture Ministry has 47 warehouses to store grains, cereals (rice mainly), animal food, and milk, located mostly in the coastal region. Other ministries also have central warehouses and small stores in each province for minimal stocks. The Customs Authority (SENAE) has strategic warehouses in several places and rents temporary depositories. The Secretary of Risk Management (SGR) maintains nine strategic warehouses throughout the country, used to store humanitarian kits to support the responses to various emergencies.

Figure 42. Ecuador can expand its agriculture exports by tapping into its potential in high-value crops.

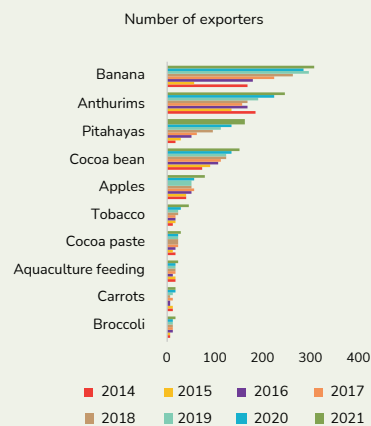
Export of some traditional exports continue growing ...



... and some new agriculture products are gaining momentum ...



... allowing a significant increase of exporter firms.

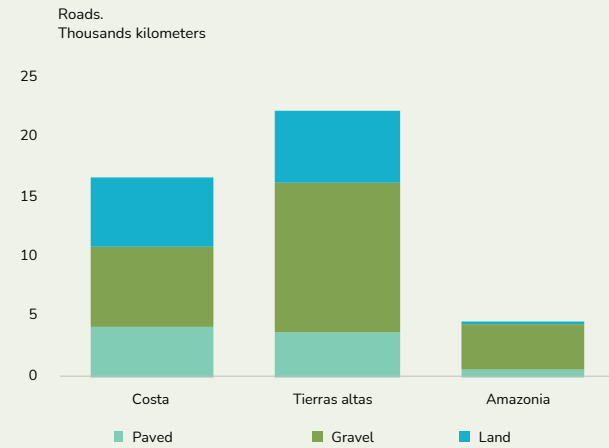


Fuentes: Instituto Nacional de Estadística y Censos (INEC) y Banco Mundial (2021).



© Manthra Archive

Figure 43. Road quality continues to be an important constraint on agricultural development.



Source: Logistics Capacity Assessments (LCAs).

**Ecuador has better supply-chain infrastructure than its export competitors, but improved roads and port facilities would enhance competitiveness of non-traditional, delicate export products.** According to the Global Competitiveness Report 2019, Ecuador ranks 64th among 141 countries in transport infrastructure, surpassing Peru (97th) and Colombia (92nd).<sup>56</sup> However, only one-fifth of roads are paved: one-quarter in the coastal region, one-fifth in the Andes region, and one-tenth in the Amazon region (Figure 43). According to Quezada (2021), 77 percent of smallholder producers face difficulties commercializing their products, and 70 percent indicate that roads are in poor condition, resulting in high transportation costs. The poor quality of road infrastructure, mainly tertiary roads, leads to significant delays, an important issue for perishables goods because transportation from farms to packing facilities is usually in unrefrigerated trucks. Freight transportation services are highly fragmented and dominated by individual carriers and small companies, which prevents economies of scale and integration of logistic services. Exporting high-value fresh products is also constrained by a lack of qualified drivers, leading to breaks

in the cold chain. Tariff and non-tariff import barriers increased transport and logistic costs because vessels and containers come back empty, and high labor costs. Labor costs are high, representing 22 percent of vehicle operating costs in Ecuador, compared to 10 percent in Colombia and 6 percent in Peru. Although Guayaquil is the second largest port in South America after Santos, Brazil, Ecuador is the only country on the west coast of South America without ports with a draft of 15-16 meters, capable of handling fully laden vessels of 12,000-15,000 twenty-foot equivalent unit (TEU). Guayaquil's port has a draft of fewer than 10 meters plus a vessel length restriction of 305 meters. Air transportation costs are high due to limited competition in the air-cargo market. Ecuador is connected to the maritime network mainly via branch lines (as opposed to main lines between hubs), putting it at a disadvantage compared to other countries in the region.

**Diversifying agriculture exports would also require improved access to foreign markets.** For Ecuadorian exporters, the European Union, the United States, and Russia are the top three destinations, with about 60 percent of agriculture exports, but other destinations have gained importance in recent years, such as Turkey, Ukraine, Saudi Arabia, Algeria, United Arab Emirates, Japan, Indonesia, and China. The recent trade agreement with the European Union will provide

<sup>56</sup> The port system in Ecuador consists of seven state ports and 10 private docks, specialized for general cargo and oil. The main ones are Guayaquil, Manta, and Bolívar. The country has several navigable rivers, such as El Guayas and El Río Napo, with a waterway targeted for development by the Manta-Manaus project. In addition, Ecuador has more than 966 kilometers of track on state railways, connecting Sierra and Costa, mainly for tourism purposes. Most of the non-road transport sector involves state-owned enterprises that control the railways industry, major port terminals, and half of the airline domestic market.

more stable market access for Ecuador's agri-food products in coming years.<sup>57</sup> Something similar is expected with the recently negotiated trade agreement with China and ongoing negotiations with South Korea and Canada. However, Ecuador's agriculture exports still lack preferential market access relative to its competitors, with only two comprehensive free trade agreements signed, compared with 22 for Chile, 13 for Peru, and eight by Colombia. Perishable product exports face domestic and international transportation and logistical challenges, including antinarcotics physical inspections, which reduce port efficiency, increase logistics costs, delay shipments, and break the cold chain. This problem is exacerbated by the lack of mutual recognition of sanitary and phytosanitary standards, including with neighboring countries.

**Low firm and farm adoption of international quality standards, food safety standards, cold-chain protocols, and the use of pesticides and fertilizers are major causes of rejection for Ecuador's exports.** For fruit and vegetable exports to the United States and the European Union, the common reasons for rejection are poor hygienic conditions caused by ineffective controls, excessive rates of pesticide use, and mycotoxins and other microbiological contaminants. For fish and fishery exports to these markets, the common reasons for rejection are the choice of food and feed additives, bacterial contamination, poor hygienic conditions and control, presence of heavy metals, adulteration, missing documents, and ruptures in the cold chain. This is partly because only 12 percent of farmers have sufficient knowledge of food safety issues, and only 7 percent have an internationally recognized quality certification, compared with 21 percent in Colombia and 14 percent in Peru. Ecuador's public institutions lack the technology and human resources to guarantee efficient service delivery to exporters, leading to delays in export certifications, including phytosanitary certificates mandated by importing countries, and cumbersome and lengthy processes for registering pesticides.

## The domestic food market represents an opportunity for small and medium farms

**The local food market has substantially increased and diversified in recent decades.** The urban population was 5.7 million in 1990 and 11.5 million in 2021, leading to an important expansion in the domestic food demand that was only partly offset by the economic crises in the late 1990s, the post-oil-price-boom slowdown, and the pandemic in the early 2020s (Figure 44). The urban food market alone is large at US\$5.5 billion, equal to 1.5 times the export value of bananas and nine times the export value of cocoa. With more than nine-tenths of the domestic food consumption met by the domestic food supply chains, Ecuador does well on food security. Diet changes and competitive advantages have led to a contraction of such products as beans, potatoes, and oilseeds; they also favor the expansion of other products, such as maize and rice, fruit and vegetables, and animal products.<sup>58</sup> Given the still high poverty and malnutrition,<sup>59</sup> any effort to foster economic growth will further increase local food demand, particularly for superior products.

---

57 It ensures that almost all Ecuador's agricultural and fishery export products will enter the European Union tariff free. It also allows Ecuador to contemplate agricultural safeguards, support the solidarity-based economy, and protect infant industry (World Bank, 2021).

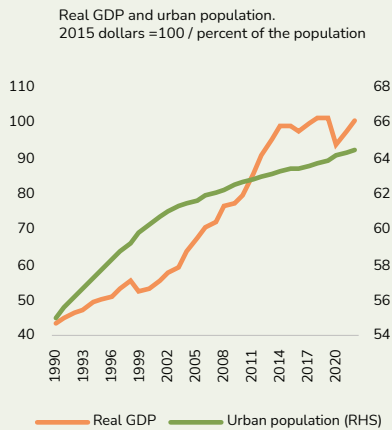
58 Food imports by tonnage accounted for about 9.0 percent of total food consumption in 2019, a bit above the regional average of about 7.0 percent. Yet, Ecuador imports food where it does not have a competitive advantage, such as wheat, which accounts for 57 percent of imports by tonnage. Wheat imports have grown quickly in recent decades due to increasing demand resulting from with the transformation of Ecuador's diets toward processed foods (Popkin and Reardon, 2018).

59 Ecuador's malnutrition rate (23.1 percent of children under age 5 in 2020) is much higher than expected, given its GDP per capita. Malnutrition in Colombia (11 percent), a country with similar per capita GDP, is about half of Ecuador's rate.

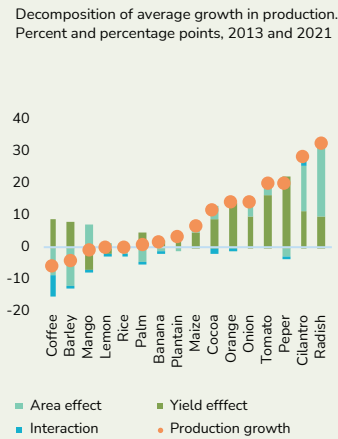


Figure 44. The local market is growing and has important needs.

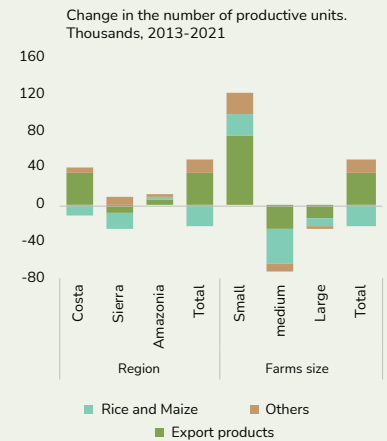
The local market is growing on the back of urbanization and economic growth ...



... inducing an important expansion of some non-export products and ...



... opening additional opportunities for small farms in the Coastal and Andean regions.



Note: Export products include bananas, cocoa, coffee, plantains, and palms; others refer to other domestic market products and include lemons, oranges, barley, onions, cilantro, pears, radishes, and tomatoes.  
Source: FAO, World Development Indicators (WDI), and National Institute of Statistics and Census (INEC).

The domestic market is an important opportunity for small producers. Between 2013 and 2021, domestic food crops like radishes, coriander, bell peppers, tomatoes, oranges, red onions, and oranges have grown faster than traditional products, such as cocoa, banana, and coffee. While this expansion has led to better yields on small farms, increasing the harvested area has played an important role only for coriander and radishes. Elsewhere, the harvested areas expansion was offset by the contraction of other crops, such as barley and coffee. The growth of domestic food crops has been led by small farms in the Coastal and Andean regions, complementing the strong development of small producers of export products on the Coast. It is easier for small farmers to enter and compete in local markets than in export markets, where the investment thresholds are much higher due to, for example, certification requirements and less sophisticated logistics.

The future development of these crops is highly dependent on infrastructure investment in domestic supply chains, mainly tertiary roads and wholesale markets. Rural-to-urban food supply chain infrastructure overlaps little with investment in export supply chain infrastructure because, unlike domestic food supplies, exports do not move through urban wholesale and retail markets. Infrastructure plays a critical role in the supply chains that support domestic market farmers, urban markets, and food security, especially during adverse shocks like the pandemic, climate disasters, and international food price upsurges (FAO and FLAMA, 2022). However, the national discussion about the relevance of whole-

sale food markets has been traditionally neglected due to a national bias in favor of exports and an unsubstantiated belief that wholesale is exploitative. Investment in wholesale markets is curtailed by the fact that they are run by subnational governments with little or no funds for upgrades. The national government has pursued a direct farmer sales program that, far from improving market efficiency, diverts public resources from improving the tertiary road network and upgrading wholesale markets. Direct sales are unrealistic for feeding a large country, do not secure better earnings for farmers, and expose them to a risky and inefficient endeavor.

## Policy options to enhance agriculture productivity and market linkages

**Addressing the challenges would require improving the efficiency of agriculture expenditures by phasing out highly distortive support prices and reallocating public funds to address structural challenges, including the low R&D public spending.** The government has limited fiscal room to increase agriculture expenditures, and the country could benefit from reallocating public resources from highly distortionary and regressive agriculture price supports and public procurement of excess agri-produce. The money would be better spent on other initiatives to provide public goods that have higher returns, such as research and innovation services, sanitary and phytosanitary facilities, logistics infrastructure, market information, and modernization of wholesale markets. For instance, agricultural R&D could be improved by providing better salaries for researchers to reduce turnover. However, any effort to increase R&D outlays should be accompanied by parallel initiatives to improve its efficiency by, for example, establishing collaborations with neighboring countries with similar agroclimatic conditions, such as Colombia and Peru. They spend more in R&D and have more researchers. Just as important, market prices need to reflect Ecuador's competitive advantages in high-value, non-traditional agricultural products, and removing minimum prices or absorption commitments can trigger a reallocation of land, labor, and capital to more productive crops.

**Farm productivity can be enhanced by improving access to irrigation, technical assistance, and modern machinery.** Irrigation dramatically increases yields and reduces vulnerability to climate change events, making a case for subsidizing water-efficient irrigation systems, such as drip irrigation, to encourage farmers to adopt household irrigation initiatives. In Ecuador, the Bank-supported *Proyecto de Irrigación Tecnificada* (PIT) has demonstrated the enormous impact of bringing pressured irrigation to small farmers via irrigation associations. It could also be useful to disseminate modern agricultural practices through demonstration fields at the level of leading farmers. With appropriate assistance, organic fertilizers have positive impacts on yields, reduce soil degradation, and get certifications for accessing international markets. It could also be useful to establish a rental market for easy access to farm machinery.

**An area yield index-based agriculture insurance could be useful to offset the effect of climate change on agriculture.** Many governments promote agriculture insurance for smallholders to mitigate production risk, protect farmers against adverse climatic events, and stimulate diversification. Learning from the failed experience with individual insurance under the AgroSeguro system, the government could consider implementing an area yields index-based insurance, which, according to the University of California Davis, could be more efficient (i.e., insure more area and producers at the same subsidy cost).

**The emergence of new export products requires opening new markets and enhancing export infrastructure and logistics.** Continuing to negotiate trade agreements could be useful, with a focus on complementary economies, such as China, South Korea, and Canada. Another important contribution to facilitating trade could come from improving logistics by fostering public and private investments to improve the cold chain, using new technologies to streamline export procedures and reduce physical inspections. The government can facilitate the adoption of information and communication technologies at public institutions to guarantee efficient services delivery for exporters. It could also be useful to evaluate options to provide financial and capacity-building support to freight transportation services providers to assist them in developing specializations in their services.



The government can facilitate the adoption of information and communication technologies at public institutions to guarantee efficient services delivery for exporters.

**Improving rural roads and wholesale markets is crucial to accessing urban markets, the best option for most small and medium farms, including those managed by vulnerable groups, such as the indigenous.** The domestic food supply chain infrastructure overlaps little with export supply chain infrastructure, and the lack of farm-to-market infrastructure, such as storage, processing, and transportation facilities, makes food marketing relatively expensive. In this context, it could be useful to modernize transport infrastructure, including refrigerated trucks and rural roads, and to upgrade wholesale markets, including storage facilities. This is far more important and practical than the ongoing farmers' direct selling programs that are the current solution for the small farmers in the hinterlands. In this respect, it is critical to improve coordination among agriculture, trade, and transport ministries and municipalities responsible for wholesale market operations—so the latter can increase their investments. Finally, these actors need to work together to develop a strategic vision to improve Ecuador's supply chain conditions and connections to domestic markets nationwide.

**Considering the government has little room to increase expenditure, Ecuador could benefit from mobilizing private and foreign investment to address some of these challenges.** Many of the challenges, such as improving the tertiary road network, could only be addressed through direct public intervention. However, others can be partly addressed by mobilizing private investment through public and private partnerships. Unleashing these opportunities requires improving a regulatory regime, including the public-private partnership framework, to encourage the private sector to participate and reduce non-market risks. In the short term, public-private partnerships could enhance competition in the air cargo market by facilitating the entry of new air cargo and air freight enterprises. In the medium term, this approach could foster investments in the rail network, port upgrades, cold-chain facilities, or other infrastructure for agriculture production and commercialization. For example, it could be important to mobilize public or private investment to improve the airports and ports, mainly Guayaquil port, so they can handle larger volumes and be well-equipped to preserve the cold chain. The government could enhance private investment in R&D by, for example, establishing some incentives for private firms to invest in R&D and facilitating timely dissemination of donor funds for agricultural R&D. In the medium term, the local financial sector could build on productive alliances to facilitate access to credit for producers with good records in the alliances. However, mobilizing private investment through tax incentives should be seen as a last-resort option because Ecuador already has high tax expenditures (World Bank, 2019). Moreover, the efficiency of tax incentives is low, particularly when other constraints to private investment remain in place.

**Productive alliances could help to enhance small producer productivity and market linkages.** Several countries in the region have applied this approach. It involves three core agents: a group of smallholder producers, one or more buyers, and the public sector (Box 13). These agents are connected through a business plan, which describes the producers' capital and services needs and proposes improvements to upgrade their production capacities and skills and strengthen their linkage with the market (i.e., the buyers). In addition to the three core agents, a productive alliance typically involves a technical assistance agency that aids in implementing the business plan and a private financial entity that co-finances implementation. This model allows small producers to consolidate their production to meet local and external market requirements while easing restricted access to improved inputs, getting access to better production methods and technical assistance, gaining access to credit, obtaining better market information, and enhancing their negotiation power with buyers. Productive alliances may also stimulate diversification of agriculture production, especially where business plans would involve irrigation, climate-smart production technologies, good agriculture practices, and certifications.

**Box 13.**

Productive alliances could help small farmers to overcome some constraints.

.....

**The productive alliance approach provides integrated solutions for addressing market imperfections that constrain smallholder producers' socio-economic progress.** They include: (i) limited scale of production and low productivity; (ii) weak standing in market negotiations with buyers and input providers to obtain better prices and more stable market relationships; (iii) poor knowledge of modern production practices, technologies, and market requirements, and the entrepreneurial and management skills required to become more competitive and resilient to economic and climatic shocks; (iv) inadequate access to financial resources for productive investments to increase efficiency and comply with market requirements; and (v) lack of direct access to buyers and markets to successfully integrate into local, national, or international value chains.

**The productive alliance involves at least three core agents:** (i) a group of smallholder producers typically united in a producer organization, (ii) one or more buyers that are active at different levels of a value chain in either commercial or institutional markets, and (iii) the public sector commonly represented by the Ministry of Agriculture and Livestock. These three agents are connected through a business plan, which describes the capital and services needed by the producers and proposes improvements that would allow them to upgrade their productive capacities and skills to strengthen their linkages with markets (i.e., the buyers).

**Implementing this business plan is typically supported by productive investment and business development associated with producers' needs to reach market standards and requirements.** Productive investments typically include the provision to producers of machinery and equipment, infrastructure (on-farm or off-farm), and production inputs (e.g., seeds, fertilizer, veterinary supplies). In this way, productive alliances allow individual smallholders to engage in collective action to generate economies of scale (e.g., collective sales or setting up a financial accounting system subject to common review by productive alliances members) and to invest in and share common goods (e.g., warehouses or processing equipment).

**Productive alliances proved to be an efficient instrument to support small producers.** They have been successfully used in many countries in the region, such as Bolivia, Brazil, Colombia, Guatemala, Haiti, Honduras, Jamaica, Mexico, Peru, and Panama (World Bank, 2016). They are designed to resolve a series of constraints by providing integrated solutions adapted to local conditions, reflecting the ability of the productive alliance approach to adapt to differences in policy priorities, market opportunities, and countries' economic conditions.





**This approach could be beneficial to overcome some restrictions that prevent small producers from integrating into export value chains.** Scaling up small producers' exports will require investments in post-production and distribution management skills and infrastructure, quality enhancements, and certification. Moreover, export competitiveness will remain constrained in the medium term by high labor costs, comparatively costly access to foreign markets, and challenges linked to insecurity. All this implies that small producers can reach out to export markets through a productive alliance with large agro-exporters, which can cover the significant fixed costs with small farmers that currently account for the production of non-traditional agriproducts. A valuable experience on how productive alliances could help to develop private sector-led initiatives to expand high-value-added agriculture export while increasing small producer earnings (Box 14).

#### Box 14.

Productive alliances could help to foster exports while improving small producers' earnings.

.....

**Productive alliances in Peru point to an alternative model for promoting greater inclusion of smallholders in export value chains.** Growing international demand and limited availability of irrigated land have led export firms on the coast to source an increasing share of their produce from smallholders, particularly in the adjacent highlands (*Sierra*), where climate, geography, and water availability favor the growth of non-traditional crops. Productive alliances have formed linking large firms with small and medium farmers' organizations, allowing smallholders to increase earnings by overcoming limited productivity, lack of access to finance, and small scale. This scheme also allows large exporters to diversify geographically, increase the number of crops, and extend peak harvest times, helping them to better manage seasonal weather and market risk. By granting a more stable input supply, productive alliances also increased the competitiveness of large agribusinesses by allowing them to level demand for labor and facilities across the year.

**Most successful productive alliances started with a private-led push to satisfy international demand.** For example, the potential for exporting organic bananas was identified by COPDEBAN and Biocosta S.A.C, which identified international demand, realized the potential of responding to this demand due to suitable agroclimatic conditions, favorable trade policies, and previous conversion to organic hectares in the northern coastal region. Following this initial experience, several export firms started to work in this area, increasing organic banana exports more than 30 times in less than five years. Gandules Inc. S.A.C., a firm that exports beans and paprika, has set up a scheme where 14 formal intermediaries



not only help gather the production but also transfer technologies to the producers. Price premiums set incentives to improve production, and prompt payments through bank transfers grant agility.

**This scheme has boosted agricultural exports while increasing small producers' earnings.** A mango and avocado exporter, Sunshine Export S.A.C, saw a 500 percent increase in export value between 2000 and 2006 based on a supply expansion strategy, where about 90 percent of total sourcing comes from external producers. Similarly, the decision by MC and M S.A.C. to expand exports of artichokes, bell peppers, and paprika induced them to start working with producers with fewer than 10 hectares. Export expansion by DANPER S.A.C., a seller of asparagus, artichokes, peppers, and fruits, led to 50 percent of its production depending on small-scale producers through SERVIAGRO, an advisory services provider, and CARE Peru, an intermediary supporter. This integration of small producers to export value chains has increased small producer earnings by about 40 percent with respect to a control group, being superior to the 25 percent gains attained by producers in association/cooperatives and the 13 percent gain for producers articulated to firms.

**There are factors prevent the approach from being scaled up.** Improved territorial development can support strategic investment in public goods and remove key constraints to the integration of small-scale producers outside coastal regions. For example, last-mile secondary and tertiary road connectivity, internet connectivity, water and sanitation infrastructure, irrigation, access to certified seeds, support for technology adoption, or improvement to land tenure to facilitate the use of land as collateral for bank credit, insurance, and so on could be pursued through public sector reform and investment with strategic participation by the private sector. Although private firms are better endowed to identify such market opportunities, a public effort can mitigate information asymmetries and increase access to information on market trends and demand conditions for smallholders.

Source: World Bank, 2023. Peru Country Private Sector Diagnostic (CPSD).



**Complementary conservation initiatives could be needed to prevent higher agriculture productivity and market linkages from increasing deforestation and emissions.** Whether higher agriculture productivity will contribute to forest conservation will depend on the interplay of the Borlaug and the Jevons effects.<sup>60</sup> International evidence suggests the Jevons effect could dominate (i.e., an increase in productivity could lead to an expansion of deforestation), particularly when the final demand and land supply are inelastic (Goulart, Chappell, Mertens, and Britaldo, [2023](#) and Hanusch, [2023](#)). Although some international evidence supports the dominance of the Jevons effect, it depends on multiple factors (Box 15). More research and empirical studies are needed to evaluate the Jevons effect in Ecuador, but the risk that higher productivity could lead to higher deforestation implies that any effort to increase productivity should be accompanied by complementary measures to limit agriculture's expansion into new areas, a critical element of the country's decarbonization agenda. For example, successful conservation instruments like SNAP and *SocioBosque* could be further expanded and provided with additional enforcement to ensure even lower deforestation (World Bank, forthcoming). These programs could benefit from better targeting high-risk deforestation areas like paramos and mangroves. It could be important to shield the conservation instruments' medium-term budgets from other expenditure priorities to secure their sustainability over time and enlarge their impacts. In the same vein, it could be useful to curb illegal deforestation, enforce conservation agreements, and enhance benefits for local communities through high-value tourism or sustainable management of timber and non-timber resources.

---

<sup>60</sup> The basic notion of the Borlaug effect is that agricultural intensification could save natural habitats from agriculture expansion. Yet, the Jevons paradox maintains that intensifying and increasing productivity may lead to further expansion of agricultural lands (and implicitly points to the need for legal enforcement of conservation laws to save forests).

**Box 15.**

Efforts to increase agriculture productivity need complementary measures to prevent deforestation.

.....

**Higher productivity and agricultural yields could lead to greater, not lesser deforestation.** According to the Jevons paradox, agriculture intensification and yield increases could induce agricultural expansion and habitat conversion as agriculture profits rise, inducing newcomers to buy land and convert habitat into farms (Miller et al., 2021). The paradox suggests increasing agricultural efficiency could lead to increased deforestation because it incentivizes farmers to expand agricultural activities, including clearing more land for cultivation. In addition, technological advances may lead to intensified farming practices, adding pressure to existing agricultural land and driving the expansion of agricultural frontiers (Ceddia et al., 2013). In Latin America, evidence points to greater yields led to higher deforestation rates (Goulart et al., 2023). In Brazil, for example, increased soybean productivity led to further expansion of soybean fields into forests (Yao et al., 2018).

**However, the extent of the Jevons paradox may vary depending on regional contexts, policy frameworks, socio-economic factors, or specific producer characteristics, such as land size or land titling.** Other specialists have theorized that increasing yields and productivity might limit or reverse global drivers of agricultural expansion—the Borlaug effect. For instance, Stevenson et al. (2013) found that adopting improved crops saved nearly 27 million hectares from being transformed into agricultural land. For this reason, this hypothesis needs to be tested in Ecuador. At the same time, measures that involve adopting more efficient agriculture practices to improve agriculture productivity and food security could be accompanied by specific regulations and complementary policy intervention to avoid the Jevons effect and reduce pressures on forests.











# Chapter 6

## Setting a Shared Vision and Coordinating Efforts to Release Ecuador's Tourism Potential



### Summary

**D**espite some progress over the decade before the pandemic, Ecuador has struggled to unleash its enormous tourism potential to foster growth and employment and reduce dependency on oil exports in a decarbonizing world. However, realizing this potential requires setting a shared vision to coordinate public agencies and the private sector stakeholders to improve marketing, rationalize burdensome regulation, address critical infrastructure bottlenecks, and ensure greater access to skilled workers while controlling potential negative environmental effects.

**Due to its unique ecology, topography, and cultural heritage, Ecuador has a tourism product that appeals to an array of visitors—from adventurous young backpackers to high-spending retirees.** For a relatively small country, Ecuador has extraordinary topographical and ecological diversity and a rich cultural heritage. This allows Ecuador to offer visitors a broad range of high-quality activities, including wildlife viewing, visits to historical sites, various adventure and outdoor activities, and cultural experiences.<sup>61</sup> With so much to offer, Ecuador hosts a wide variety of tourists, including high-spending visitors attracted by the country's natural and cultural offerings, adventurers drawn by outdoor activities, budget travelers seeking to explore the country in-depth, members of the diaspora visiting friends and relatives, domestic tourists, and digital nomads.

**Tourism sector growth can create productive jobs and support the current account.** The tourism sector is labor-intensive and a source of foreign revenues and, as such, a key sector to fostering inclusive growth during macroeconomic rebalancing. Croes and Rivera (2017) estimate that households received 78 percent of the economic benefits generated by increased tourism in 2015, and 85 percent of benefits went to urban areas. Tourism could also have long-term effects on productivity by exposing local workers to new languages, technologies, and efficient management practices and generating demand for other export-oriented industries—this has been observed, for instance, in Peru. In addition, tourism can improve productivity in linked sectors by increasing access to business services such as finance, accounting, and consulting, loosening credit constraints, or facilitating networks. Unleashing this potential requires a shared vision to coordinate public agencies and the private sector stakeholders to improve marketing, rationalize burdensome regulation, address critical infrastructure bottlenecks, and ensure greater access to skilled workers while preventing potential adverse environmental effects.

## Despite some progress, Ecuador is struggling to unleash its tourism potential

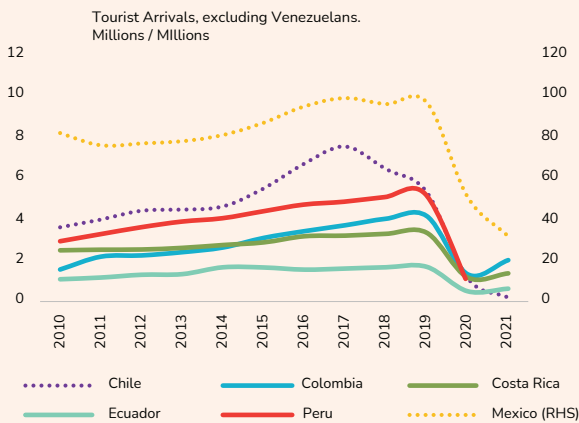
**Despite some progress before the pandemic, Ecuador's tourism has lagged other countries in the region.** From 2010 to 2019, Ecuador's tourist receipts increased from US\$800 million to US\$2.3 billion, a growth rate that exceeded the regional peers. However, in 2019, Ecuador received only 1.6 million arrivals, well behind Peru at 5.2 million, Colombia at 4.1 million, and Costa Rica at 3.3 million (Figure 45). Although the bulk of arrivals came from high (57 percent of total arrivals in 2019) and upper-middle-income (40 percent) countries before the pandemic, arrivals continued below their pre-pandemic levels mainly due to the lackluster recovery of arrivals from upper-middle-income countries. Between 2019 and 2022, arrivals from low-income countries decreased 92 percent, while arrivals fell 42 percent for lower-middle-income countries, 32 percent for upper-middle-income countries, and 15 percent for high-income countries.

---

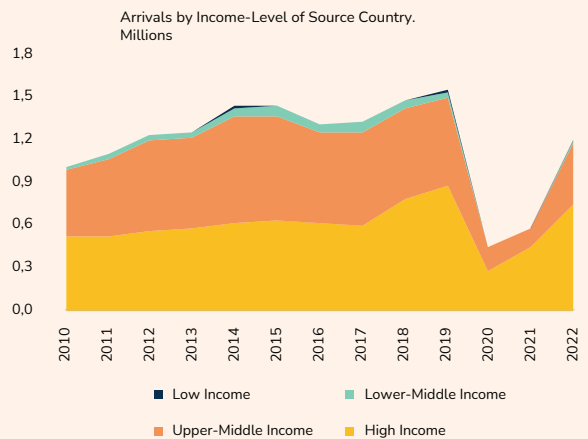
61 High-quality ecotourism offerings span Ecuador's four regions, encompassing the Galápagos Islands, Yasuní National Park, jungle lodges across the Amazonian lowlands, and whale and birdwatching along the Pacific Coast. Ecuador also offers tourists various adventure and outdoor activities, including mountain biking, hiking, surfing, white-water rafting, kayaking, trekking, snorkeling, and diving. Ecuador is also distinguished by the cultural experiences it offers visitors through community-based tourism, craft markets, and UNESCO-listed historical attractions. Ecuador's Pacific coast features numerous beaches, which are destinations for considerable numbers of domestic tourists. While Ecuador's tourism offering is relatively undeveloped, the country's natural springs offer the potential for this rapidly growing segment.

Figure 45. Ecuador's tourism has lagged other countries in the region.

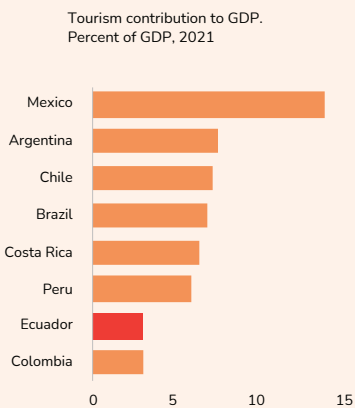
The number of arrivals was low even before the pandemic ...



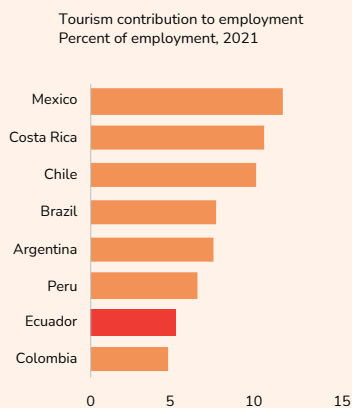
... and recovered only part from the pandemic due to a dampened upturn from higher and upper-middle-income countries



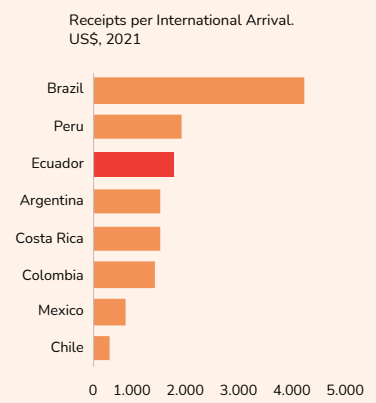
The tourism contribution to GDP ...



... and employment is low despite ...



... high expenditure by tourists.



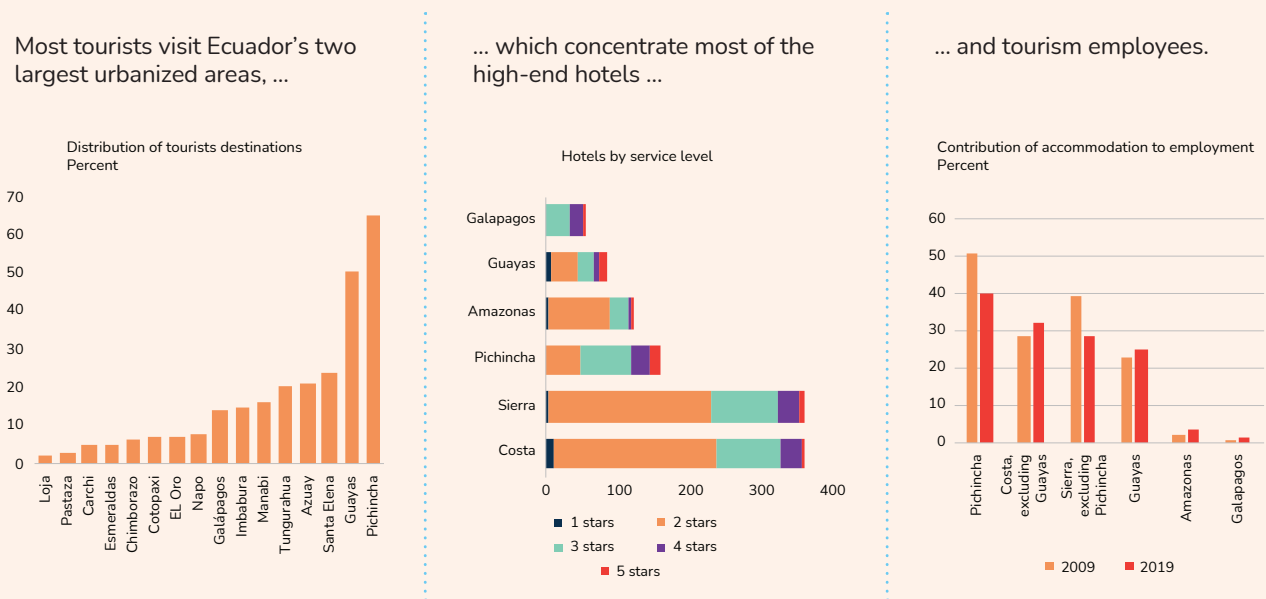
Note: Chile's International Arrivals and Tourism Receipts are for 2020 due to the unavailability of 2021 data.

Source: World Bank Group, World Trade Organization (WTO), Yearbook of Tourism Statistics, 2022, MINTUR, Visualizador Turismo, 2022, World Travel & Tourism Council (WTTC), 2022, and World Trade Organization (WTO), 2023.

**Despite Ecuador’s tremendous potential, tourism’s contribution to economic activity and employment is low.** Two years after the pandemic shut down a large portion of global tourism, Ecuadorian tourism accounts for only 2.9 percent of GDP and 4.8 percent of employment, among the lowest in the region after Colombia. Although average expenditure per tourist (US\$1,571) remained among the region’s highest, Ecuador continues to have relatively low tourism receipts (US\$1.1 billion) part because international arrivals (0.7 billion) remained well below pre-pandemic levels.

**Most tourism activity concentrates in Quito and Guayaquil despite other regions’ natural, cultural, and historical attractions.** In 2019, 70 percent of international visitors arrived by air, 60 percent in Quito, and 40 percent in Guayaquil (MINTUR, 2022). International tourists mostly stay in Pichincha and Guayas provinces, which feature Ecuador’s two largest cities and contain the main cultural tourism assets (Figure 46). Santa Elena, the third most-visited destination, is home to Ecuador’s most important beaches, and Azuay, the fourth most visited destination, features the historic center of Cuenca, a UNESCO Cultural Heritage Site. The geographic distribution of domestic tourism is similar to international tourism, although Santa Elena receives significantly fewer domestic tourists. Quito and Guayaquil concentrate most tourism operations, but the low availability of high-quality tourism products and services outside these cities limits Ecuador’s capacity to capture value from these offerings. For example, most hotels in Ecuador are in the low to mid ranges, and high-end hotels are located almost exclusively in Quito and Guayaquil. Food and beverage establishments have a geographic distribution akin to other establishments, except for the Galapagos, an outcome likely resulting from additional restrictions on commercial development in the islands.

Figure 46. The bulk of tourist activity takes place in Quito (Pichincha) and Guayaquil (Guayas).



Source: Ministry of Tourism.



## Ecuador could foster lucrative international tourism segments

**Ecuador has some well-stabilized segments with limited potential to foster high-value tourism.** Domestic tourism is focused on the coastal region's beaches, and it was critical during the pandemic when international arrivals plummeted. Members of the Ecuadorian diaspora visiting friends and relatives and domestic tourists are important segments of Ecuador's tourism—Ecuador's diaspora was estimated in 2014 at 1.5 million to 2 million people, mostly in Spain, Italy, and the United States (Jokisch, 2014). These tourists generally stay in private accommodations and spend less than other tourists on domestic goods and services. Due to the array of outdoor attractions, varied topography, and low-cost domestic transport, traveling to Ecuador attracts more adventurers and budget travelers than regional peers. Ecuador can be particularly rewarding for those staying longer and comfortable with low-end accommodation and transportation. They are from the same high and upper-middle-income countries as high-value tourists but tend to be younger, stay longer, spend less, and travel to more destinations.

**Ecuador can still develop its most lucrative segment, consisting of older visitors from high-income countries drawn to cultural and natural attractions.** Tourists visiting Ecuador mainly to experience its flora and fauna are among the highest spenders due to the high costs of traveling to and within the country and staying in the Galápagos Islands and the remote Amazonian lodges. In 2015, for instance, tourists whose main reason for visiting Ecuador was to see the Galápagos Islands (10 percent to 15 percent of all international arrivals in 2019) spent an average of US\$1,310, compared to US\$869 for those who cited culture as the key draw (MINTUR, 2017). Remote luxury lodges in Ecuador's Amazon are increasingly drawing birdwatchers and other high-value tourists seeking unique opportunities to view wildlife in near-seclusion (World Bank, 2021). Quantitative data are lacking, but high-value visitors' share of Ecuador's tourism appears lower than regional peers.<sup>62</sup>

**Quito and Guayaquil still attract only a modest number of business travelers, part due to increasing security concerns.** Before the pandemic, meetings, incentive trips, conventions, or events (MICE) was one of the highest-value tourism segments globally, with a yield per tourist four to five times higher than leisure tourists (ICCA, 2018). Both Quito and Guayaquil possess high-capacity convention bureaus, high levels of international connectivity, mid-level and luxury accommodations, and high-quality restaurants. However, Ecuador generally underperforms regional peers, hosting just 44 of the region's 1,160 meetings in 2019 (ICCA, 2022). In addition to lingering public health concerns in the pandemic's wake,<sup>63</sup> security threats—a major concern for business travelers and event organizers—have constrained the growth of this segment over the past year, particularly in Guayaquil because of its recent rise in crime.

**Foreign retirees and digital nomads<sup>64</sup> could emerge as particularly lucrative segments, given the special treatment accorded both categories of tourists.** Ecuador has a specific visa for retirees, and International Living ranked Ecuador as the fourth-best country for foreigners to retire in 2023 (Primi-cias, 2023). The constitution accords special privileges to persons over age 65; even foreign retirees receive discounts on domestic transportation, event tickets, utility bills, and taxes (International Living, 2023). Cuenca has emerged as a popular destination for foreign retirees due to its affordable living costs and ease of transportation. Ecuador was the first South American country to introduce a “digital nomad” visa (Visa Guide, 2022), allowing residents of 183 countries to remain for up to two years (Ecuador Travel, 2022). The high incomes and long stays of digital nomads—foreigners who

62 According to the 2017 visitor survey, high spenders are 10 to 15 percent of arrivals, well below the 50 percent in Costa Rica.

63 The global meetings, incentive trips, conventions, or events (MICE) segment was decimated by the pandemic, but it has started to recover. In 2019, 13,252 unique association meetings were reported, representing total estimated expenditures of US\$10.8 billion (ICCA, 2022). In 2020, 4,843 fewer meetings were reported, and total spending declined to US\$1.6 billion. In 2021, expenditure levels rebounded to US\$2.3 billion.

64 Digital nomads are technically tourists because most visas are for less than or up to a year, fitting the United Nations World Tourism Organization's (UNWTO) definition. The data recognize no specific visas for digital nomads, and they would enter countries as other tourists on shorter visits.

visit for prolonged periods and may either travel regularly within the country or take up temporary residence in a single location—make them a valuable source of tourism revenues.

### The sector is constrained by inadequate marketing, lack of coordination, specific business environment issues, and poor infrastructure

Ecuador's tourism is constrained by low foreign investment and low productivity, limiting the country's capacity to satisfy high-spending segments. The Ecuadorian tourism industry is price competitive, with relatively cheap accommodations, short-term rental prices, and subsidized fuel prices. Between 2015 and 2019, however, Ecuador attracted just 2 percent of foreign tourism investment in Latin America and the Caribbean (World Bank, 2021), trailing Peru, Chile, and Costa Rica (Figure 47). FDI is particularly sparse outside Quito and Guayaquil. These patterns are worrisome because tourism FDI is an important channel for promoting productivity spillovers. International brands generally possess training programs, managerial capacities, and technologies that transfer knowledge to local workers and firms, enhancing their productivity (Xu & Sheng, 2012). In addition, Ecuador's average hotel and restaurant output per worker is far below other countries in the region, suggesting that tourism productivity is also low. As of 2019, for instance, Quito rooms had relatively high occupancy rates but generated average daily revenue below hotels in other Latin American business centers (World Bank Group, 2021). These shortcomings are part explained by cross-cutting issues that restrict private investment and productivity across the economy, such as political, policy, and legal uncertainty, rigid labor regulation, a dysfunctional insolvency framework, and high business costs. They are linked to sector-specific constraints that, if addressed, could transform tourism into a sustainable engine of growth and employment:

Figure 47. Ecuador's tourism struggles to increase investments and productivity.



Source: FDI Intelligence, 2020 and World Economic Forum (WEF), 2021.

## Ineffective marketing and the lack of coordination prevent Ecuador from getting greater value from its cultural and natural assets

**The lack of an effective and long-lasting country brand has limited Ecuador's ability to attract high-value tourists.** Successive governments have failed to develop an international brand that communicates the scope of the country's offerings to potential tourists due to inconsistent strategies, underinvestment, and inadequate collaboration between public agencies and the private sector. Ecuador lacks a destination management organization (DMO) with private sector representation at the director level and does not involve the private sector in developing tourism strategies (Utreras, 2022; Camacho, 2020; Estrella, 2022). Without private sector input, tourism strategies have been politically driven, poorly funded, and inconsistent. Ecuador spends only 1.2 percent of the government budget on tourism, the lowest among regional peers (Figure 48). Overall, the marketing and development shortfalls adversely affect the tourism experience and limit the extent tourists who have visited Ecuador engage in word-of-mouth marketing, which is as important as official marketing.<sup>65</sup>

**The lack of funding and coordination has kept Ecuador from conducting an international visitor survey since 2017.** As a result, tourism authorities and stakeholders lack information on tourist characteristics, such as expenditure, activities, demographics, and satisfaction with their experiences, activities, and infrastructure. This shortcoming inhibits developing marketing strategies anchored in a value proposition that would more effectively attract high-spending tourists. These information gaps also prevent the use of data to inform decisions on developing tourism-related infrastructure and services. In addition, data deficits on the number of visitors and spending patterns inhibit private firms' investment decisions (Estrella, 2022).

Figure 48. Ecuador spends little on tourism.



Source: Clausing, 2021; Primicias, n.d.; Hosteltur, 2021; Periodico Mensaje, 2022; SERNATUR Chile, 2022; FONTUR Colombia, 2022

**Limited coordination with the private sector and across government agencies has truncated tourism development and created regulatory burdens.** Under the 2002 Tourism Law,<sup>66</sup> the Ministries of Tourism and Environment are jointly responsible for developing tourism in natural and protected areas. However, limited coordination mechanisms exist, and recent attempts to establish joint working groups have suffered from little continuity (Muneton, 2022). In addition, there is a low level of coordination between government authorities that set policies and design and implement tourism projects and private tourism firms, partly due to the lack of DMO. Both deficiencies result in inefficient regulation and ineffective projects, undermining tourism firms' productivity and willingness to invest.

65 Word-of-mouth marketing — returning tourists' recommendations to friends and family and social media posts— is as important as official marketing through television, radio, print, and digital media. As a result, tourists' satisfaction with their experiences is an important determinant of future tourism demand. Overall satisfaction is important in whether a visitor returns to the destination or recommends it to others (Tapak, 2019). Recommendations by family and friends have also been identified as critical to both the "inception" and "research" stages of the process through which potential tourists make decisions to travel to a destination (Nielsen IQ, 2021).

66 An updated law is under discussion but disagreements between the executive and the legislative branches are preventing approval of the text.

**This lack of coordination is worsened by the limited capacity of subnational governments, mainly in the peripheral regions.** Decentralization has created two tiers of administration of tourism projects, with many functions now delegated to local authorities. Authorities in Quito, Guayaquil, Cuenca, and the Galapagos have good capacity and the ability to raise resources for tourism promotion and development. However, staff, capacity, and financing constraints in other provinces have resulted in politicization in the design of plans, projects, and policies, ineffective implementation of tourism policies, and inadequate control and monitoring systems (Utreras, 2022 and Camacho, [2020](#)).

**The tourism-specific business environment is constrained by complex regulations, skill mismatches, and limited access to finance**

**Figure 49. Ecuador ranks poorly in the Travel and Tourism Development Rating**



Source: World Economic Forum (WEF), 2022.

**The tourism sector is affected by burdensome non-tax regulations, potentially preventing entry and increasing informality.** Post-pandemic reforms appear to have reduced the financial costs of taxes on tourism operators, and the general level of business taxes is not particularly high – Ecuador ranks below the regional average in corporate taxes.<sup>67</sup> Yet, Ecuador ranked 109th among 117 countries in 2021 on the World Economic Forum’s study of regulatory burdens on tourism firms (Figure 49). Additional burdens imposed on firms and investors in the Galápagos Islands further restrict the ability of Ecuador to extract value from its preeminent tourist destination.<sup>68</sup> Due to licensing burdens that specifically affect tourism operators, studies estimate that around 40 percent of tourism establishments and 60 percent of tourism employees are informal (El Telegrafo, [2016](#), Bustillos, [2021](#), and Calderon, [2018](#)).

**Besides the problems generated by rigid labor regulations, the tourism sector is affected by severe skill mismatches.** Existing labor regulations not only create hiring inefficiencies by failing to account for the seasonal nature of tourism employment but also place additional costs on large firms that inhibit the exploitation of economies of scale.<sup>69</sup> In addition, the insufficient supply of technical and vocational training courses in tourism, especially outside Quito and Guayaquil, limits firms’ access to qualified staff. Because tourism services are skill-intensive, the availability of skilled labor is a major determinant of the

67 With the passage of the *Ley de Desarrollo Económico y Sostenibilidad Fiscal* in November 2021, the Ecuadorian government has taken steps to reduce taxes and fees that inhibit the price competitiveness of Ecuador’s tourism offerings and to encourage private investment in the sector. With the passage of this law, VAT on tourism activities will fall from 12 percent to 8 percent for 12 days a year, tourism firms will be allowed to deduct 100 percent of losses incurred during 2020 and 2021 on their income taxes for up to 10 years, and international visitors will pay zero percent VAT on accommodation services.

68 Firms operating in the Galápagos Islands must either recruit labor locally or prove there are no suitable local candidates (*Gobierno de Ecuador*, 2017). Tour operators must be granted one of the quota shares – none of which have been awarded since 2009 (Parque Nacional Galapagos, 2022) – and have a local operating permit, valid for only one year and restricted to local residents.

69 Labor regulations impose a surcharge of 35 percent on tourism operators who employ seasonal labor and discourage companies from hiring more than 30 full-time employees (World Bank, [2021](#)).



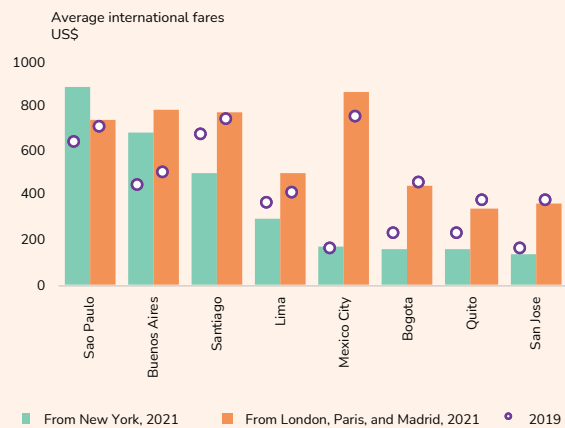
cost structure facing tourism operators. The problem is further compounded by the educational pre-conditions imposed upon tour guides by the country's strict licensing regime.<sup>70</sup> The lack of skilled labor to meet the sector's demand increases costs for tourism operators through increased wages paid to local workers or costs associated with recruiting and retaining foreign workers necessary to meet domestic skill deficits.

**Access to finance, particularly credit for small and medium enterprises, restricts the creation and expansion of tourism firms, limiting competition and productivity.** For small and medium enterprises operating in Ecuador's tourism sector, access to finance poses a constraint that exceeds all peer countries except Mexico (WEF, 2021). Loans offered tend to have shorter terms and grace periods than what tourism investors traditionally demand and what the sector requires, given its characteristics like seasonality. In addition to restricted loan amounts and increased business collateral, personal guarantees or corporate guarantees and the limited presence of banking institutions outside Quito and Guayaquil hurts entrepreneurship and limits diversification in tourism.

### Underdeveloped transport and communication infrastructure continues to constrain tourism outside Quito, Guayaquil, and Galapagos

**A sparse domestic air transportation network limits the geographical breadth of tourism's impacts and undermines the overall tourist experience.** Due to open skies agreements and high competition among international carriers, Ecuador's fares from North America and Europe are low relative to peer countries (Figure 50). In 2021, for example, flights from the United States to Quito were cheaper than all other regional destinations except for Mexico City and San Jose, Costa Rica. Domestic air routes are mostly limited to flights between Quito, Guayaquil, and the Galápagos Islands and do not provide tourists with an attractive means to travel within and between destinations in the Costa, Sierra, and Oriente regions. Domestic arrivals in December 2019 were highly concentrated with 44 percent in Quito and 30 percent in Guayaquil. Accounting for smaller shares of domestic arrivals were Baltra at 7 percent, the southern cultural center of Cuenca at 6 percent, San Cristobal islands in the Galápagos at 4 percent, and the coastal city of Manta at 3 percent.

Figure 50. Quito and Guayaquil enjoy inexpensive international air connections.



Source: OAG: Flight Database & Statistics.

**Poor road safety, the low quality of regional bus services, and a lack of tourist-specific services prevent high-value tourists from exploring the full scope of Ecuador's lesser-known regions.** Ecuador has a well-developed road infrastructure, fuel is highly subsidized, and the country is geographically small. Buses are the main form of domestic transport, but the services generally do not meet the quality standards of high-value tourists, and tourist-specific services are limited. What restricts tour operators from developing tourist-centric services are regulations requiring transport and

<sup>70</sup> Tour guides, who cannot operate independently or must follow fixed itineraries, are governed by a multi-tiered accreditation process with local, national, and national specialized layers (MINTUR and *Ministerio Ambiente y Agua*, 2020). Except for non-specialized local guides who work only a particular location, guides must possess a tertiary degree and, if offering specialized services other than hiking and biking, must also be internationally certified (MINTUR and *Ministerio Ambiente y Agua*, 2020). Guides visiting National Protected Areas (NPA) must have terrestrial, water, and/or supplementary service permits.

tour operators to obtain separate operational permits and licenses (World Bank Group, 2021). Ecuador's domestic bus network is dense, but the country has a high level of traffic fatalities, deterring international tourists from domestic travel, either by bus or rental car (Albiston, Bremner, Kluepfel, Morgan, and Yanagihara, 2022). Before the pandemic, Ecuador had two train routes marketed to tourists: the luxurious *Tren Crucero* between Quito and Guayaquil and the *Tren de los Volcanes*, which made a day-long round trip from Quito to Cotopaxi National Park. However, the public corporation operating them was liquidated during the pandemic, and services have yet to resume.

**Low levels of digitalization limit competition and the extent tourists can use mobile technologies and digital payment systems to research and book products that might otherwise enhance their experiences.** Ecuadorian tourism firms are less likely than potential competitors in peer countries to have a digital presence or utilize platforms to advertise or receive payments.

### Increasing perceptions of crime and instability are becoming an important challenge

**Crime and social unrest have adversely impacted Ecuador's ability to project an attractive image to prospective tourists.** Anecdotal evidence points to rising cancellations after reports of violent events and even civic demonstrations (Perez, 2022). In June 2022, Ecuador's surging homicide rate caused the U.S. State Department to advise its citizens to avoid all non-essential travel to Ecuador. A study using Central Bank of Ecuador data identified losses of US\$82 million for the tourism sector due to the October 2019 protests, the second largest impact after retail (Becerra et al., 2020). To mitigate the potentially adverse impact of criminality on tourism, the government formed a tourism police force, which patrols Guayaquil, Quito, Cuenca, and Baños (Estrella, 2022). The extent to which this innovation has reassured tourists of their safety is still unclear.



Various constraints that impede the development of Ecuador's tourism are traceable to a lack of coordination between public agencies and private sector stakeholders that prevent more efficient regulations and more effective projects.

### Limited control of potential environmental adverse effects could hamper the sector's sustainability

**Although nature-based tourism in Ecuador appears to be increasingly promoting environmental conservation, solid waste and wastewater management is still an important challenge.** Tourism may generate positive or negative environmental externalities, depending on its effects on threatened species and fragile ecosystems and the management of waste generated by tourists. Available evidence suggests that Ecuador's tourism positively contributes to environmental protection and reduces the incidence of plastic waste. As of 2018, Ecuador was struggling in its environmental performance relative to regional peers, ranking 87th among 180 countries on the Environmental Performance Index, compared to 30th for Costa Rica, 64th for Peru, 69th for Brazil, 72nd for Mexico, and 84th for Chile, (Wolf, 2022). By 2022, Ecuador ranked 66th, higher than all peers except Chile, an improvement largely driven by enhanced protection of threatened species. A study of macro-plastic incidence in 14 beaches in the Galápagos found that tourist beaches were cleaner than non-tourist ones (Jones et al., 2021), underscoring the environmental benefits of well-managed tourism. The improvement was due to visitor expectations, trashcans, daily clean-up programs organized by local tour operators, and the beaches' sheltered locations. Similar findings were reached in a study of anthropogenic marine debris on Ecuador's southern coast (Salazar et al., 2022). Such findings indicate the

sector's potential – if well managed, planned, and developed, with proper incentives and community involvement – to contribute positively to biodiversity and wildlife conservation. However, some of the solid waste and wastewater tourists generate are not managed sustainably.

## Policy options to set a shared vision and coordinate efforts to release Ecuador's tourism potential

**Realizing Ecuador's tourism potential will require closer cooperation between the government and private sector stakeholders.** Enhancing tourism's contribution to the country's development requires measures to attract and satisfy high-spending segments, address factors that undermine productivity, and ensure that tourism generates positive economic and environmental impact. Various constraints that impede the development of Ecuador's tourism are traceable to a lack of coordination between public agencies and private sector stakeholders that prevent more efficient regulations and more effective projects.

**This cooperation can be enhanced by institutionalizing a coordination mechanism to come up with a new strategy to enhance tourism, particularly high-value segments.** There is no single approach, but the government would need to design coordination mechanisms appropriate to Ecuadorian tourism. It could establish a public-private DMO like Costa Rica, a separate autonomous and fully private DMO like Mexico, a public-private dialogue mechanism at the ministerial level like Canada— or a combination of these options. Given the importance of private sector participation, this institution should incorporate professional leadership, a marketing staff, and private sector representatives at the director level. Once formed, the body could develop, implement, and monitor a cohesive strategy to enhance the value added by tourism to the economy, mainly the high-value tourism segment, with key objectives, monitoring and evaluation tools, and the appropriate sequencing and coordination of initiatives. In coordination with private sector stakeholders, the government could also develop an updated tourism law that places the sector on equal footing with other industries.

**Information-based decision-making and coordination would benefit from collecting and analyzing data on the experiences and perceptions of international tourists.** In conjunction with its private partners, the government could consider the developing and implementing regular international visitor and expenditure surveys. The design and deployment of these surveys can revive the institutional arrangement used in past efforts to establish a tourism satellite account (TSA). However, the exercise must be more sophisticated in design and implementation than the 2017 International Visitor Profile. Surveys could also be used at the firm level to identify reforms to improve private sector productivity and investment in the tourism sector. These surveys could provide key insights to shape the development of tourism infrastructure and products, marketing campaigns, and tourist guide materials.

**This coordination could result in a shared vision to set an effective and long-term brand strategy that attracts high-spending tourists while promoting other exports and domestic tourism.** To avoid the past pitfalls of politicization and inconsistency in marketing efforts, the government could focus on building an international brand with the buy-in from various political parties, private sector stakeholders, and community and civil society organizations. In particular, the branding campaign could be commissioned and managed by a new coordination institution, ideally financed directly by tourism or other parafiscal taxes rather than the general budget. It is critical to understand lessons from past efforts (e.g., *Fondo Mixto de Promocion Turistica*) to avoid issues related to funding allocation and coordination and commitment by the government. The marketing exercise could build on best practices among peer countries and seek to develop approaches that generate positive marketing externalities for other export products and promote domestic tourism. Another critical factor is a unique value proposition as a destination founded in a collaborative approach that considers the country's characteristics. All marketing campaigns should be anchored in it, further target high-spending tourists, and be evaluated periodically to ensure effectiveness.

**Rationalizing regulations and licensing systems is critical to fostering tourism demand and productivity in a relatively short period.** Licensing barriers discourage entrepreneurship and investment, and they are among the greatest constraints on Ecuador's capacity to extract value from its tourism offerings. In this context, the authorities could comprehensively review regulations and licensing requirements affecting tourism operating firms and entrepreneurs seeking to start new businesses. After that, they could streamline, standardize, and automate permitting and licensing, particularly for tour guides.<sup>71</sup> The government may also wish to explore "light certification" programs that address information asymmetries but do not create burdens on businesses. Increasing coordination with private sector operators in the design and implementation will be required to ensure quality of service, employment, and competitive and contestable markets for tourism operators. At the same time, the central government could focus on approving legislation regarding peer-to-peer accommodation services to ensure quality, safety, inclusion, regulatory certainty, and a level plain field for all providers.<sup>72</sup>

**Improving road safety skills development is critical are critical.** The government could consider additional measures to enhance road safety, reduce the high incidence of road accidents, and reassure tourists. The path to greater tourism mobility starts with identifying barriers to expanding domestic air services in the *Costa* and *Oriente* regions. To reduce the prevailing mismatches between the content of tourism courses and employer requirements, the Ministry of Tourism and other relevant government agencies could seek to develop coordinating mechanisms between educational and vocational training institutions and tourism sector representatives. To make Ecuador's tourism product more attractive to high-value segments, upgrading capacity in digital skills, environmental management, sustainable and circular practices, and the overall service quality are critical skills that need developing. The government may also wish to consider subsidizing capacity-building programs to improve the quality of micro, small, and medium enterprise operators with the goal of facilitating formalization and securing relevant certifications.<sup>73</sup>

**The government could also remove regulatory barriers that inhibit extension of financial services to small and medium-sized tourism firms outside the main centers.** Increasing tourism productivity and attracting additional investment will require expanding the supply of financial services outside the main centers and enhancing financial institutions' capacity to manage tourism lending portfolios based on a sound understanding of the tourism firms' specific characteristics. Achieving this will require improved skills in structured financial products, accepted risk assessment and mitigation techniques and instruments (e.g., guarantees), or tourism-specific risk-sharing facilities to encourage banks to provide liquidity to firms for short- and medium-term credit.

---

71 To increase the productivity of tourism firms operating in Cuzco, for example, the Peruvian government simplified, integrated, and automated the business registration process, which removed 150 unnecessary regulations, trimmed three years off the time required to start a business, and saved private companies a total of US\$760,000.

72 Unlike many European destinations, regulations pertaining to accommodations in Ecuador have to be approved by the central government.

73 Ecuador may consider investing in skills development and marketing to elevate its nascent gastronomic sector. Ecuador shares many of the combinations, diversity, and geography that make Peru's gastronomic heritage so rich, while also possessing unique ingredients, products, and dishes that distinguish its national cuisine. Ecuador stands to capitalize on the growing global interest in food tourism and Andean cuisine by investing in specialized skills training for emerging chefs and restaurateurs and by integrating and highlighting the country's primary products and gastronomic heritage in itineraries and promotions.



**Supporting solid waste and wastewater management requires enforcing existing legislation, raising societal awareness, and incentivizing private initiatives.** To encourage appropriate management of solid waste, the government may consider establishing fines for illegal disposal and enabling prosecution of non-payers of public waste collection fees. Complementary measures worth considering include: (i) implementing a nationwide “extended producer responsibility” scheme with at-source separation, collection, and recycling; (ii) applying the “polluter pays” principle and financially incentivizing tourism businesses to reduce their waste and increase recycling; (iii) enhancing controlled landfilling sites; (iv) expanding recycling infrastructure capacity; and (v) adapting gate-fees for recyclables. Taking a cue from operators who keep beach areas clean, tourism businesses could be encouraged to raise awareness among tourists and staff and run national waste prevention programs and zero plastics and reuse campaigns to improve collection and further reduce littering. There is also a lack of incentives for tourism businesses and citizens to reduce waste amounts and collect waste separately for recycling. The missing elements are support from society, alternatives to flat-fee systems, infrastructure for recycling through separation at source, and sufficient wastewater treatment and infrastructure capacity.

**Enhancing high-value tourism in the Galapagos and its protected areas requires revamping its regulatory and standards framework.** Satisfying the demands of the high-value adventure tourism segment requires compliance with safety and security standards and improvements in adventure tour operators' overall capacity (Stowell, 2022). Increasing Ecuador's appeal to birdwatching tourists requires developing complementary infrastructure and services, standards and policies that support birdlife conservation, and targeted marketing (World Bank, 2021). The ability to generate investment in protected areas is key. To do so, Ecuador could update its regulations for tourism in protected areas to include the potential for investment in infrastructure and tourism services. An updated Hotel Management Plan (*Plan de Regulación Hotelera*) and an investment plan considering the interplay between conservation, sustainability, and tourism development could be prepared to increase the Galapagos' quality offering.







# References

- Akerberg, D., Caves, K., and Frazer, G., 2015. Identification properties of recent production function estimators. *Econometrica*, 83(6).
- Aghion, P., Bergeaud, A., Blundell, R., and Griffith, R. 2019. The innovation premium to soft skills in low-skilled occupations.
- Alaimo, V., Bosch, M., Kaplan, D., Pagés, C., and Ripani, L. 2015. Jobs for growth. Inter-American Development Bank.
- Albiston, I., Bremner, Kluepfel, J., Morgan, M., and Yanagihara, W. 2022. Lonely planet – Ecuador & the Galapagos Islands 12.
- Alvarado, E., Peñarreta, M., Armas, R., Alvarado, R. 2017. Access to financing and regional entrepreneurship in Ecuador: an approach using spatial methods. *International Journal of Entrepreneurship*.
- Angrist, J. and Pischke, J. 2008. Parallel worlds: fixed effects, differences-in-differences, and panel data. *Mostly harmless econometrics*. Princeton University Press.
- Armour, J., Menezes, A., Uttamchandani, M., and van Zwieten, K., 2015. How do creditor rights matter for debt finance? A review of empirical evidence. In: *Research handbook on secured financing in commercial transactions*.
- Asai, K., Breda, T., Rain, A., Romanello, L., and Sangnier, M. 2020. Education, skills and skill mismatch. A review and some new evidence based on the PIAAC survey. Institut des Politiques Publiques Report n°26
- Ashwini S. 2020. Policy Note: Productivity and Jobs in Ecuador's Agriculture. World Bank.
- Ávila, A. and Evenson, R. 2010. Chapter 72 Total Factor Productivity Growth in Agriculture. The Role of Technological Capital. *Handbook of Agricultural Economics*.
- Barnes, S., Romain, B., Philippe, B., Sean D., and Mehmet E. 2011. The GDP Impact of Reform: A Simple Simulation Framework. OECD Economics Department Working Paper 834.
- Bartelsman, E., and Doms, M. 2000. Understanding productivity: lessons from longitudinal microdata. *Journal of Economic Literature*, 38 (3).
- Becerra, J., Becerra, A., Trueba, B., and Montilla, A. 2020. Catástrofes sociales y su impacto en las actividades turísticas de Quito, Ecuador.
- Bergoeing, R., Repetto, A., and Hernando, A. 2006. Market reforms and efficiency gains in Chile. *Documentos de Trabajo*. Banco Central de Chile.

Beylis, G., Fattal-Jaef, R., Sinha, R., Morris, M., Sebastian, A. 2020. [Going viral: COVID-19 and the accelerated transformation of jobs in Latin America and the Caribbean](#). World Bank.

Boer, L., Pescatori, A., and Stuermer, M. 2021. [Energy Transition Metals](#). IMF working Paper WP/21/243.

Bourguet, D. and Guillemaud, T. 2016. [The hidden and external costs of pesticide use](#). Sustainable Agriculture Reviews.

Busso, M., Cristia, J., Hincapié, D., Messina, J. and Ripani, L. 2017. [Learning better: public policy for skills development](#). Inter-American Development Bank.

Bustillos, G. 2021. [Alojamiento informal e influencia en la rentabilidad del sector hotelero en la provincia de Salinas](#). Guayaquil, Guayas, Ecuador. Universidad Tecnológica Empresarial de Guayaquil.

Cadot, O., Ferrantino, M. J., Gourdon, J., Reyes, J-D. 2018. [Reforming non-tariff measures: from evidence to policy advice](#). World Bank.

Camacho, M. 2020. [Análisis de las políticas públicas de turismo en Ecuador \(2009-2013\)](#). Universidad Andina Simon Bolivar.

Calderon, A. 2018. [Análisis de la cadena del turismo de Ecuador](#). Comisión Económica para América Latina y el Caribe CEPAL.

Calzada, J., Gisbert, M., and Moscoso, B. 2021. [The hidden cost of bananas: pesticide effects on newborns' health](#). UB Economics Working Papers E21/405.

Ceddia, G., Sedlacek, S., Bardsley, N., and Gomez y Paloma, S. 2013. [Sustainable agricultural intensification or Jevons paradox? The role of public governance in tropical South America](#). Global Environmental Change.

Centro Competencia. 2022. [Recientes cambios al reglamento a la Ley ecuatoriana de competencia](#).

Chunga, K. 2023. [El rol del IIGE en la transición energética](#). XVIII Ordinary Assembly of the Ibero-American Association of Geologic and Mining Services (ASGMI).

Choi, J., Rivadeneyra, I., and Ramirez, K. 2021. [Labor Market Effects of a Minimum Wage: Evidence from Ecuadorian Monthly Administrative Data](#).

Claessens, S. and Klapper, L. 2003. [Bankruptcy around the World: Explanations of Its Relative Use](#). American Law and Economics Review, Volume 7, Issue 1.

CNMC. 2018. [Impact of competition enforcement by the Spanish Competition Authority](#). Comisión Nacional de los Mercados y la Competencia. Documento AE-01/19(0410)

Cole, D., Carpio, F., and Leon, N. 2000. [Economic burden of illness from pesticide poisonings in highland Ecuador](#). Revista Panameña de Salud Pública, 8(3).

Connor, J. 2020. [Private international cartels full data 2019 edition](#). Purdue University Research Repository.



Cooper, J, and Hans, D. 2007. [The benefits of pesticides to mankind and the environment](#). Crop Protection, Volume 26, Issue 9.

Croes, R. and Rivera, M. 2017. [Tourism's potential to benefit the poor: a social accounting matrix model applied to Ecuador](#). Tourism Economics, 23(1).

Dall' Olio, A., Goodwin, T., Martinez, M., Alonso, A., Drozd, M., and Orłowski, J., Patiño Peña F., and Sanchez-Navarro, D. 2022. [Are all state-owned enterprises equal? A taxonomy of economic activities to assess SOE presence in the economy](#). WPS 10262. World Bank.

Davis, S., Haltiwanger, J., and Schuh, S. 1996. [Small business and job creation: Dissecting the myth and reassessing the facts](#). Small Bus Econ 8.

De Rosa, D., Madzarevic-Sujster, S., Boromisa, A., and Sonje, V. 2009. [Barriers to competition in Croatia. The role of government regulation](#). Policy Research Working Paper 5100. World Bank.

Decker R, Haltiwanger J, Jarmin R, and Miranda J. 2014. [The role of entrepreneurship in US job creation and economic dynamism](#). Journal of Economic Perspectives. Vol.28. No. 3.

Dewaelheyns, N. and Van Hulle, C. 2008. [Legal reform and aggregate small and micro business bankruptcy rates: evidence from the 1997 Belgian bankruptcy code](#). Small Business Economics, 31, pp.409-424.

Djankov, S. 2009. [The regulation of entry: A survey](#). The World Bank Research Observer, 24(2).

Egas, J., Shik, O., Inurritegui, M., and De Salvo, C. 2018. [Análisis de políticas agropecuarias en Ecuador](#). InterAmerican Development Bank.

Estrella, M. 2022. Advisor to the Ministry of Tourism.

FAO. 2019. [Agricultural policies for a sustainable rice supply chain in Ecuador](#). Food Agriculture Organization of the United Nations.

FAO and FLAMA. 2022. [Wholesale markets – The social and economic effects of wholesale markets on urban food systems](#). Bulletin 8. Food Agriculture Organization of the United Nations.

Fernandes, A., Freund, C., and Pierola, M. 2015. [Exporter Behavior, Country Size and Stage of Development. Evidence from the Exporter Dynamics Database](#). Policy Research Working Paper 7451.

Fiszbein, A., Cosentino, C., and Cumsille, B. 2016. [The skills development challenge in Latin America: Diagnosing the problems and identifying public policy solutions](#). Inter-American Dialogue and Mathematica Policy Research.

Foster, L., Haltiwanger, J., and Krizan, C. 2001. [Aggregate productivity growth: lessons from microeconomic evidence](#). In New developments in productivity analysis. University of Chicago Press.

Freeman, B. and Hawkins, R. 2017. [Evoke - Developing skills in youth to solve the World's most complex problems: randomized impact evaluation findings](#). SABER-ICT Technical Paper Series, no. 19. World Bank Group.

Gachet, I. 2022. Skill-mismatch in Ecuador: challenges and opportunities.

Gachet, I., Packard, T., and Olivieri, S. 2020. Ecuador's labor market regulation: A case for reform. Unpublished paper. World Bank.

Gertler P., Heckman, R, Pinto, S., Chang S., Grantham-McGregor, C., Vermeersch, S. and Wright, A. 2021. [Effect of the Jamaica early childhood stimulation intervention on labor market outcomes at age 31](#).

Goulart, F., Chappell, M., Mertens, F., and Soares-Filho, B. 2023. [Sparing or expanding? The effects of agricultural yields on farm expansion and deforestation in the tropics](#). Biodiversity and Conservation.

Hadad, E., Bonet-Morón, J. and Pérez-Valbuena, G. 2022. [Impacto regional de las regalías en Colombia](#). Documentos de Trabajo sobre Economía Regional y Urbana (309). Cartagena: Banco de la República.

Haltiwanger J, Jarmin R, Kulick, R., and Miranda, J. 2016. [High growth young firms: Contribution to job, output, and productivity growth](#). National Bureau of Economic Research.

Handel, M., Valerio, A. and Puerta, M. 2016. [Accounting for mismatch in low-and middle-income countries: Measurement, magnitudes, and explanations](#). World Bank.

Hans, J. Wesseling, C., Uytewall, E., and Stoorvogel, J. 1998. [Health externalities and pesticide use in the Atlantic zone of Costa Rica: An economic evaluation](#).

Hanusch, M. 2023. [A balancing act for Brazil's Amazonian states – An economic memorandum](#).

Hsieh, C. and Klenow, P. 2014. [The life cycle of plants in India and Mexico](#). The Quarterly Journal of Economics, 129(3).

Iacovone L. and Patiño Peña, F. 2021. [Economywide productivity drivers and job dynamics](#). In: Productivity growth in Mexico. Understanding main dynamic and key drivers.

Cardenas, M., Bonilla, J., and Federico, B. 2021. [Políticas climáticas de América Latina y el Caribe: Casos exitosos y desafíos en la lucha contra el cambio climático](#). Inter-American Development Bank.

ICCA. 2018. [A modern history of International Association Meetings-Update 1963 to 2017](#). International Congress and Convention Association.

ICCA. 2022. [ICCA Destination Performance Index](#). International Congress and Convention Association.

International Living. 2023. [World rankings: The best places to live in 2023](#).

- Jokisch, B. 2014. [Ecuador: From mass emigration to return migration?](#)
- Jones, J., Porter, A., Muñoz-Pérez, J., Alarcón-Ruales, D., Galloway, T., Godley, B., . . . Lewis, C. 2021. [Plastic contamination of a Galapagos Island \(Ecuador\) and the relative risks to native marine species](#). *Science of the Total Environment*.
- Kleemann, J., Zamora, C., Villacis-Chiluisa, A., Cuenca, P., Koo, H., Noh, J., and Fürst, C., Thiel, M. 2022. [Deforestation in Continental Ecuador with a Focus on Protected Areas](#). *Land* 2022, 11, 268.
- Lall, S. 2000. [The technological structure and performance of developing country manufactured exports, 1985-98](#). *Oxford Development Studies*, Taylor & Francis Journals, vol. 28(3).
- Langedyk, K. 2001. [Farm size and productivity: An empirical analysis of the farm size -productivity relationship in Ecuador](#). University of Florida ProQuest.
- Livanos, I. and Núñez, I. 2017. [Rethinking under-skilling in Europe](#). *Mismatch in Labor Markets*, Vol. 45.
- Loayza, N., Oviendo, M., and Serven, L. 2004. [Regulation and Macroeconomic Performance](#). Policy Research Working Papers. World Bank.
- McGowan, M., and Andrews, D. 2015. [Labour market mismatch and labour productivity: Evidence from PIAAC data](#).
- Melitz, M., and Polanec, S. 2012. [Dynamic Olley-Pakes productivity decomposition with entry and exit](#). NBER Working Papers 18182, National Bureau of Economic Research.
- Miller, D., M. Donahue, and N. Gurwick. 2021. [Agriculture's footprint: Designing investment in agricultural landscapes to mitigate tropical forest impacts](#). US Agency for International Development.
- Ministerio de Minería. 2016. [Ecuador. Catálogo minero](#).
- Ministerio del Trabajo. 2022. [Boletín Estadístico Anual: El Mercado laboral en el Ecuador N° 2, 2021](#).
- Muneton. 2022. [Entrevista del Ing Holbach Muñeton presidente de la Federación Nacional de cámaras de turismo del Ecuador junto a Lizzete Abril de la revista líderes de comercio](#).
- Neira, J. 2017. [Bankruptcy and cross-country differences in productivity](#). *Journal of Economic Behavior & Organization*.
- Nin-Pratt, A., Falconi, C., Ludeña, C., and Martel, P. 2015. [Productivity and the Performance of Agriculture in Latin America and the Caribbean](#). IADB, Working paper No. 608.
- Nielsen IQ. 2021. [New Tourism Demand Trends: Risk, Health and Sustainability in the Age of COVID-19](#). World Bank Group.

OECD. 2020. [OECD Competition Trends 2020](#).

OECD. 2021. [Education at Glance 2021](#).

Oliveri, S., Orterga, F., Rivadeneira, A., and Carranza, E. 2020. [The Labor Market Effects of Venezuelan Migration in Ecuador](#). No 13501, IZA Discussion Papers from Institute of Labor Economics (IZA).

Patiño Peña F., and Ferro E. 2024. The role of firm dynamics in aggregate productivity, job flows, and wage inequality in Ecuador.

Perez, J. 2022. Founder & General Manager, Tierra del Volcan. (J. M. Villascusa, Interviewer)

Pfeiffer, L. 2003. [Agricultural productivity growth in the Andean Community](#). American Journal of Agricultural Economics, Vol. 85, No. 5.

Popkin, B. and Reardon, T. 2018. [Obesity and the food system transformation in Latin America](#). Obesity Review.

Primicias. 2023. [Gobierno destinará USD 47 millones a la promoción y la innovación de turismo](#).

Procel, D. 2018. [La dependencia de los pequeños productores agroalimentarios frente a las cadenas de valor y sus efectos sobre la vulnerabilidad climática](#). Universidad Andina Simón Bolívar.

Quezada, M. 2021. [Análisis de la Producción y Comercialización del Cultivo de Maíz, cantón Palenque Provincia de los Rios](#). Universidad Agraria del Ecuador.

Ritchie, H., Roser, M., and Rosado, P. 2020. [CO<sub>2</sub> and Greenhouse Gas Emissions](#). OurWorldInData.org.

Rodano, G., Serrano-Velarde, N., and Tarantino, E. 2011. [The causal effect of bankruptcy law on the cost of finance](#).

San Martín, H. 2022. [Energía, la transición energética y los minerales del futuro, Ecuador](#). AAPG UCE Student Chapter.

Salazar, J., González, R., Navarrete, A., Calle, P., Alava, J., and Domínguez, G. 2022. [A temporal assessment of anthropogenic marine debris on sandy beaches from Ecuador's southern coast](#). Frontiers in Marine Science.

Stads, G. and de los Santos, L. 2023. [Agricultural R&D Indicators Factsheet Ecuador](#). IDB-IFPRI.

Stevenson, J., Villoria, N., Byerlee, D., Kelley, T., and Maredia, M. 2013. [Green revolution research saved an estimated 18 to 27 million hectares from being brought into agricultural production](#). Proceedings of the National Academy of Sciences.

Stowell, G. 2022. Regional Director for Latin America Adventure Travel and Tourism Association.

Tapak, A. 2019. [Assessment of factors affecting tourism satisfaction using K-nearest neighborhood and random forest models](#). BMC Research Note, 749.



- Telegrafo, El. 2016. [La informalidad afecta en un 40% al sector turístico.](#)
- Trindade, F. and Fulginiti, L. 2015. [Is there a slowdown in agricultural productivity growth in South America?](#) Agricultural Economics.
- Urquidi, M. 2022. Virtual platform for agricultural work labor. Skills for work initiative in Latin America and the Caribbean. Inter-American Development Bank.
- Utreras, D. 2022. Presidente de la Federación Hotelera del Ecuador.
- Vaca, E., Gaibor, N., and Kovacs, K. 2020. [Analysis of the chain of the banana industry of Ecuador and the European market.](#) Applied Studies in Agribusiness and Commerce.
- Vasco, C. and Tamayo, G. 2017. [Determinants of non-farm employment and non-farm earnings in Ecuador.](#) Economic Commission for Latin America and the Caribbean.
- Vera, X. 2022. Presentation at the XVII ENAEP. October 18, 2022.
- Visa Guide. 2022. [Digital nomads visa guide.](#)
- WEF. 2021. [Travel and Tourism Development Index.](#) World Economic Forum.
- Wolf, M. 2022. [Environmental Performance Index.](#) Yale Center for Environmental Law & Policy.
- World Bank. 2016. Ecuador: Country Economic Memorandum. Productivity Growth under Adverse Global Conditions. Unpublished report.
- World Bank. 2016. [World Development Report 2016: Digital dividends.](#)
- World Bank. 2016. [Linking farmers to markets through productive alliances: An assessment of the World Bank experience in Latin America.](#)
- World Bank. 2017. [New irrigation technology, an option that improves the quality of life of small farmers in Ecuador.](#)
- World Bank. 2018. [Ecuador systematic country diagnostic.](#)
- World Bank. 2019. [Public Finance Review.](#)
- World Bank. 2019. [World Development Report 2019: The changing nature of work.](#)
- World Bank. 2020. Ecuador: Creating Jobs after Tough Times.
- World Bank. 2020. [World Development Report 2020: Trading for development in the age of global value chains.](#)
- World Bank. 2021. [Creating markets in Ecuador: Country Private Sector Diagnosis.](#)
- World Bank 2021. [Evaluation of ALMPs targeting the young and vulnerable.](#)
- World Bank. 2021. [Fixing markets, not prices: policy options to tackle economic cartels in Latin America and the Caribbean.](#)

World Bank. 2021. [Ecuador Learning Policy Brief](#). EduAnalytics.

World Bank. 2021. [Acting Now to Protect the Human Capital of Our Children: The Costs of and Response to COVID-9 Pandemic's Impact on the Education Sector in Latin America and the Caribbean](#).

World Bank. 2021b. [Results in the Latin America and Caribbean region 2021, Volume 17](#).

World Bank. 2021c. [World Development Report 2021: Data for Better Lives](#).

World Bank. 2023. Argentina Fiscal Analytics. Unpublished paper.

World Bank. 2023. Country Climate Development Report. Forthcoming.

World Bank. 2023. Productive Competition in Latin America and the Caribbean. Forthcoming.

Yao, G., Hertel, T. W., & Taheripour, F. 2018. [Economic drivers of telecoupling and terrestrial carbon fluxes in the global soybean complex](#). *Global Environmental Change*, 50, 190–200.

---

## Annex

## Annex A. Detailed polity options for a more pro-competition environment

ACTION PLAN			Responsible Agencies
Short-term (Less than 1 year)	Medium-term (2-5 years)	Long-term (> than 5 years)	
Implement the competitive neutrality principles and Level the playing field between market operators			
Evaluate the need for the State to directly participate through SOEs when the private sector can cater to markets. No amendments needed	Introduce transparent and competitive procedures to designate Board members and involve them in the CEOs' appointments. It Requires modification of Ley Orgánica de Empresas Publicas.	Limit some existing privileges for SOEs through legal reform: public procurement, bankruptcy law, and tax law. The playing field also requires changes in sectoral laws, such as telecommunication, energy, and mining.	National Assembly, line ministries, General Secretariat of Public Administration, and EMCO EP, SCPM, ARCOTEL, ARCERNNR.
	Separate commercial and non-commercial activities of SOEs, at least through account separation. No changes to primary laws are needed.		
Implement SCPM's guidelines to enhance public procurement competition. No amendments needed	Limit privileges for national firms in tenders (i.e., local content, preference in public work, reserved percentage of contracts). This will require changes in the Ley Orgánica del Sistema Nacional de Contratación Pública and secondary regulation.	Further, implement the "silence is consent" rule for authorizations. It is provided by the law, but in practice, it is not implemented, creating uncertainty.	National Assembly, line ministries, and General Secretariat of Public Administration.
	Additional competition advocacy and review Servicio de Contratación Pública resolutions. No amendments needed		
Reduce costs for market entry and limit regulation complexity			
Establish an online database of primary legislation and foster dissemination. No amendments needed.	Reduce the number of bodies contacted to register a new firm. It requires amending the Ley de Compañías.	Further, implement the "silence is consent" rule for authorizations. It is provided by the law, but in practice, it is not implemented, creating uncertainty.	National Assembly, line ministries, General Secretariat of Public Administration and National Supreme Court.
	Implement a one-stop shop for authorizations and permits and promote dissemination and guidelines for startups. It requires changing the Código Orgánico de Organización Territorial, Autonomía y Descentralización to set standard procedures at the municipal level.		
	Establish programs to reduce the number of licenses and permits to reduce compliance costs. It requires amending the Decrees of Superintendencia de Compañías y Valores with respect entry and creation of firms.		

Evaluate the costs and benefits of lifting monopolies in markets where competition is viable (e.g., energy, transportation, telecom). No law amendments needed.	Promote further entry of the private sector into key network industries where SOEs have almost monopoly structures and support access of private operators to markets where competition is viable (e.g., energy production, transportation, telecommunications). This will require strengthening the independence of the sectoral bodies and changes to sectoral laws such as the Ley del Regimen del Sector Electrico, to extend access to private competitors and liberalize the wholesale market.		National Assembly, line ministries, General Secretariat of Public, EMCO EP, SCPM, ARCOTEL, and private sector.
	Eliminate provisions that set pricing for professional services. It requires changes: in Ley de la Federación de Abogados, Acuerdo Ministerial. No. MDT-2020-282 del Ministerio de Trabajo, Ley de Ejercicio Profesional de la Ingeniería Civil.		SCPM, National Assembly, Supreme Court of Justice, and professional bodies.
Create/reinforce market institutions with adequate resources and regulatory frameworks to avoid conflict of interests and foster competition advocacy			
Progressively reinforce budgetary and staff capacities of SCPM and sectoral regulators. No amendments needed.	Create independent regulators in network sectors (e.g., transport) to avoid conflicts of interest between regulators and market operators. Review rules applicable to appointing board members at regulatory agencies to minimize risks of political influence and conflicts of interest. These actions require amending laws in transport, hydrocarbons, mining, energy, etc.		National Assembly, line ministries and General Secretariat of Public Administration.
	Develop procedures to involve key stakeholders in developing primary laws and consider their comments within the legislative process. It requires introducing primary laws and amendment of the Ley Orgánica de la Función Legislativa.	Enact legislation to manage relationships between regulators and interest groups, including disclosure of members of advisory bodies involved in the regulatory process.	SCPM and sectoral regulators.
		Enact legislation to avoid conflicts of interest for cabinet members and cooling off periods.	
Implement ex-ante RIA for secondary regulation, with consideration to competition impact. No amendments needed.	Implement ex-ante RIA for primary legislation, with consideration of competition impact. It requires the introduction of a primary law.		National Assembly, SCPM, sectoral regulators



## Annex B: Mining pipeline

Priority	Name	Operator	Location	Investment (US\$ millions) <sup>74</sup>	Annual production <sup>75</sup>	Operations start <sup>76</sup>	Stage and current status
Operations	Fruta del Norte	Aurelian Resources (Lundin Gold)	Cantón Yantzaza (Zamora Chinchipe)	1.500	Oro: • Concentrate: 281,640 OzTroy <sup>77</sup> • Dore: 140,650 OzTroy • Silver: • Concentrate: 315,650 OzTroy • Dore: 43,600 OzTroy	2019	Operating
	Mirador	Ecuacorriente (CRCC – Tonguan)	Cantón El Pangui (Zamora Chinchipe)	1.550	Copper: Concentrate: 392,940 MT <sup>78</sup>	2019	Operating
Strategic projects	Loma Larga	Dundee Precious Metals	Cantón Cuenca (Azuay)	500	Gold equivalent: 170,000-200,000 OzTroy	2024	Explorations and economic assessment. Stopped
	San Carlos Panantza	ExplorCobres (CRCC – Tonguan)	Cantones San Juan Bosco y Limón Indanza (Morona Santiago)	3.050	Copper: Concentrate: 285,000 TM	Not defined	Exploration. Stopped
	Río Blanco	Ecuagold Mining (Junefield)	Cantón Cuenca (Azuay)	90	Oro: 72,500 OzTroy Plata: 455,000 OzTroy	Not defined	Exploration. Stopped

74 Minas: inversión real; proyectos: inversión prevista.

75 Minas: producción 2021; proyectos: producción prevista.

76 Minas: fecha de inicio; proyectos: inicio previsto.

77 ozt: onza troy, equivalente a 31,1034768 gramos.

78 t: toneladas métricas.

Second-generation projects	Cascabel	Novamining (SolGold)	Cantón Ibarra (Imbabura)	2.950	Copper: 132,000 TM Gold: 358,000 OzTroy Silver: 1.000,000 OzTroy	2028	Exploration and economic assessment
	Cangrejos	Lumina Gold	Cantones Santa Rosa y Atahualpa (El Oro)	1.950	Gold: 366,000 OzTroy Copper: 20,000 TM	2028	Advanced exploration
	Ruta del Cobre	Compañía Minera Ruta del Cobre (Grupo México)	Cantón Cuenca (Azuay)	Not available	Not available	2026	Advanced exploration
	Llurimagua	ENAMI/ CODELCO	Cantón Cotacachi (Imbabura)	Not available	Copper: 210,000 TM	2024	Advanced exploration. Stopped
	Curipamba - El Domo	Curimining (Adventus Mining/ Salazar Resources)	Cantón Las Naves (Bolívar)	237	Copper Equivalent.: 23,000 TM	2024	Advanced exploration, economic assessment and permitting
	La Plata	Minera La Plata (Atico Mining)	Cantón Sigchos (Cotopaxi)	176	Gold, copper, zinc, silver. Production not available	2024	Exploration and economic assessment

### Annex C: Environmental permitting in Ecuador

Mining regime	Criteria	Environmental Management Instrument	Environmental Permit	Approval times	Other permits/ requirements
Artisanal/ subsistence	Underground: Up to 10 Tons/day Placer: Up to 120 m3/ day	Afidavit	Register	Automatic	Approval of training and technical assistance programs
Small scale	Underground: 11 – 300 Tons/day Open pit: Up to 1000 Tons/day Placer: 121 – 1500 m3/ day	Impact Declaration	License	90 days	
Medium scale	Underground: 301 – 1000 Tons/day Open pit: 1001 – 2000 Tons/day Placer: 1501 – 3000 m3/day	Initial exploration: Technical File	Register	Automatic	Intersections certificate Citizen Participation Process Financial warrant (EMP and Closure Plan)
		Advanced exploration: Environmental Impact Declaration	License	90 days	
Large scale	Above medium-scale limits	Exploitation: Environmental Impact Assessment	License	185 days (inc. Citizen Participation Process)	

Sources: Mining Law, Mining Bylaw, Environment Organic Code, Environment Code Bylaw

## Annex D: Mining scenarios for 2030

Scenario	Descripción	Exports (US\$ million)	Taxes (US\$ million)
Base	The base scenario is a stationary situation in which none of the projects in the pipeline are brought into production before 2030 in the context of the current social, political, and institutional challenges that weigh on the mining sector; the projects currently in operation continue producing. This scenario, equivalent to what Spurrier Group (op. cit.) called the “passive scenario,” is the most extremely negative scenario within the realm of the plausible.	16,468	4,382
Likely	This is the most likely scenario given the current social, political, legal, and institutional conditions for mining in Ecuador. It identifies as key obstacles the aspects related to (i) the implementation of the consultation processes (especially FPCI), (ii) the popular consultations and the legal processes to which it has given or will give rise in coming years, (iii) the lags in the process of environmental licensing and water permits, and (iv) the risks related to illegal mining and the correlated insecurity for mining personnel and facilities.	30,103	7,927
Planned	This scenario assumes that, in addition to the continuity of current operations, the strategic and second-generation projects start operations “as planned” despite the different political, social, legal, and administrative risks.	42,635	11,174
Potential	In this scenario, decisive and efficient actions are taken to counteract the negative effect that the current context would have on mining development. This minimum package for this scenario to be viable includes (i) the enactment of the Law on CP and its regulations, (ii) a legal and consensual way out of the bottleneck of popular consultations and citizen regulatory initiatives; (iii) a significant improvement in the efficiency of environmental licensing processes and water permits; and (iv) the implementation of measures that allow for the safe operation of strategic and second-generation projects.	45,033	11,803









**WORLD BANK GROUP**  
Macroeconomics, Trade & Investment