

INEQUALITY AND SOCIAL DISCONTENT: How to address them through public policy

**Economic Report on Central America, the
Dominican Republic, Haiti, Mexico, and Panama**



Coordinators:
Arnoldo López Marmolejo and Marta Ruiz-Arranz



**Cataloging-in-Publication data provided
by the Inter-American Development Bank
Felipe Herrera Library**

Inequality and social discontent: how to address them through public policy: Economic report on Central America, the Dominican Republic, Haiti, Mexico, and Panama / coordinators, Arnaldo López, Marta Ruiz-Arranz.

p. cm. — (IDB Monograph; 888)
Includes bibliographic references.

1. Poverty-Central America. 2. Fiscal policy-Central America. 3. Health services administration-Central America. I. López, Arnaldo, coordinator. II. Ruiz-Arranz, Marta, coordinator. III. Inter-American Development Bank. Country Department Central America, Haiti, Mexico, Panama and the Dominican Republic. IV. Series.

IDB-MG-888

JEL classification: D63, I32, I38, J46, O23

Keywords: Central America, Mexico, Panama, Dominican Republic, inequality, polarization, poverty, fiscal policy, informality.

Copyright © 2020 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license.

Note that link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



Contents

**INEQUALITY
AND SOCIAL DISCONTENT:
How to address them
through public policy**
Economic Report on Central America, the
Dominican Republic, Haiti, Mexico, and Panama



Click on each topic to go straight there

Click on the page number to return to the contents section | 0

Foreword	 4
CHAPTER 1 Poverty and Inequality in the Face of the Pandemic	 6
CHAPTER 2 Formalization and Public Spending on Human Capital as Tools for Redistribution	 22
CHAPTER 3 Mitigating the Risk of Polarization in the Region	 42
CHAPTER 4 Public Perceptions in the Context of a Pandemic	 52
CHAPTER 5 Analysis of Inequality by Country	 70
References	 111

Acknowledgments

This report was coordinated by Marta Ruiz-Arranz and Arnoldo López Marmolejo. Its contents were prepared by the team of economists at the Country Department for Central America, Haiti, Mexico, Panama, and the Dominican Republic of the Inter-American Development Bank. The authors who contributed to this edition were Arnoldo López Marmolejo, Carlos Eggers Prieto, and Juan Barrios Galván (Chapter 1); Arnoldo López Marmolejo, Carlos Eggers Prieto, and Marta Ruiz-Arranz (Chapter 2); Arnoldo López Marmolejo and Carlos Eggers Prieto (Chapter 3); Melanie Laloum and Jordi Prat (Chapter 4); Janelle Leslie and Lucía Martín, Priscilla Gutiérrez and Mauricio Monge, Juan Barrios Galván and Julia Escobar, Jordi Prat and Gisele Teixeira, Jennifer Linares and Boaz Anglade, Samuel Jiménez and Jordi Prat, Ana Karen Díaz and Agustín Filippo, André Martínez and Fadel Ugarte, Jhonatan Astudillo and Carlos Garcimartín, Fanny Vargas and Joaquín Zentner (Chapter 5). We wish to express our gratitude for the support provided by Ximena Ríos with editing, Duare Pinto with the design and layout, and Brian McDougall and Karina Azanza with the translation into English; as well as to Flavia Milano, Laura Kirshner, Cristian Pi, Cristina Rodríguez, and Luis Huag for their valuable comments and construction of the statistics in Chapter 4.

Foreword

The world economy will experience a major economic downturn in 2020 as a result of the COVID-19 outbreak. This contraction will affect the countries of the region comprising Mexico, Central America, the Dominican Republic, and Panama due to their high level of openness to trade and investment, as well as to the considerable importance of the tourism sector in several of the countries in question. As a result, the already high levels of poverty and inequality in the region will become even more pronounced. It is also important to note that those on lower incomes are being disproportionately affected by this pandemic, both in terms of their finances and their access to education and healthcare, both of which are reported on in this document.

Given the urgent need for the government to support the most needy members of the population in the most efficient way possible, it is vital for us to review the structure of fiscal policy as it relates to redistribution in the region, by looking at aspects of both taxation and public spending that impact household incomes. For this purpose, this report evaluates the extent to which public spending benefits the population depending on their income level and their involvement in either the formal or informal sector of the economy. The results show that people on lower incomes are net beneficiaries of the State (i.e., they receive more than they pay in) because the State provides education and healthcare. However, major challenges remain in the region with respect to quality and expansion. Furthermore, the report shows how a significant proportion of informal workers are net beneficiaries of the State, even in the highest income deciles, which suggests that there is considerable room for improvement as regards fiscal fairness and tax revenue.

Inequality also leads to greater polarization between social groups, which in turn poses a risk to political and social stability. In addition to providing estimates on the level of polarization, this publication offers insights into issues of political and social inclusion that could help reduce the risks of polarization in the countries of the region. This point is crucial in any economy where there are high levels of inequality, though the COVID-19 crisis could make it even more relevant by widening socioeconomic divides.

The epidemic has brought about a change in the economic and social climate, which in turn has led to changes in the social priorities and concerns of the region's citizens. The report describes the changes that have taken place in the various countries in order to enable political institutions to take prompt and better focused actions.

Lastly, given the significant differences between the countries of the region, the report includes a discussion on the issue of inequality on a country-by-country basis and proposes public policies aimed at mitigating it.

In light of the major social challenges faced by the region as a result of the pandemic, I am in no doubt that the first step in addressing these as a society is to encourage a discussion on these challenges, so I am pleased to present this report as one more step towards ensuring a more socially inclusive region.

Verónica Zavala

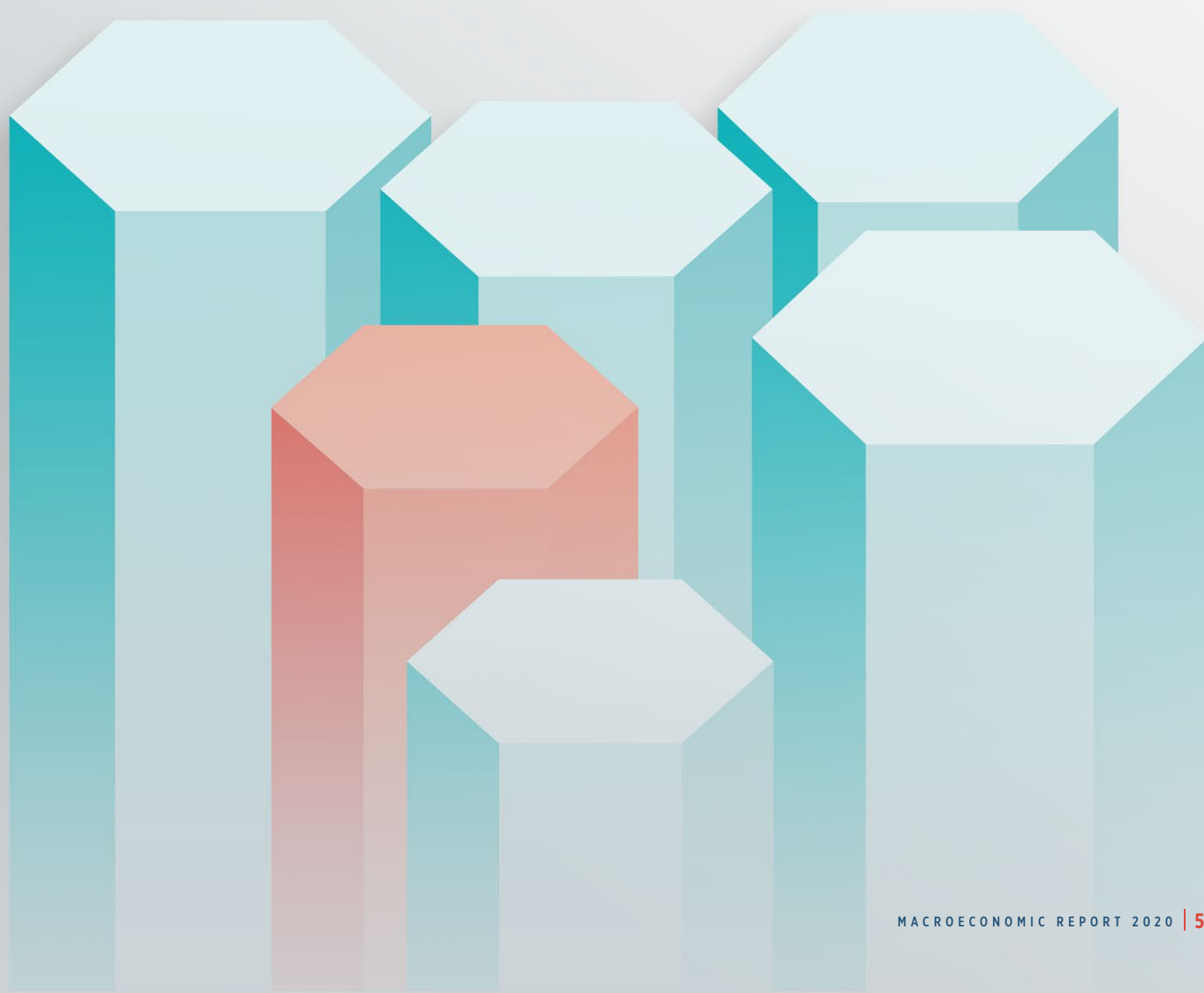
General Manager

Country Department Central America (CID), Haiti, Mexico, Panama, and the Dominican Republic

CHAPTER 1

Poverty and Inequality in the Face of the Pandemic

Arnoldo López Marmolejo, Carlos Eggers Prieto and Juan Barrios Galván



CHAPTER 1

Poverty and Inequality in the Face of the Pandemic

Arnoldo López Marmolejo, Carlos Eggers Prieto and Juan Barrios Galván

Over the last decade, the countries of the region comprising Mexico, Central America, Panama, and the Dominican Republic have made substantial headway in the economic and social sphere. Per capita GDP growth has remained stable in most of these countries, while the average for the subregion of Central America, Panama, and the Dominican Republic (CAPARD) exceeded that of Latin America and the Caribbean (LAC) as a whole, at 2.4% and 0.6%, respectively. Particularly notable in the region are the cases of the Dominican Republic and Panama, which both recorded an average annual GDP growth rate of more than 4% over the last nine years (see Figure 1.1). As a result, in virtually all the countries of the region, GDP per capita in real terms was higher in 2018 than in 2010 (see Figure 1.2).

This economic growth has helped reduce poverty. Between 2010 and 2018, there was a significant improvement in the proportion of households living below the US\$5 a day poverty line in almost all countries in the region. The experiences of El Salvador, which reduced its poverty rate from 48.0% to 31.3%, and the Dominican Republic, which reduced its poverty rate from 37.5% to 18.6%, are particularly striking (see Figure 1.3)¹.

¹ The poverty rate may not exactly match other official estimates or calculations due to differences in the value of the poverty line, how the latter is defined (e.g., multidimensional or by income), or which components of household income are considered (i.e., monetary/non-monetary income). In this case, country comparisons employ a standardized definition of indicators; specifically, the poverty line of US\$5 a day (PPP 2011), based on monetary income alone.

Figure 1.1. Real per capita GDP growth

Average annual change 2010–2018

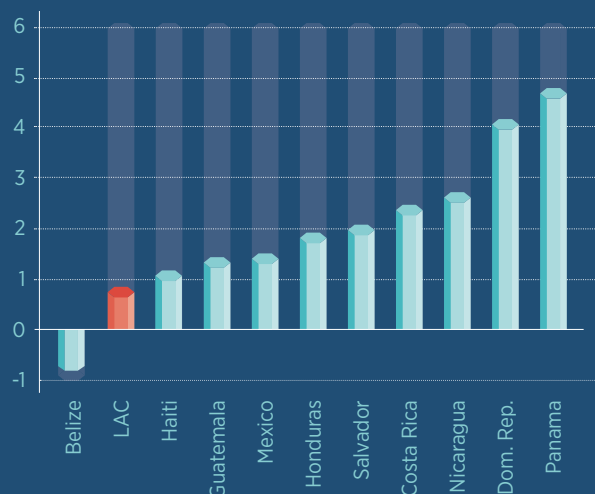
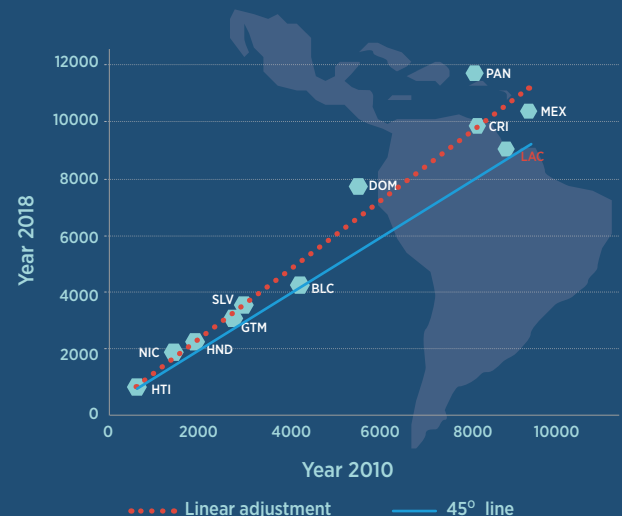


Figure 1.2. Real per capita GDP 2010 and 2018

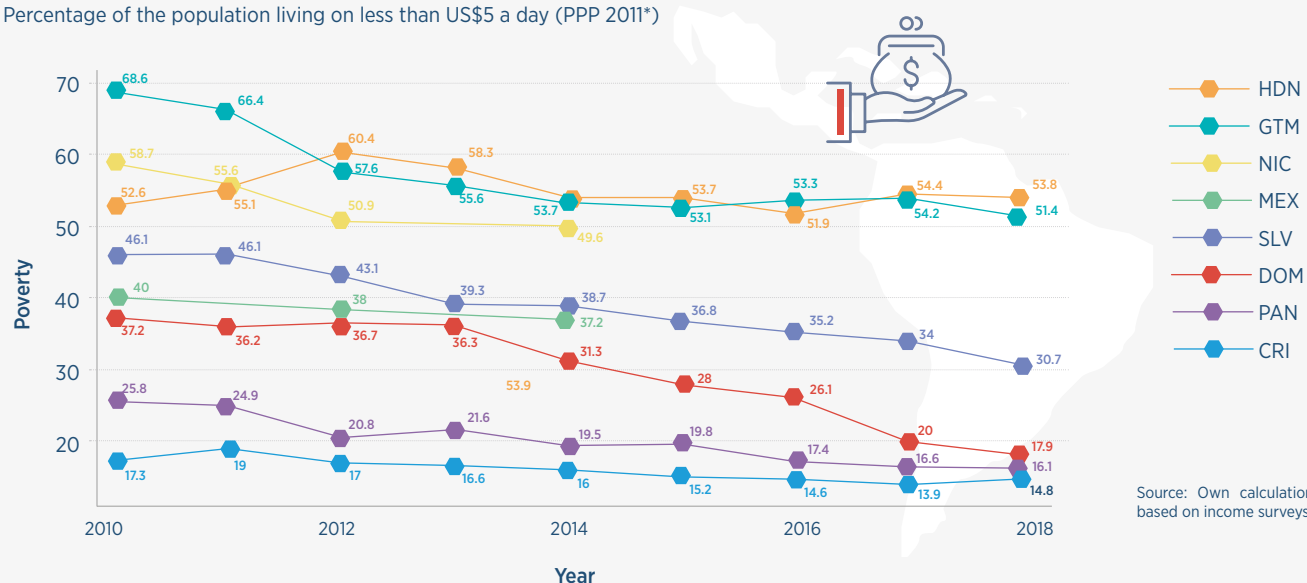
Dollars at 2010 prices



Source: World Development Indicators.

Figure 1.3. Poverty rate

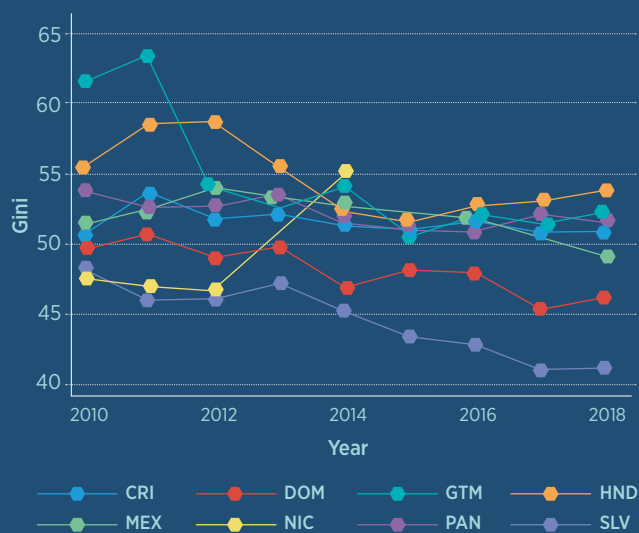
Percentage of the population living on less than US\$5 a day (PPP 2011*)



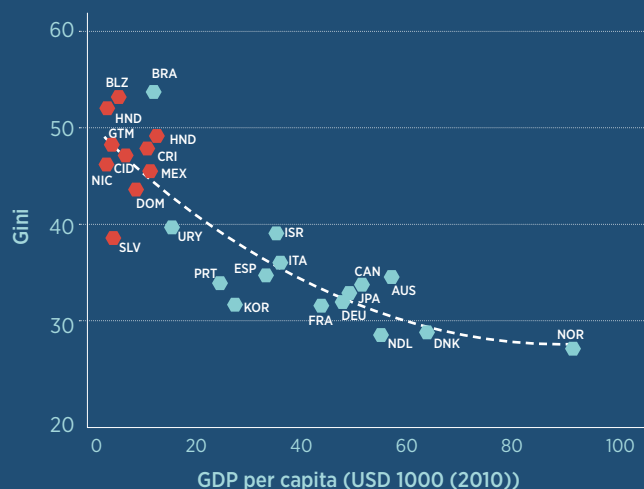
Notes: In the case of Mexico, the definition of income in the surveys was revised in 2016, for which reason the series is not comparable from 2014 on. The poverty estimate may differ from other sources depending on where the poverty line is set. *PPP 2011 refers to Purchasing Power Parity (PPP) at 2011 prices.

Income inequality in the region also fell during the last decade. This reduction has been modest partly due to the more marked improvements recorded in the early part of the decade, which subsequently stalled in a number of countries in the latter four years (see Figure 1.4). Moreover, it should be noted that the level of inequality in the countries of the region is still very high compared to the most developed economies, and even compared to certain others with a similar level of development to theirs (see Figure 1.5).

36% of people in the CAPARD region are living in poverty (i.e., on less than US\$5 a day per person), while a further **35%** are in a vulnerable situation (i.e., living on between US\$5 and US\$12.4 a day per person)

Figure 1.4. Inequality as measured by the Gini index


Source: Own calculations based on income surveys.

Figure 1.5. Inequality as measured by the Gini index and GDP per capita: selected countries


Source: World Development Indicators.

The reduction in poverty has been one of the major advances brought about by the economic stability and growth of various countries in the region. Unfortunately, the health and economic crisis created by the COVID-19 epidemic has jeopardized this significant progress. IMF (International Monetary Fund) estimates point to a 5.9% decrease in real GDP in CAPARD in 2020. In this scenario, the projected 4.3% contraction of the U.S. economy is significant given its particular importance to exports and financial flows to the region, its being its main trading partner and source of foreign investment and remittances.

With regard to the latter, unemployment in the U.S. is a key factor, particularly Hispanic unemployment, which remains well above the pre-crisis level despite falling sharply as economic activity resumed (see Figure 1.6).

As a result, the flow of remittances to the region has slowed down somewhat (see Figure 1.7).

It is worth remembering the great importance of remittances to the countries of Central America,

as they constitute over
20% of GDP
in El Salvador and
Honduras

and nearly
13% of GDP
in Guatemala
and Nicaragua



Depending on the country, the percentage of households that receive remittances ranges anywhere from **10% y el 20%**



Households spend more than **80% of the remittances** they receive on basic goods



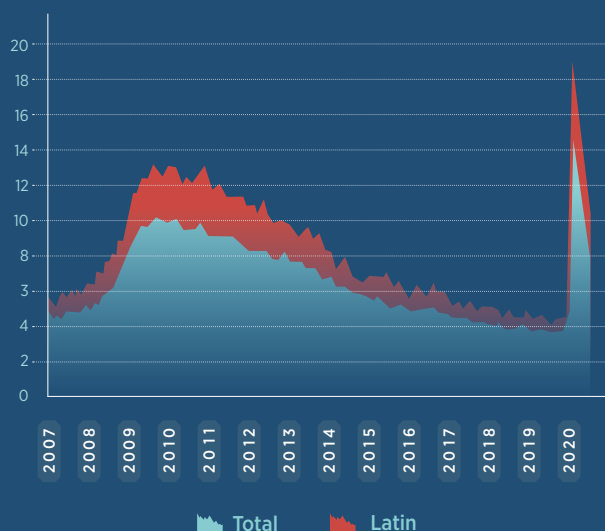
about **10% on providing education** for their children



and the remainder **on rent or building/repairing housing** (IDB, 2019)

Figure 1.6. Total and Hispanic unemployment rate

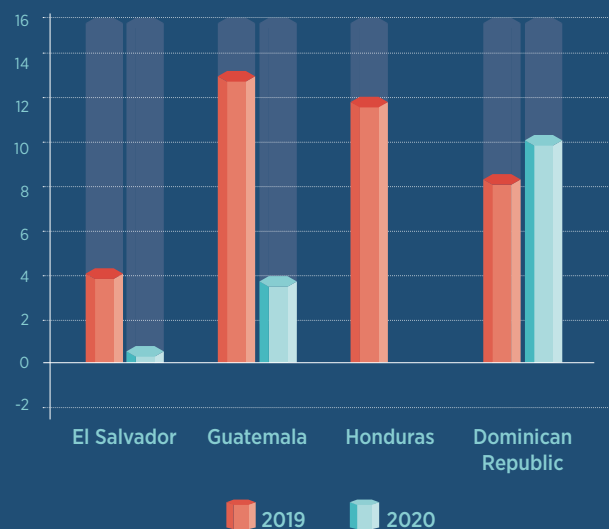
Unemployed population as a percentage of the total



Source: Federal Reserve St. Louis.

Figure 1.7. Cumulative remittances Jan-Sep each year

Year-on-year rate of change



Source: Executive Secretariat of the Central American Monetary Council (SECMCA).

Through job losses, declining wages, and, in some countries, a drop in remittances, the pandemic



could result in an additional
2.8 million people falling
into poverty

Costa Rica
(247,000)

Dominican Republic
(677,000)

El Salvador
(478,000)

Guatemala
(581,000)

Honduras
(536,000)

Panama
(301,000)

Meanwhile in
Mexico, a further

10.3 million
people are expected
to fall into poverty

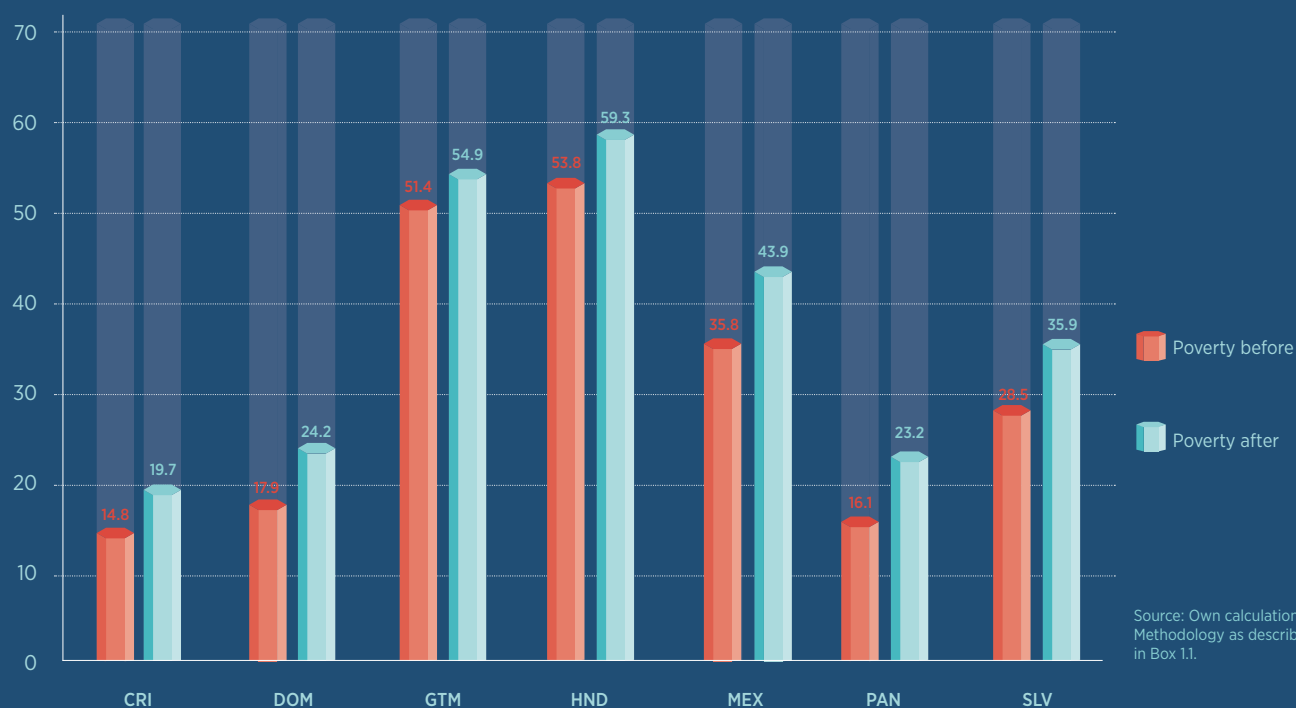


Figure 1.8 shows an estimate of the rise in the poverty rate that the epidemic could potentially cause in these countries. It is worth noting that social assistance programs implemented by governments have helped mitigate the increase in poverty, though this varies considerably from country to country. The increase in poverty will depend fundamentally on the extent to which the economy eventually shrinks and on sectoral differences. However, a comparison with other estimates, such as those of Acevedo *et al.* (2020) for LAC countries, shows the calculations to be robust. The estimation methodology is outlined in Box 1.1.

Poverty could increase by an average of
6 percentage points
in the region
as a result of COVID

Figure 1.8. Pre- and post-covid-19 poverty rate

Percentage of population living on less than US\$5 a day (PPP 2011)



Box 1.1.

Methodology for estimating poverty before and after COVID-19 in the Central American Isthmus and the Dominican Republic

The following are the steps involved in estimating the poverty caused by the COVID-19 epidemic in each country:

First, we estimate the effect of the downturn in economic activity according to two criteria: wages and number of jobs. The employment ratio in each country is estimated econometrically based on GDP, consumer prices, an unobserved component that captures cyclical movements not explained by the variables of interest, and other control variables, such as interest rates that were not statistically significant. Wages by country are estimated based on employment, consumer prices (all variables in logarithms and differences), and the unobserved component. In this last function, when the explanatory capacity of the estimate improves, GDP is taken as an alternative to employment. In addition to the estimation using the unobserved component, we also estimate by ordinary least squares and obtain similar coefficients. On the basis of these estimates, we then take the average of the two methodologies as a parameter. To incorporate the heterogeneous nature of the change in income across sectors, we forecast the performance of each productive sector in 2020, while maintaining the relationship between its year-on-year variation and the variation in the aggregate, and applying this to the latest available data in the year (typically June 2020, though this varies depending on the availability of data in each country). In other words, the relationship between sectors is maintained over the year with the same relationship as the most recent data available. In the absence of any additional information, based on the latest available data it is assumed that the recovery over the year is symmetrical across sectors. The performance of aggregate economic activity is calculated in a manner consistent with the projections detailed below.

Second, in order to estimate the level of employment and wages in the year of the epidemic, we consider a scenario of growth rates of real GDP and of consumer prices for 2020. The GDP growth rate used is that projected for the year by the International Monetary Fund; to be precise, -5.5%, -6.0%, -2.0%, -6.1%, -9.0%, -9.0%, and -9.0% for Costa Rica, Dominican Republic, Guatemala, Honduras, Mexico, Panama, and El Salvador, respectively. The projected inflation for 2020 is that of each country's central bank. The calculation of lost income described below also incorporates the expected performance of remittances. Specifically, the variation in remittances takes the cumulative data to June as the annual data.

Third, based on household income and expenditure surveys, income per person is adjusted downwards in accordance with the sector worked in, based on the loss of jobs and wages per sector estimated in the previous step. The loss of employment is simulated based on a probability that depends on the decrease in activity in the sector in which each individual

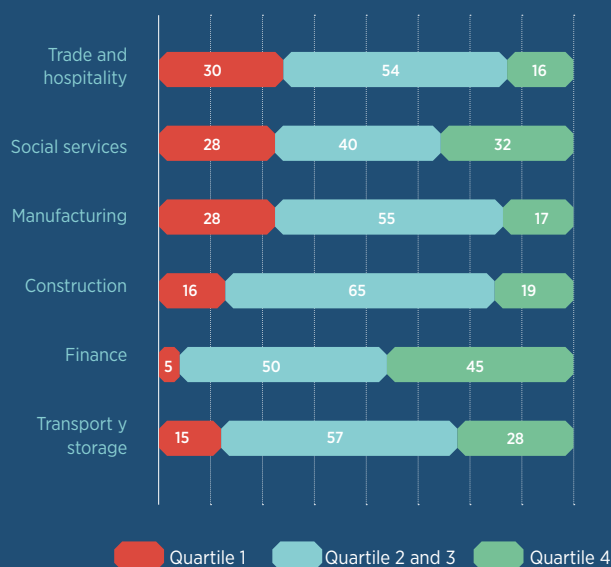
works and the parameters estimated for the ratio of employment to GDP. Thus, for example, if an employment-to-GDP elasticity of 0.8 is determined and a sector shrinks by 20%, then a 16% probability of job losses is assumed, randomly distributed among the individuals in the sector that were registered in the survey. The drop in income of those individuals who keep their jobs is also calculated based on the elasticity derived from the estimates obtained. As for the loss of income due to lower remittances, this is directly reflected under this item in the survey data.

Fourth, financial assistance from government social programs implemented to mitigate the effects of COVID on earnings is added to income. These support programs are listed in the appendix to this chapter.

Fifth, this simulation is repeated 200 times for each country and the average taken for the results. The poverty rate is calculated as the percentage of people among the total who receive an income below the poverty line of US\$5 a day (PPP 2011), and the Gini coefficient is then calculated. Furthermore, the drop in income is calculated for each percentile to see how the crisis affects each income segment. The result would represent the average change in poverty and inequality over the year.

The drop in income is not uniform across the population and instead depends on the sector in which each person works and the decline experienced in each. It is important to remember that lockdown measures taken as a result of the pandemic disrupted global value chains, travel, and meetings, directly affecting the trade and hospitality sectors, social services, manufacturing, and construction, all sectors in which low- and middle-income workers (quartiles 1-3) are concentrated in the CAPARD subregion (see Figure 1.9).

Figure 1.9. Share of each quartile by productive sector in the CAPARD subregion



Source: Own calculations based on income surveys.

Note: Arranged in order from highest to lowest according to the percentage of workers in each sector.

In some countries of the region, the importance of tourism to employment income is particularly significant, especially in middle-income segments. For example, in Costa Rica and the Dominican Republic, employment income in the tourism sector accounts for around 8% of all national employment income in the middle segments of the income distribution (quintiles 2 to 4 in Figure 1.10). These segments are at risk of falling into poverty if their income decreases, as may well occur as a result of a critical event such as a pandemic.

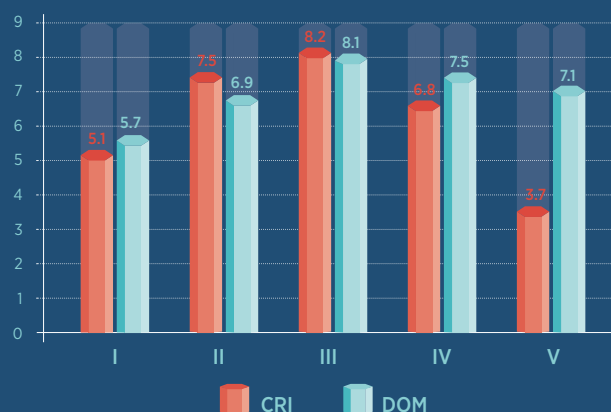
In addition to the fact that the middle sectors of the population are concentrated in sectors particularly affected by the crisis, most workers concerned work in small companies, which have been more severely affected than large ones. Figure 1.11 shows the drop in company sales by size of firm and, in parentheses on the horizontal axis, the percentage of employees employed by each type of company for the average of the countries of the Northern Triangle of Central America (Guatemala, Honduras, and El Salvador), where 70.4% of employees work in small companies.

As a result of the distribution of workers by sector and the economic downturn of specific sectors in each country, the simulations show that, in general and in Costa Rica, the Dominican Republic, Guatemala, Mexico and Panama in particular, the crisis affects the income of the vulnerable middle class and the first percentiles of the non-vulnerable middle class to a greater extent.² This result is consistent with the simulations of Lustig *et al.* (2020) for other Latin American countries. The effect of this is to push vulnerable households into poverty and non-vulnerable middle-class households into a position of vulnerability, while the poorest and richest sectors are affected to a lesser degree. Figure 1.12 shows the distribution of income loss per decile in the various countries. We can see how income decreases in all deciles as a result of the pandemic, but that the distribution varies from country to country. In the Dominican Republic, it is interesting to see how government aid is helping to alleviate the shock felt among the lower-income population, there being a sharp upturn due to the expansion of the conditional cash transfer program.

² The brackets are classified as i) poor, having an income of less than US\$5 a day per capita (dpc); ii) vulnerable middle class, having an income between US\$5 and US\$12.4 a day per capita; and non-vulnerable, having an income of more than US\$12.4 a day per capita.

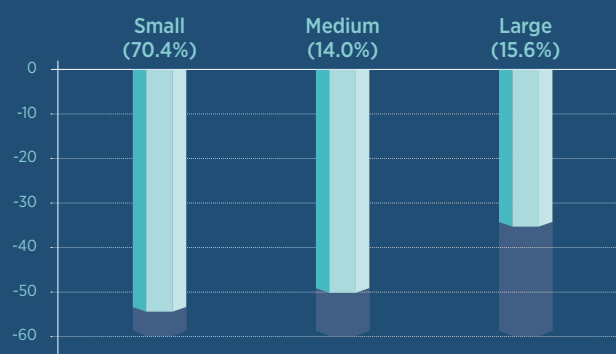
Figure 1.10. Tourism income as a percentage of employment income.

Income quintile on the horizontal axis.

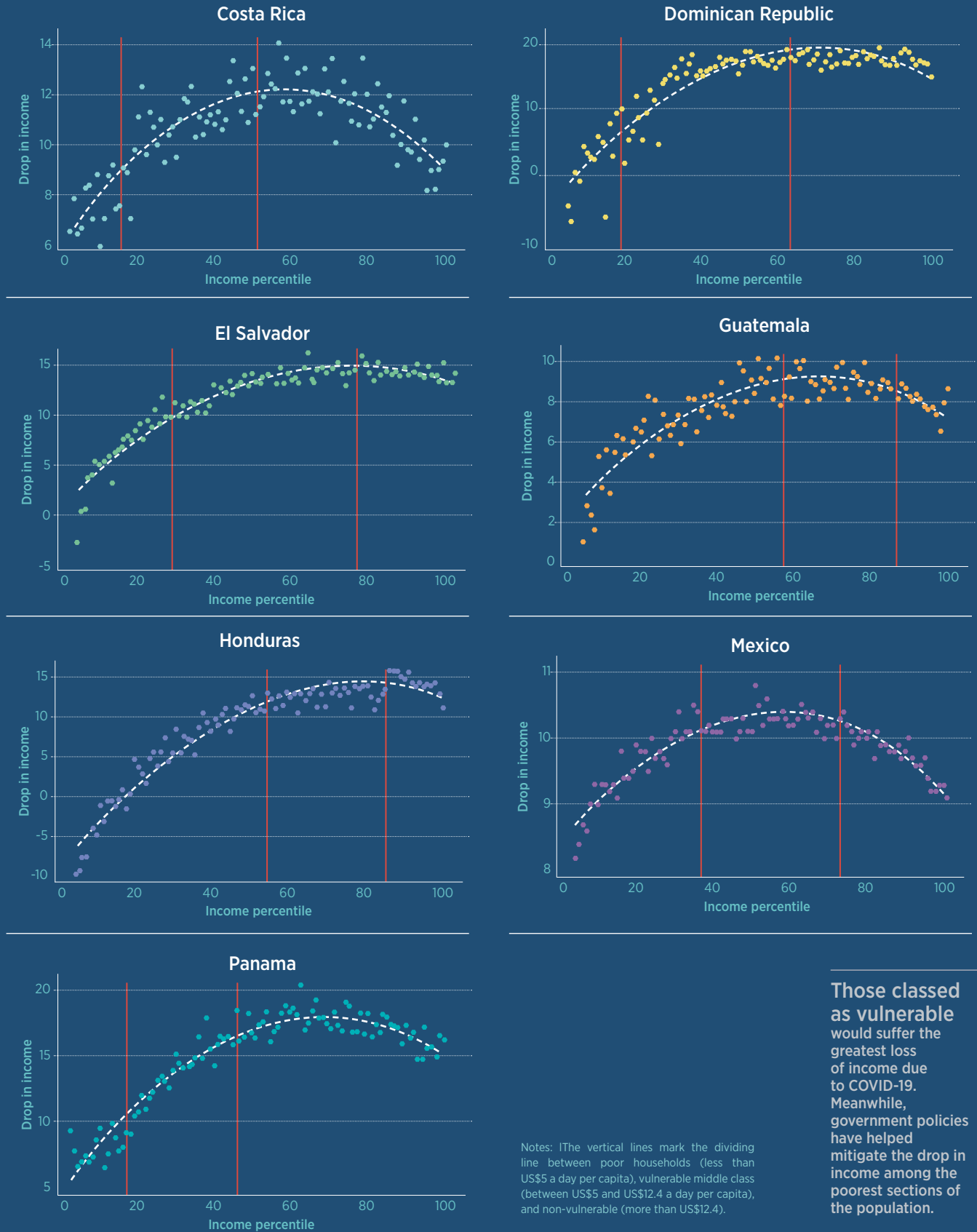


Source: Own calculations based on income surveys.

Figure 1.11. Year-on-year change in average monthly sales in 2020 by company size in the Northern Triangle of Central America

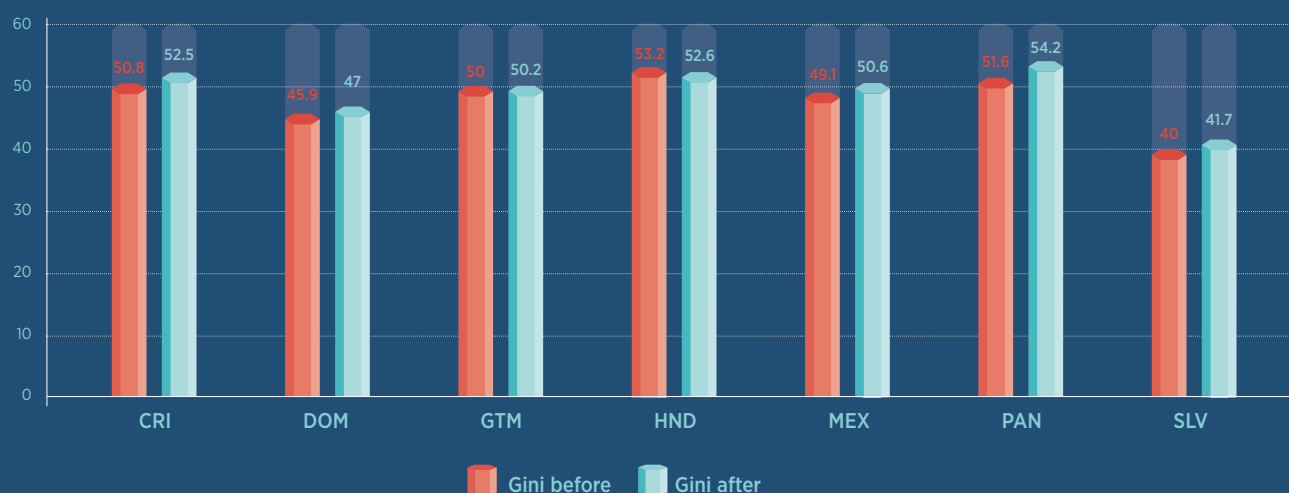


Source: Calculations based on Enterprise Surveys Follow-Up on COVID-19, World Bank.
Note: Percentage of all employees in parentheses.

Figure 1.12. Drop in income per percentile of income per capita (% of income before COVID 19)

Furthermore, in all cases, the heterogeneous effect on income produces an increase in the Gini income inequality index, except for Honduras, where the benefits extended by the state would significantly increase the income of households at the bottom of the distribution, providing they effectively reached the target beneficiaries. Figure 1.13 shows the estimated changes in inequality. It should be noted that the main source of heterogeneity in the simulation is the relative degree of contraction among the productive sectors, though it does not take into account the heterogeneity within the latter, such as the level of educational qualification, the possibility of teleworking, and so on. This implies that the estimated increase in inequality may be downwardly biased.

Figure 1.13. Pre- and post-covid-19 Gini Index



Source: Own calculations. Methodology as described in Box 1.

In sum, in terms of their income level, low- and middle-income individuals are the most affected as a result of the pandemic, largely because the sectors in which they are engaged have so far been among the worst hit. However, it is important to bear in mind that the most vulnerable groups are disproportionately affected, due to other factors specific to the sector in which they operate, such as:

i) Concentration in the informal economy

This means that they are excluded from coverage by most components of the state's social protection network, such as access to the public health, pension, and disability and life insurance systems, as well as to any of the aid transfer schemes that use any of the latter, and so on. In several countries of the region, over 80% of workers in the lowest income quartile are engaged in the informal sector (see Figure 1.14).

Furthermore, the experience of the 2009 crisis could provide clues as to what might happen on this occasion. One example is the case of El Salvador: in 2009, the poorest suffered the sharpest drop in income (see Figure 1.15), which also resulted in greater inequality. It is important

to remember that any possible government programs could mitigate this effect. For example, Cox *et al.* (2020) show that while job losses in the United States have been greatest in those sectors that employ the poorest individuals (which, as we have seen, is also true in CAPARD), and therefore those in which the fall in income has been greatest, government transfers and aid have enabled consumption to recover. This shows how targeted government measures can mitigate the redistributive effect of the pandemic while stabilizing the economy as a whole.

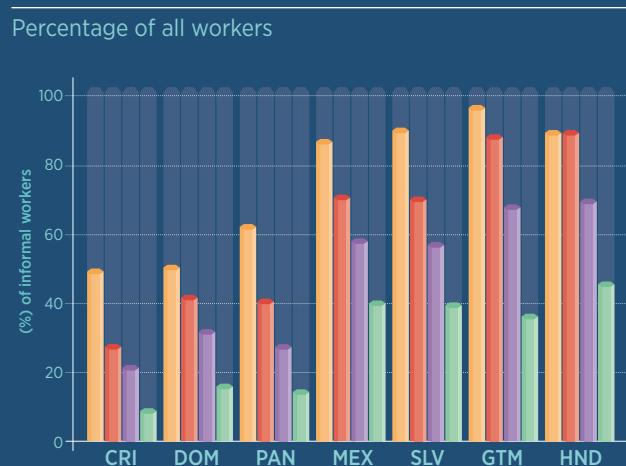
In this regard, it should be noted that the governments of CAPARD have been implementing measures to mitigate the effects of the crisis on the population (see summary in Appendix 1.1). There have been support measures for formal workers and for companies that pay tax and have access to credit, though others have been broader in scope in order to reach the informal sector also.

ii) Lower likelihood of being able to work and study from home

The literature (see Brussevich *et al.*, 2020 for a teleworkability index) shows the likelihood of teleworking to be lower among young workers, the non-college educated, those with less secure employment arrangements (i.e., temporary or self-employed workers), and those working for small firms. Furthermore, it is also affected by the differences between countries in terms of access to and use of technology, and the sector-specific structure of the economy.

In CAPARD, the level of qualifications of workers and the sector-specific economic structure constitute a major impediment to teleworking. Highly skilled workers are scarce in the region and only 7.5% have a college-level education (i.e., 16 years or more of schooling). Similarly, large portions of the population are employed in sectors that do not lend themselves to teleworking, such as the trade, hospitality, transport, and construction sectors. Based on the index calculated for the country average in Brussevich *et al.* (2020) and information from the household surveys of each country, we estimate the teleworkability index in order to determine the relative gaps in the countries of the region by income level. Specifically, Figure 1.16 shows the index calculated for each country, based on the ability to telework according to the education level and age of the population by income quintile. The results suggest that workers in the lowest income quintiles

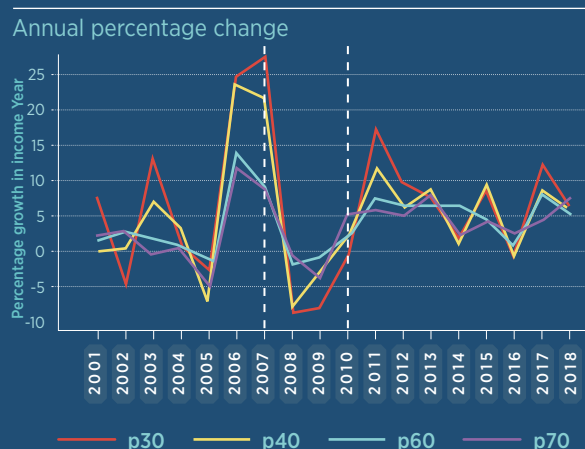
Figure 1.14. Percentage of informal workers by income quartile in 2018



Source: Own calculations based on income surveys.

Note: 'Informal workers' are defined as those who do not pay into the social security system.

Figure 1.15. Income growth by percentile in El Salvador



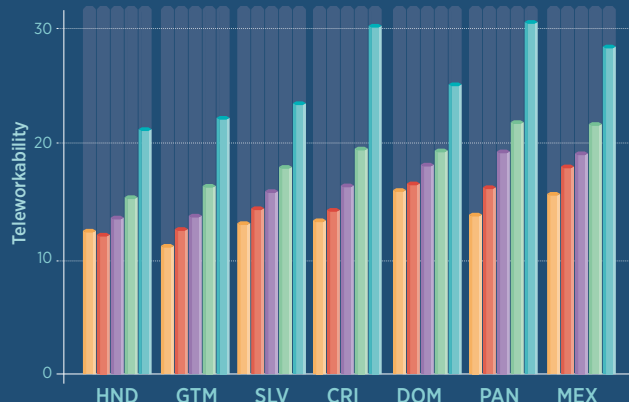
Source: Own calculations based on income surveys.

Note: p30, p40, p60, and p70 are the income percentiles and the series shows the percentage income growth for each.

are less likely to telework because of the education divide. The same pattern is found when workers are ranked according to the productive sector in which they are engaged, suggesting both factors have an impact in the lower income quintiles of the population.

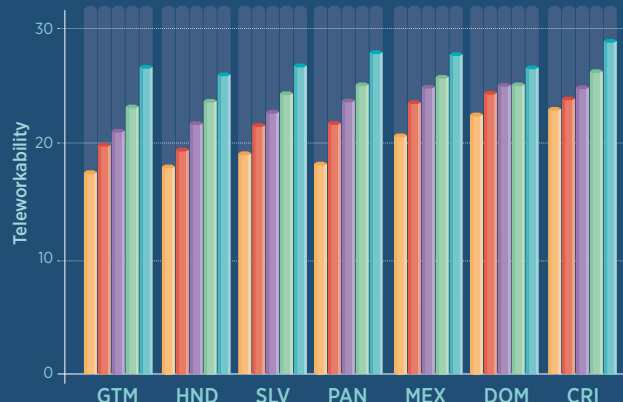
At the same time, the region's limited digital infrastructure represents another obstacle to people's ability to work or study from home. For example, in several countries of the region, households have limited access to the Internet, particularly among those on lower incomes (see Figure 1.18); in some of them, fewer than 30% of households below the national median income have the service.

Figure 1.16. Teleworkability index by income quintile, calculated based on education level and age



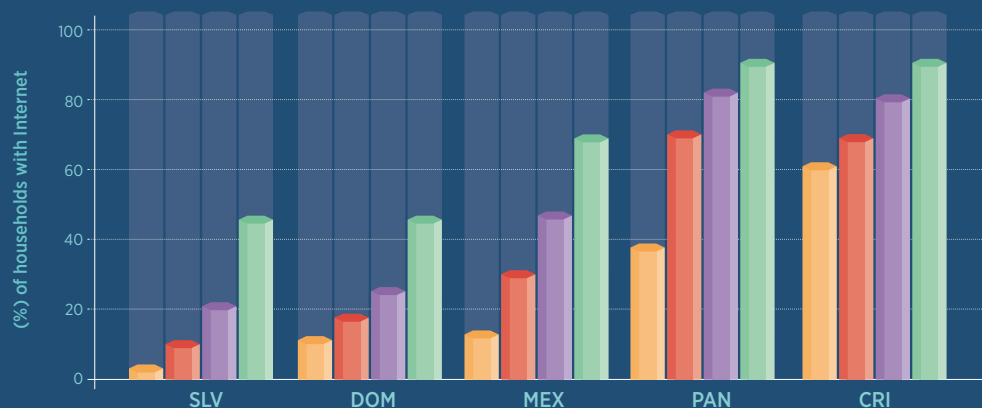
Own calculations based on income surveys and estimations of Brussevich *et al.* (2020).
Note: each column groups 20% of the population, in ascending order of income.

Figure 1.17. Teleworkability index by income quintile, calculated based on productive sector



Source: Own calculations based on income surveys and estimations of Brussevich *et al.* (2020).
Note: Each column corresponds to 20% of the population, in ascending order of income.

Figure 1.18. Households with Internet access by quartile



Source: Own calculations based on income surveys.
Note: Each column corresponds to 25% of the population, in ascending order of income.

The higher-income population of the region is twice as likely to be able to telework as those on lower incomes

As a result of the epidemic, distance learning has become vital, so any lack of Internet access also limits access to knowledge and education in lower-income households, thus further widening existing learning gaps (see Figure 1.19). Standardized tests suggest that skill gaps emerge early in life. In early childhood, children from high socioeconomic status families score better than their low socioeconomic peers in social-emotional, cognitive, and language skills. In elementary school, this gap persists in math and reading skills. For those in their teens, the gaps in math, reading, and science become even wider.

It has also been shown that the performance of students from higher socioeconomic backgrounds in reading and mathematics improves in the period between the end of one school year and the beginning of the next, while that of their peers from lower socioeconomic backgrounds deteriorates (see Figure 1.20). Given that students in various countries of the region have already missed out on several months of face-to-face classes and the fact that access to distance learning varies substantially among students due to their socioeconomic status, the performance gap is likely to widen even further.

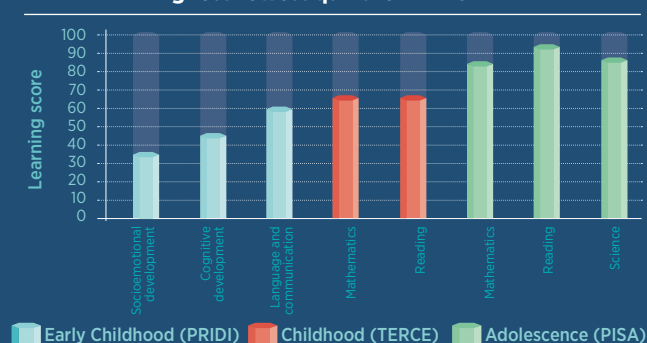
iii) Concentration in rural areas and areas with limited access to public services such as healthcare

In several countries of the CAPARD subregion, around 40% of the population live in rural areas, a figure that rises to over 70% for people in the bottom income quartile in Panama, El Salvador, Honduras, and Guatemala (see Figure 1.21), but one that is also significant in other countries of the region.

Despite the significant proportion of people living in the rural sector, health coverage in this geographical region is very low. In countries such as Guatemala and Honduras, over 85% of the population in rural areas have no health coverage (see Figure 1.22).

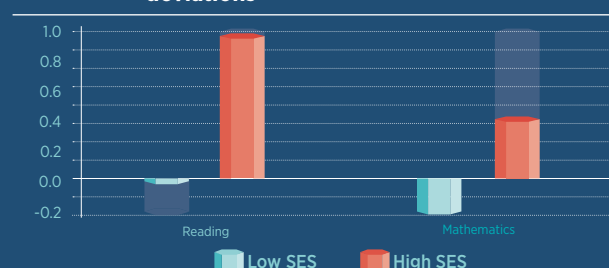
While the lack of health coverage is particularly marked in rural areas, it is also associated with personal income and low levels of government aid. Figure 1.23 shows that the lower-income population in several countries of the region have virtually no health coverage and that in a number of them, even the proportion of people nationwide with no coverage is very high. Lack of access to medical services could cause people to wait until they find themselves in the advanced stages of an illness before seeking medical help.

Figure 1.19. Learning gaps by socioeconomic status: highest-lowest quintile in LAC



Source: IDB (2020), taken from Busso and Hincapié (2017).

Figure 1.20. Change in test scores between the end of one school year and the beginning of the next, by average socioeconomic status (SES) from grades 1-4, measured in standard deviations



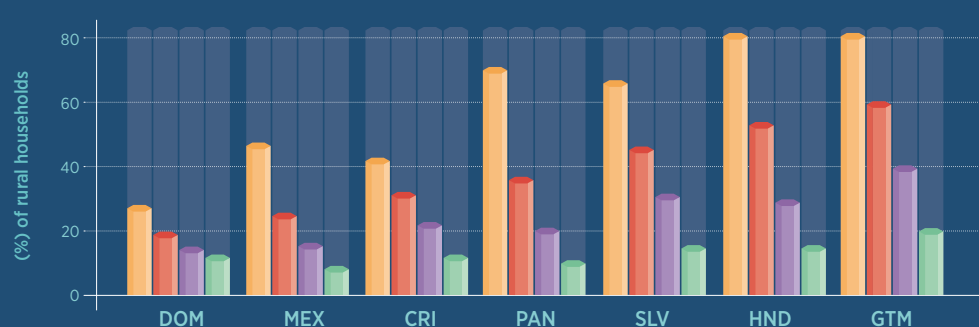
Source: IDB (2020), taken from Alexander et al. (2001) and Cooper et al. (1996) with calculations for the United States.

In the low-income countries of the region over 80% of the population has no health insurance

In sum, given the limited resources and social infrastructure available in the region, living in the rural sector makes it difficult for people to access public services and government aid in order to deal with the current crisis.

Therefore, economic recovery policies not only face the challenge of restoring pre-crisis levels of investment, production, and employment, they also need to provide support for the most hard-hit segments of the population. This will allow countries to recoup the gains made in reducing poverty and inequality over the last decade as quickly as possible and to close the human capital gap affecting the most vulnerable population.

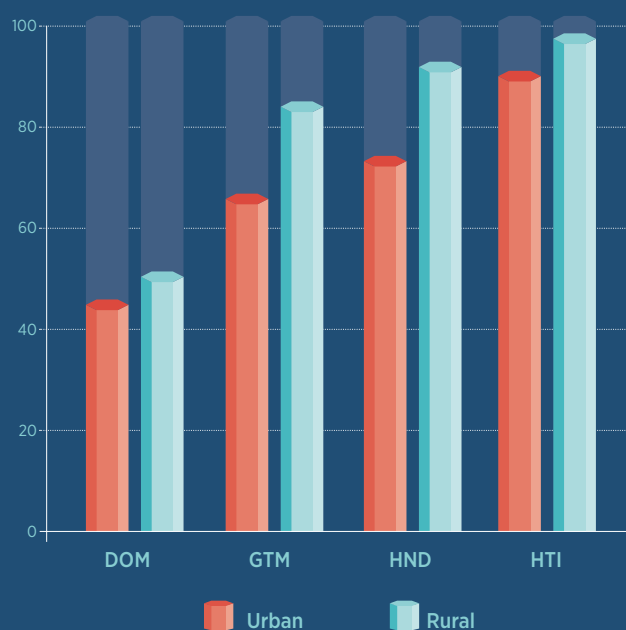
Figure 1.21. Rural households by income quartile



Source: Own calculations based on income surveys. Data for 2018.

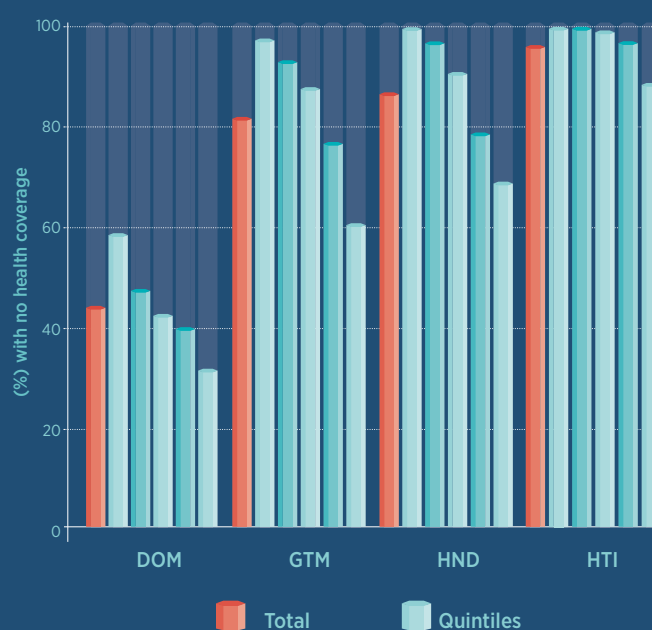
Note: each column groups 25% of the population, in ascending order of income.

Figure 1.22. Percentage of people with no health coverage in urban and rural areas



Source: WHO Demographic and Health Surveys. Most recent available data for each country.

Figure 1.23. Percentage of people with no health coverage by quintile



Source: WHO Demographic and Health Surveys. Most recent available data for each country.

Appendix 1.1. Support measures to address the economic effects of COVID-19³

Country	Fiscal	Employment	Social
Belize		<ul style="list-style-type: none"> • Introduction of teleworking • US\$75 subsidy every two weeks for 12 weeks for those who have lost their jobs; those who were already out of work receive 50 dollars (75 million US dollars in total) • Two-month exemption from employer contributions 	<ul style="list-style-type: none"> • Reduction in water bills • Reduction in electricity bills
Costa Rica	<ul style="list-style-type: none"> • Tax deferment • Reduction in taxable income (lower contributions from formal employees with salaries below the minimum tax threshold) 	<ul style="list-style-type: none"> • Withdrawals from the Labor Capitalization Fund permitted. Applicable to those who have been furloughed or have seen a reduction in their earnings from formal employment. 	<ul style="list-style-type: none"> • <i>Plan Proteger</i> ("Protection Plan"). Benefit payable to formal sector employees who have been furloughed or seen their hours reduced • Special subsidy of 100,000 colones for 23,700 vulnerable families • Food delivery: 49,667 parcels for the most vulnerable families
Dominican Republic	<ul style="list-style-type: none"> • Exemption from asset tax for micro- and small-sized enterprises • Special exemptions for the hotel sector 	<ul style="list-style-type: none"> • Government pays 8,500 pesos of the salary of furloughed formal workers • One month later, this relief was extended to a further 70,000 households to include the informal sector 	<ul style="list-style-type: none"> • Delivery of three million food rations • <i>Quédate en Casa</i> ("Stay at Home") expanded coverage to reach 2.6 million beneficiaries to include those above the poverty line who are vulnerable, with the size of the subsidies increased to approximately US\$90; some 450,000 households receive additional transfers of US\$36 • The <i>Pa' Ti</i> ("For You") program launched in May delivers US\$90 a month to some 200,000 self-employed workers who have been unable to work due to social/physical distancing measures and who are not receiving any help from any of the other programs. • The Government provides between 5,000 and 8,500 pesos through the FASE program, which helps approximately 1.2 million formal workers (around 400,000 of them furloughed and the remainder still active)
Guatemala	<ul style="list-style-type: none"> • Speeding-up of infrastructure investment projects (1.5 points of GDP) • Tax rebate totaling 500 million quetzales for digitally registered exporters 	<ul style="list-style-type: none"> • Introduction of teleworking 	<ul style="list-style-type: none"> • Direct transfer of food and vouchers for food, medicine, and supplies to help prevent infection • Allowance for vulnerable families (700 million quetzales) • Family allowance of 1,000 quetzales a month for two million recipients (targeted based on electricity consumption) • Increase of 100 quetzales in the non-contributory pension scheme • 200 million quetzales to extend the family allowance scheme to informal workers
		<ul style="list-style-type: none"> • Salary advance for public servants and guaranteed 50% of wages for textile workers 	<ul style="list-style-type: none"> • Provision of food to 75 restaurants in local communities • US\$29 subsidy for 143,477 people

³ These include the support provided in the early months of the pandemic. They do not include those implemented during the recovery period after the economies opened up.

Appendix 1.1.

Country	Fiscal	Employment	Social
Honduras	<ul style="list-style-type: none"> • Deferral of tax and levy payments • Exemption of import duties on staple goods, medical equipment, and medicines • Special tax deduction for locked-down employees • Calculation of the three 2020 income tax installments to be calculated based on 75% of the amount declared in 2019 		<ul style="list-style-type: none"> • 2,000-lempira transfer to informal workers • 6,000-lempira transfer to workers in the private pension system
Mexico		<ul style="list-style-type: none"> • Paid leave for employees who require it • Mandatory paid leave for employees over 60 years of age • Benefit for employees covered by social security system 	<ul style="list-style-type: none"> • Financial support for the elderly
Nicaragua		<ul style="list-style-type: none"> • Employment protection measures in free-trade zones by agreement between unions and the Government • Reduced work hours, teleworking, and advance payments 	<ul style="list-style-type: none"> • Food distribution
Panama	<ul style="list-style-type: none"> • Deferral of tax payments for local investors • Restructuring of loans, with no penalties 	<ul style="list-style-type: none"> • Introduction of teleworking 	<ul style="list-style-type: none"> • Direct aid and food vouchers. <i>The Panamá Solidario</i> (Supporting Panama) program provides USD\$100 a month to households in a state of multidimensional poverty, vulnerable families, difficult-to-access areas, and to the self-employed. Public officials, active salaried workers, pensioners, and taxpayers who earn more than 11,000 balboas are excluded.
El Salvador	<ul style="list-style-type: none"> • US\$2 billion worth of debt for recovery measures • 2% increase in the healthcare budget • Tourist operators not being charged 5% special tax and granted deferral of income tax 	<ul style="list-style-type: none"> • Introduction of teleworking • Pregnant women, people over 60 years old, and people with terminal illnesses required to stay at home (with pay) 	<ul style="list-style-type: none"> • US\$300 cash transfer to 1.5 million families with no permanent jobs or income, or who have been financially hit by COVID-19 • Workers performing work directly related to the pandemic receive US\$150 in compensation • One million food parcels dispatched • Three-month deferral of utility payments

CHAPTER 2

Formalization and Public Spending on Human Capital as Tools for Redistribution

Arnoldo López Marmolejo, Carlos Eggers Prieto and Marta Ruiz-Arranz



CHAPTER 2

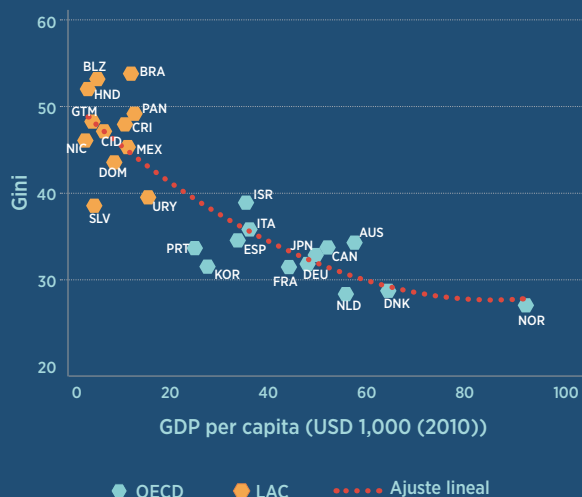
Formalization and Public Spending on Human Capital as Tools for Redistribution

Arnoldo López Marmolejo, Carlos Eggers Prieto and Marta Ruiz-Arranz

1. Current state of fiscal policy with regard to redistribution

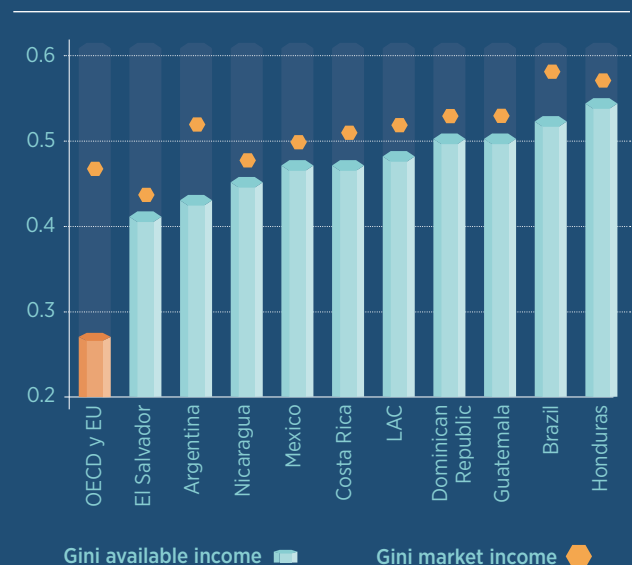
In recent years, the countries of the region comprising Central America, Panama, and the Dominican Republic (CAPARD) have succeeded in reducing inequality; nevertheless, it remains high there compared to other nations (see Figure 2.1) and indeed most CAPARD countries have a Gini inequality index above the Latin America and the Caribbean (LAC) average of 45.5. Despite implementing public policy measures similar to those seen elsewhere in LAC, CAPARD countries have failed to ensure any significant redistribution of income due to the fact that the measures adopted there have not been sufficiently far-reaching. The impact of government intervention in this regard can be calculated by estimating the Gini coefficient of market income inequality (i.e., income before government intervention) and comparing it to the Gini coefficient of disposable income (i.e., income after government intervention). Figure 2.2 shows these two measures for the OECD/European Union average and selected LAC countries. Unlike the OECD and European Union average, which shows a substantial reduction in the average Gini coefficient following government intervention, the reduction in LAC countries is marginal, as is the case in the countries of the CAPARD subregion.

Figure 2.1. Inequality measured by the Gini index and GDP per capita



Source: World Development Indicators.

Figure 2.2. Difference in income inequality before and after tax and cash transfers, 2012



Source: Izquierdo *et al.* (2018: 117).
Note: Data from around 2012.

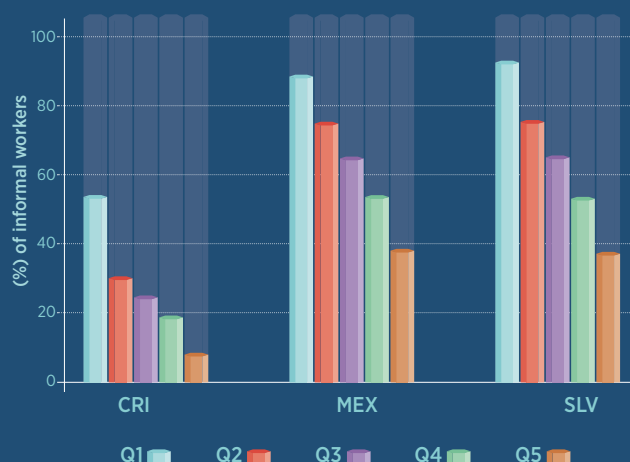
The factors underlying the low level of redistribution achieved through public policy in CAPARD revolve around both tax and public spending policy. It should be noted that in advanced economies, an average of two thirds of redistribution is achieved through spending (see Coady *et al.*, 2015). In countries where there is a large informal economy, such as those of CAPARD, this relationship may even be exacerbated by low levels of income tax collection. According to the International Labor Organization (ILO), the proportion of informal workers in non-agricultural jobs averages 63% in the countries of the region. Furthermore, while there is a relationship between informality and income (albeit a heterogeneous one), the proportion of the region's households that form part of the informal economy is substantial, even in the upper income tier. For example, in the highest income quintile, 38% of workers in El Salvador work in the informal⁴ sector and 39% of workers in Mexico. Costa Rica is the country with the lowest level of informality in Central America, registering a level of 8.8% in this tier (see Figure 2.3).

In terms of taxation, its limited redistributive effect is due to two factors: i) low levels of income tax collection, and ii) the limited progressiveness of tax rates, particularly in the upper deciles. As an example of the first, income tax revenue as a percentage of GDP in CAPARD stands at 5.7% and, therefore, the ratio of VAT to income tax in the region is generally above 1.5 (see Figure 2.4), in contrast to European countries where the ratio is close to or below 1. Consequently, CAPARD tax revenues rely more on consumption taxes than on income taxes, which is partly to be expected given the high level of informality in the economy.

VAT can be regarded as either progressive or regressive depending on how it is apportioned among products. It is also worth noting that the resources from a regressive tax could contribute to greater equalization than would be the case otherwise through social spending alone. This is often referred to in economic literature as 'Lambert's conundrum.'

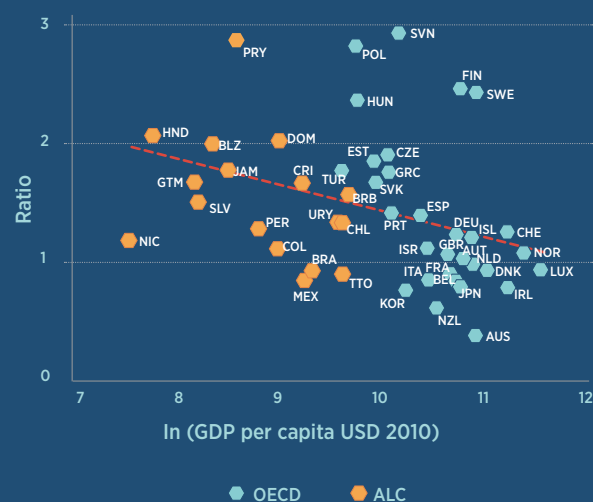
⁴ informal workers are defined as those that do not contribute to the social security system

Figure 2.3. Informal salaried workers by income quintile



Source: Own calculations based on household income surveys.
Note: 'Informal workers' are defined as those who do not pay into the social security system.

Figure 2.4. Ratio of VAT to income tax



Source: Calculations based on OECD and IMF data.

With respect to public spending, two factors explain its low redistributive effect: i) the low level of social spending and ii) leakages in social programs towards non-target individuals, such as those in non-vulnerable groups or those above the poverty line, depending on the type of program.

With respect to social program leakages, these can be found in cash transfers, energy subsidies, non-contributory pensions, tax expenditures (also called 'tax exemptions'), and so on.

According to Izquierdo *et al.* (2018), leakages in spending targeted at social programs, energy subsidies, and tax expenditures in the countries of the CAPARD region average 1.4 percent of GDP, a level similar to the 1.7 percent of GDP in Latin America and the Caribbean. The estimated leakages per country are shown in Figure 2.6.

SOCIAL SPENDING



In LAC, social spending is estimated to be around **15% of GDP**



whereas the OECD and the European Union average around **28%.**

As for social spending on education and healthcare, in 2016 OECD countries allocated

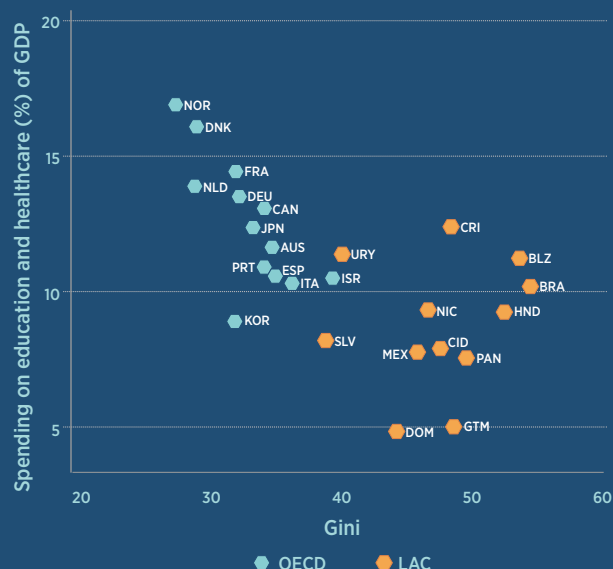


12.0% of GDP,
LAC **9.5%**
and CAPARD **8.0%.**



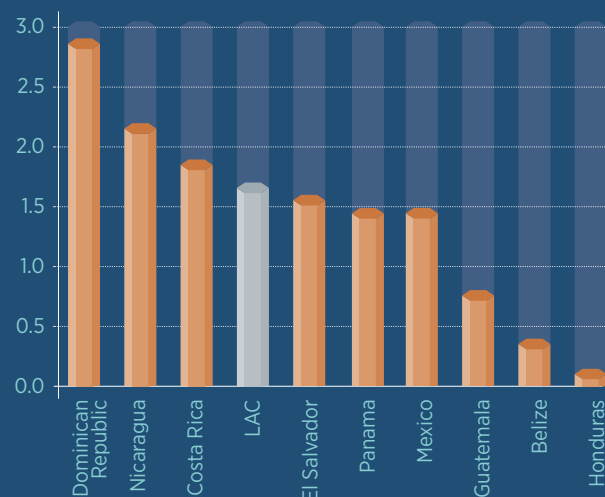
Figure 2.5 shows social spending on education and healthcare in the countries of the region and a sample of OECD countries.

Figure 2.5. Public spending on education and healthcare as a % of GDP, 2016



Source: Calculations based on OECD and IMF data.

Figure 2.6. Leakages in targeted spending as a % of GDP, 2015



Source: Izquierdo *et al.* (2018: 67).

Note: Targeted spending includes social programs, energy subsidies, and tax expenditures.

Given the need to streamline tax and spending policies in order to foster redistribution, a crucial first step is to understand how the benefits of public spending and the paying of taxes are distributed among households according to their income level. Moreover, given the significant degree of labor informality in the region and its relationship to fiscal fairness, special attention has been paid to this aspect in the analysis. For this purpose, three exercises were performed.

1 In the first, the net benefit of public spending (i.e., what is received in spending minus what is paid in) is calculated per household. This is divided up by income level and classified according to the most important types of social benefits, such as education, healthcare, and cash transfers. This allows us to identify which households benefit from each service according to their income level. In order to identify differences by income level, the net benefit of public spending is also calculated based on whether or not a household is in the formal sector.

2 In the second exercise, we calculate how income tax revenues could be redistributed if non-vulnerable households in the informal sector were to pay.

3 Lastly, in the third exercise, we look at the level of increase in income tax that would be required to reduce inequality by 10% if this were paid by both informal and formal households rather than just the latter.

In the first exercise, the net benefit of public spending is calculated by excluding the contribution of education and healthcare spending because of their importance to reducing inequality, something that is deeply linked to overcoming poverty and achieving growth. Reducing inequality has been found to contribute to economic growth (Ostry *et al.*, 2014) and among the possible mechanisms for accomplishing this is education. Benabou (2002) suggests that having a low level of education limits access to credit and, therefore, growth; hence, government support for education lowers this barrier. Furthermore, El-Shagi and Shao (2017) find that redistribution has a positive effect on growth, though only in countries with low levels of education (i.e., those below the median). Solon (2004) shows that investment in human capital improves intergenerational mobility and thus reduces inequality in the medium and long term. At the same time, a direct relationship between education and growth has also been reported (see Wilson and Briscoe, 2004), as well as a complementarity between education and both physical capital (Joffe, 2017) and direct foreign investment (Baharumshah and Almasaied, 2009).

It is hardly surprising that government funding for investment in human capital for those most in need generates greater returns and, as a result, a reduction in inequality, though its effects are progressive and medium-term, and therefore difficult to measure. It is important to bear in mind that human capital is not only something developed through education, but also something dependent upon access to healthcare, which enables workers and students to return to the labor market and to school promptly in the event they fall ill or suffer an accident, and to enjoy a longer life. This in turn allows the fruits of investment in education and experience to be enjoyed for a longer period.

It is also worth remembering that inequality of both income and opportunity—besides impeding poverty reduction and impairing growth among lower-income groups (see Van der Weide and Milanovic, 2018, and Marrero *et al.*, 2016)—increases the risk of social conflict, further hampering the region's development process (see Esteban and Ray, 2011, in the literature on polarization; and Eggers and López-Marmolejo, 2020, on the discussion of the case of CAPARD and Mexico).

In order to carry out the exercises described, and given the limited data, we have concentrated on the cases of El Salvador, Mexico, and Costa Rica, which provide important insights into the region.

The second section contains an analysis of the distribution of tax paid and public spending received, while the third calculates the counterfactual of reducing inequality through an income tax, taking into account the issue of informality. The fourth section presents the conclusions of this chapter.

2. Analysis of the distribution of tax paid and public spending received

This analysis draws on household income and expenditure surveys from the various countries along with other supplementary sources. In all three countries, the VAT (General Sales Tax in the case of Costa Rica), income tax, and business taxes (which account for a large share of total taxation) paid by households were estimated based on information for each on consumption, income, labor formality, and self-employment. In the case of Mexico and El Salvador, capital gains tax was included, a tax that was not applicable in Costa Rica in 2018. Next, information on government transfers (both in cash and in kind) was included and, in the case of El Salvador, electricity, light, and water subsidies. Public school spending per student was included as education spending, together with a proportional amount of healthcare spending for Costa Rica and El Salvador, which have universal insurance schemes. In Mexico, public spending on healthcare was taken to be that reported in the survey, as was the case with the property tax. Detailed information on the methodology used for each country can be found in Appendix 2.1.

In order to obtain the right proportions for spending on healthcare and education (compared to the tax paid by households), the information in the table below was used, which was compiled using data for the year 2018 from the International Monetary Fund (IMF), the United Nations

Table 2.1 Selected fiscal variables

	CRI	DOM	SLV	GTM	HND	MEX	NIC
Fiscal spending (% of GDP)	30.0	15.7	24.9	11.8	22.0	20.4	16.7
Employment in the public sector (% of expenditure)	41.4	39.2	41.0	33.7	45.7	11.0	38.7
Interest (% of expenditure)	11.9	16.5	11.1	12.5	8.2	13.4	6.6
Total revenue (% of GDP)	25.2	15.2	25.1	11.0	23.4	18.9	16.8
Total tax revenue (% of GDP)	13.7	13.0	17.8	10.4	17.3	13.1	15.6
Public spending on healthcare (% of GDP)	5.4	2.8	4.6	2.1	3.2	2.8	5.0
Public spending on education (% of GDP)	7.0	2.0	3.6	2.9	6.1	4.9	4.3

Note: For Costa Rica, the difference between total revenue and total tax revenue is explained by social security contributions.

Educational, Scientific and Cultural Organization (UNESCO), and the World Health Organization (WHO).

Analysis of expenditure on human capital

Figure 2.7 shows the net benefit by country that households receive from the Treasury. The vertical axis of each graph shows the difference between what they receive in public spending and what they contribute in terms of taxes as a percentage of market income, arranged in order of income per capita on the vertical axis from the lowest to the highest decile. The vertical lines represent the cut-off points between poor, vulnerable, and non-vulnerable households⁵.

In the countries analyzed, what makes households in the lower income deciles net beneficiaries of the Treasury is the spending on education and healthcare. If we exclude education and health spending, the net beneficiaries of public spending clearly constitute a small fraction of the population which, in the case of El Salvador, does not actually include all poor households; specifically, only the poorest 10% are net beneficiaries when education and health are excluded. Meanwhile in Mexico, this figure rises to 28%, making all vulnerable households net contributors. When spending on healthcare and education is included, over half of the vulnerable households in both Mexico and El Salvador are found to be receiving more than they pay in.

Compared to the other two countries and spending on education, Mexico channels significant resources to the poor through the latter, though little through spending on healthcare, which is consistent with the low level of public healthcare spending in comparison to other countries in the region (see Figure 2.8).

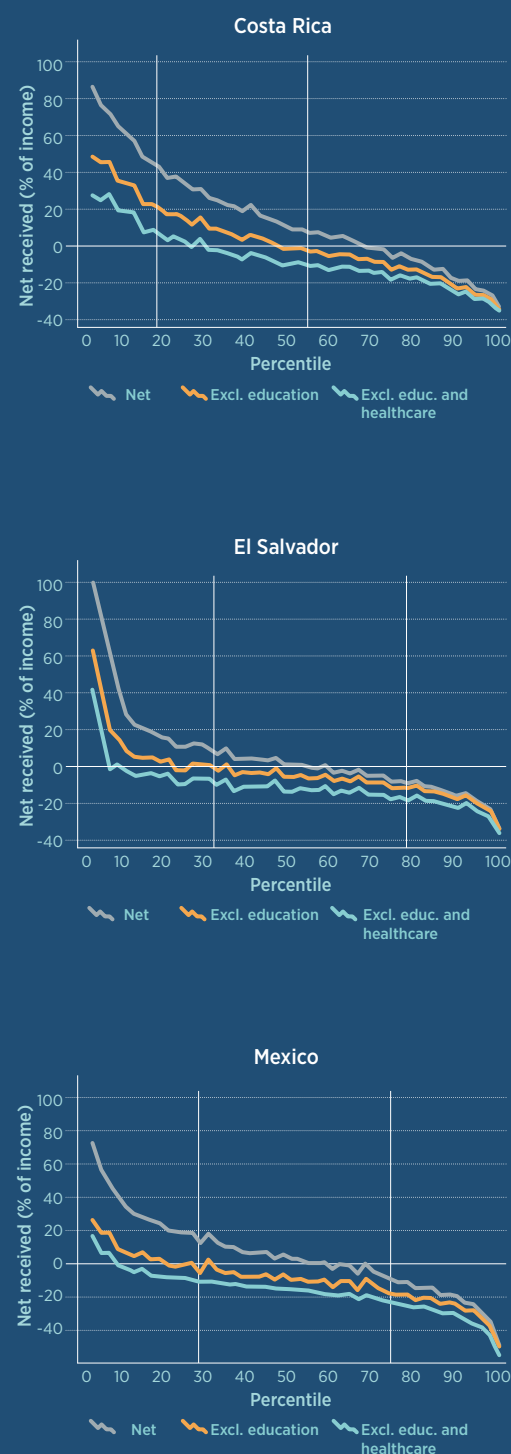
There is a major difference in the case of Costa Rica, where Treasury funding comes largely from the collection of social security contributions, particularly from employers. The IMF estimates that 45.6% of tax revenues in 2018 came from sources other than taxes on earnings and value added tax. Furthermore, if we also take into account the fact that Costa Rica has maintained fiscal deficits in the last few years, this means that with a low percentage of households that are net contributors, it is possible to achieve a high percentage of net beneficiaries. In terms of spending, the percentage allocated to employment in the public sector and interest payments is particularly notable, accounting for 41.4% and 11.9% of total spending, respectively; therefore, it would be useful to evaluate potential spending that could contribute to enhancing human capital.

Thanks to public education and healthcare, around
60% of the population
are net beneficiaries of the State, which means that it would be advisable to work on developing and improving the quality of both

⁵ The poverty line considered in this study is US\$4.96 a day per capita and US\$14.88 a day per capita for vulnerable households.

Figure 2.7. Distribution of tax paid and public spending received by spending component: healthcare and education

Percentiles in order of per capita income



Source: Own calculations.

In comparison to the rest of Latin America and the most advanced economies, there is a clear gap in human capital formation within the region, both in education and in healthcare. This gap has been documented by Manzano *et al.* (2018) on the basis of various indicators, such as years of schooling and attendance at educational establishments; as regards health, it has been shown that the countries of the region are lagging behind in infant mortality, nutrition, and health spending, among other aspects. In the case of education, despite efforts to transfer significant resources to the sector, these have oftentimes not been reflected in its quality. This can be seen, for example, in the fact that the countries studied continue to rank among the lowest performing countries on the PISA test. Public spending on health in the countries of the region is generally modest (see Figure 2.4). These gaps are not only evident between the region and other countries but also within the countries themselves, with notable differences existing between access to education at different socioeconomic levels and in different subregions, not to mention the significant challenges that remain in terms of the quality and availability of services. As an example, Figure 2.9 shows the availability of doctors. A similar result is obtained in the case of nurses and midwives.

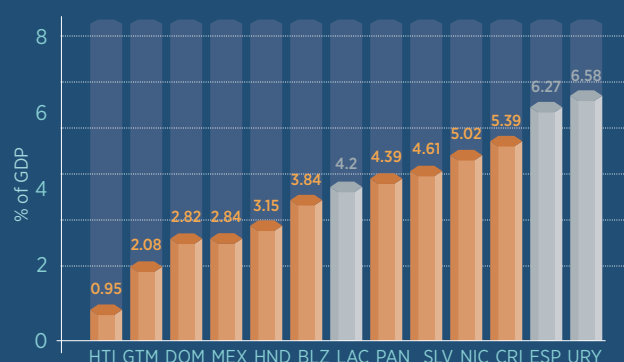
Analysis of state spending on cash transfers

Cash transfers have been one of the mechanisms most often employed in the region to transfer resources to the population in the lower deciles. The analysis in Figure 2.10 shows that, in general, these programs have been successful at targeting these deciles and considerably increasing their income. For households in the first decile, cash transfers represent a net income benefit of 75% in El Salvador; 25% in Mexico; and 40% in Costa Rica.

Meanwhile, the experience of other countries has shown that some of these resources actually go to people outside the target group, such as the non-vulnerable population. According to Izquierdo *et al.* (2018)⁶, inefficiencies in spending on payroll and targeted transfers in LAC countries amount to around 3.2% of GDP.

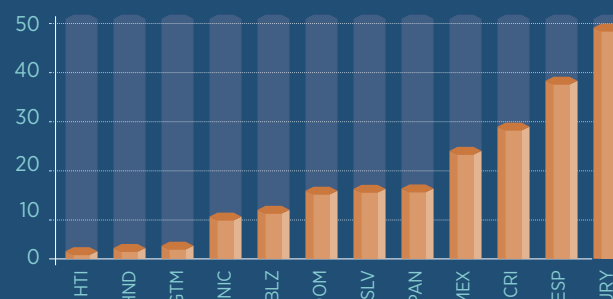
⁶ Analysis available at <https://flagships.iadb.org/en/DIA2018/Better-Spending-for-Better-Lives>

Figure 2.8. Public expenditure on health as a percentage of GDP



Source: World Health Organization.

Figure 2.9. Doctors per 10,000 inhabitants



Source: World Health Organization.
Note: Most recent available data.

Analysis of formality

In some countries of the region, two thirds of workers are employed in the informal economy, which represents a challenge in terms of both tax collection and the provision of government support within the framework of a negative impact suffered by the population.

If we take formality to mean paying into the social security (i.e., healthcare or welfare) system and formal households to mean those that have at least one member with a formal job, the analysis shows that the formal sector of the economy is heavily penalized in terms of its contribution to and benefits from the tax system (see Figures 2.11 and 2.12). This means that not enough incentives are provided at the individual level for workers to formalize their employment status and that there is little incentive to pay tax, which would provide resources that could be channeled towards equally progressive spending policies to help bridge socioeconomic gaps and finance public goods in general.

Figure 2.10. Distribution of tax paid and public spending received by spending component: cash transfers
(in order: El Salvador, Costa Rica, and Mexico)

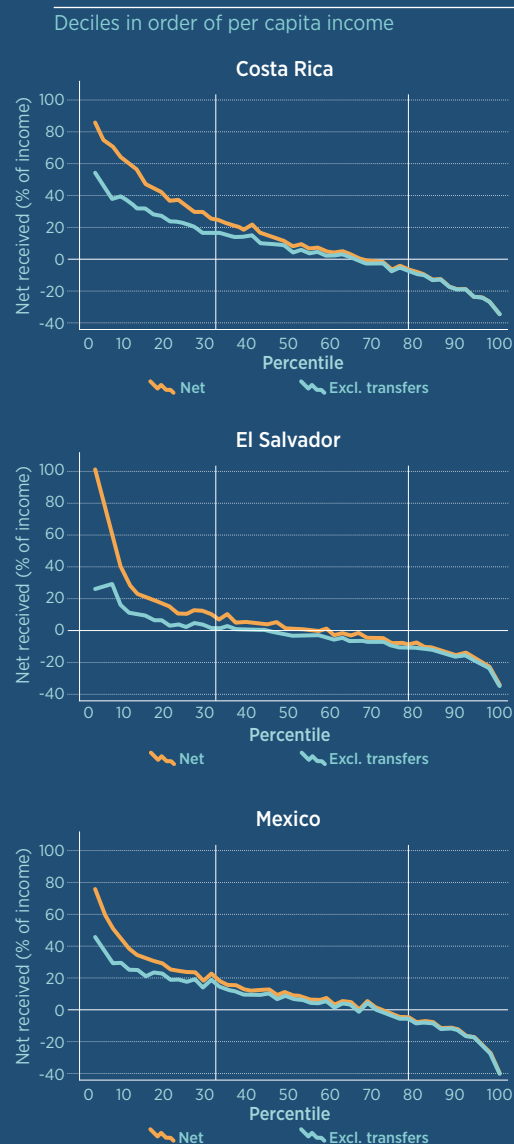
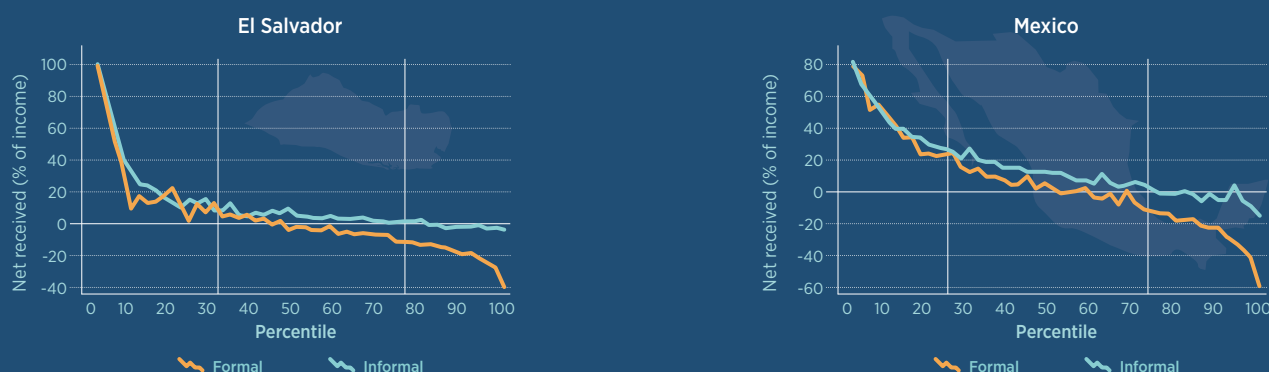


Figure 2.11. Distribution of tax paid and public spending received by sector (formal/informal)

Percentiles in order of per capita income



Source: Own calculations.

Similarly, Figure 2.13 shows the high proportion of non-vulnerable informal households there are in the countries of the region. For example, in El Salvador and Mexico around 40% of non-vulnerable workers are informal. In Panama, the richest economy, close to 20% of non-vulnerable workers are informal.

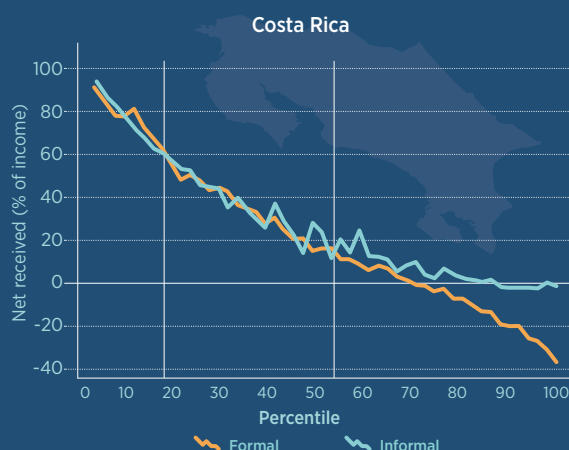
In order to expand the social protection network and encourage people to formalize their employment status, it has been proposed (see Levy, 2008; and Antón, Hernández, and Levy, 2012) that there be a shift from the current protection scheme linked to employment status towards one that provides coverage for risks not associated with salaried work, financed through mechanisms that apply generally rather than to formal employment alone. According to Levy (2020), a specific example could be the risk of getting sick, which is a general risk among the population that is not linked to a person's status in the labor market (i.e., whether he or she is a formal employee, informal employee or self-employed) and could therefore be financed by a general tax. On the other hand, those risks inherent to holding a salaried job should be financed by charging an amount proportional to the employee's salary. Consider, for example, the risk of dismissal, for which resources need to be found to pay for unemployment insurance. Furthermore, financing mechanisms that generate positive externalities (such as taxes on pollution or on products with associated health risks) could also be evaluated. According to this author, such a reform would allow for a transition to a less distorted fiscal framework and would lead to a social security system that is more universal in terms of population and risks (covering risks such as work incapacity, death, illness, and so on), one which would reduce the burden on formal workers due to its being financed from generalized sources rather than from worker-employer contributions associated with employment. At the same time, it would also be vital to limit incentives to informality and to ensure broader and more effective tax collection.

Next, a counterfactual exercise was carried out to determine how the tax paid on workers' wages and salaries would be distributed if informal workers also paid.⁷ For this purpose, the gross labor income of informal individuals was taken to be the income they declare directly in the surveys, after which income tax was applied to the corresponding earnings according to their income

⁷ Remember that 'informal worker' is someone who describes themselves as a subordinate worker and who pays nothing into the social security system.

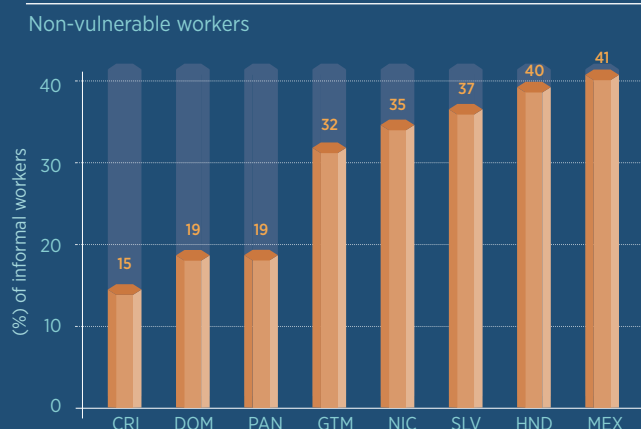
30% of non-vulnerable workers in the CAPARD region are employed in the informal sector

Figure 2.12. Distribution of tax paid and public spending received by sector (formal/informal)



Source: Own calculations.

Figure 2.13. Percentage of non-vulnerable informal workers.



Source: Own calculations based on income surveys.

Note: 'Formal household' is defined as one in which at least one of its members is employed in a formal capacity.

level. On the basis of this exercise, we assess how much greater employee income tax revenue would be if there were no informality. The results are presented by means of concentration curves, where the cumulative income tax paid by the formal sector is shown for each percentile of income distribution. Thus, the concentration curve of the formal sector of the economy reaches 100% in the 100th percentile and the other curves reach the corresponding level as a proportion of this. *Case 1* is the tax revenue collected from formal workers only. *Case 2* is the hypothetical revenue that would be collected if informal workers paid tax. Lastly, *Case 3* is the hypothetical tax revenue collected assuming that non-vulnerable informal households pay income tax.

In the case of Mexico (Figure 2.14), if income tax were also levied on people in the informal economy, income tax revenue would be 47% higher; however, if this were only applicable to those non-vulnerable individuals in the informal sector (practically the three highest income deciles of the entire population), income tax revenue would be around 25% higher, which would suggest that taxing the non-vulnerable informal sector offers significant revenue potential. In the case of El Salvador (Figure 2.15), if income tax were also collected from the entire informal economy, revenue would be 40% higher, whereas if this only affected the non-vulnerable population, revenue would be 35% higher. It should be noted that the difference between *Case 2* and *Case 3* is more marked in Mexico than it is in El Salvador. This is due to the fact that in Mexico, at progressive rates all income levels are eligible to pay income tax, which means that when those in the informal economy are taxed, the *Case 2* curve diverges from the *Case 1* curve from the outset, which is not the case in either El Salvador or Costa Rica, as will be shown later below.

Income tax revenue from workers would increase by up to

30%
if non-vulnerable informal workers paid it

Figure 2.14. Concentration curve of personal income tax in Mexico

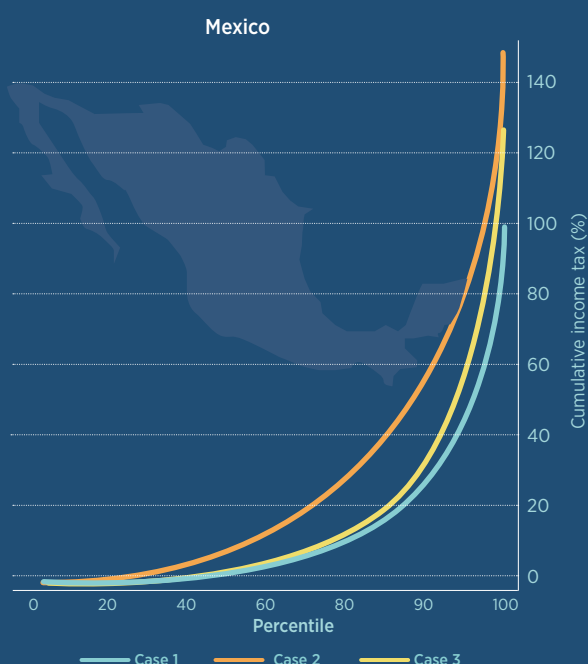
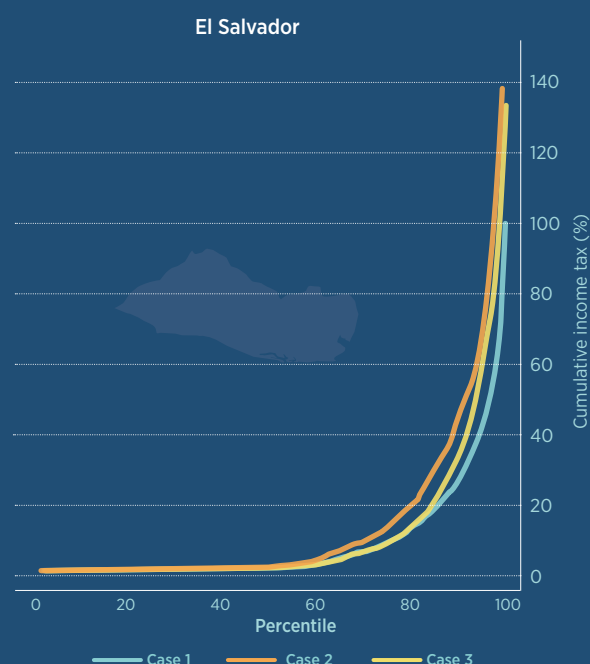


Figure 2.15. Concentration curve of personal income tax in El Salvador



Source: Own calculations. Note: *Case 1* - The current situation. *Case 2* - All informal households paying tax. *Case 3* - Non-vulnerable informal households paying tax. Horizontal axis: cumulative share of the population in order of market income level. Vertical axis: cumulative proportion of tax revenues.

In Costa Rica, a large share of tax revenues comes from social security contributions. Hence, the effect that informality has on revenues is much greater when these contributions are considered than when income tax is considered. Indeed, in Costa Rica, the threshold for paying income tax is an amount that affects mostly households in the formal labor market, as they are the ones that usually earn above it (see Appendix 2.1). According to the household survey data, individuals who earn enough to pay income tax but do not pay it because they are employed in the informal sector represent only about 1.5% of the total, so revenue remains practically unchanged when this factor is taken into account (see Figure 2.16). In terms of contributions, it is clear that while Costa Rica has achieved outstanding formality rates compared to the rest of the region, the informal economy still provides considerable room for increasing revenues.



In particular, contribution payments **would increase by up to 21.2%** if they were collected from those in the informal economy, and by a further **11.4%** if they were collected from the non-vulnerable informal sector (see Figure 2.17).

3. Redistributing tax revenues: the benefits of joining the informal sector

This section calculates the counterfactual of how much the marginal tax burden of non-vulnerable households would have to be increased in order to lower the Gini index by 10% in two cases: (1) if the tax were levied on all households, i.e., both formal and informal (see Figure 2.18), and (2) if it only applied to formal households (see Figure 2.19). The calculations follow

Figure 2.16. Concentration curve of personal income tax in Costa Rica

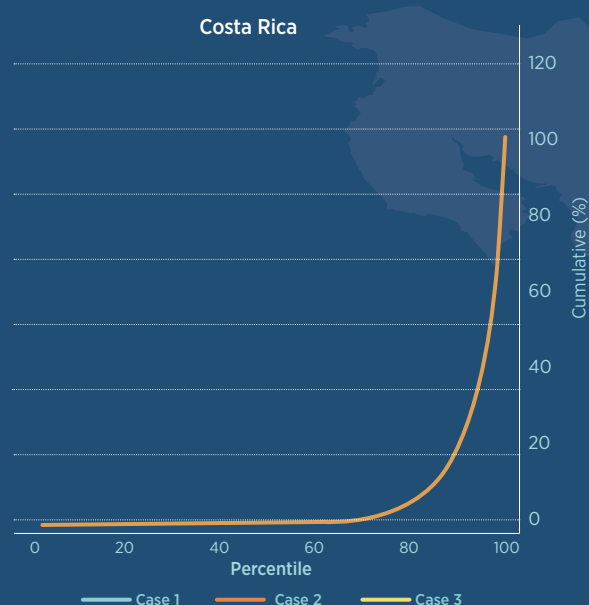
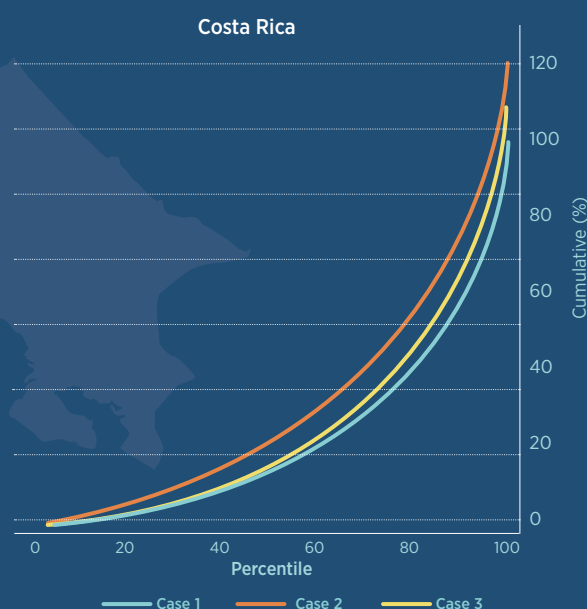


Figure 2.17. Concentration curve of social security contributions in Costa Rica



Source: Own calculations. Note: Case 1 - The current situation. Case 2 - All informal households paying tax. Case 3 - Non-vulnerable informal households paying tax. Horizontal axis: cumulative share of the population in order of market income level. Vertical axis: cumulative proportion of tax revenues.

the methodology proposed in Ravallion (2009) (see Appendix 2.2). As can be seen in Figures 2.18 and 2.19, if only the formal sector rather than the entire economy were taxed, the marginal tax rate would need to be three times higher to reduce the Gini index by 10%. Charging only the formal sector to reduce inequality would severely punish it and create major distortions in investment in human and physical capital, in addition to the associated considerations regarding the fairness of the social contract. The resources thus obtained could be channeled to the poorest through greater public investment in human capital, as shown previously.

Meanwhile, these estimates are consistent with Ravallion (2009) in that the poorest countries require much higher tax rates than the richest countries in order to achieve similar levels of redistribution, due to the lower levels of per capita income.

In sum, the informal economy, particularly with regard to non-vulnerable households, poses significant challenges to ensuring higher tax revenues, greater fiscal fairness, and improved human capital in the lower income deciles.

At the same time, it is important to stress that this analysis does not seek to identify which taxes are required, which groups they should be applied to or where there is more room for increasing tax revenues, but instead provides an additional tool for assessing the challenge posed by informality, with special emphasis on informality in the higher income deciles.

Formalizing the non-vulnerable would reduce the rate of inequality by 10% by increasing tax on earnings by 10%

Figure 2.18. Percentage increase required in the marginal tax burden of non-vulnerable households in order to reduce the Gini by 10%.

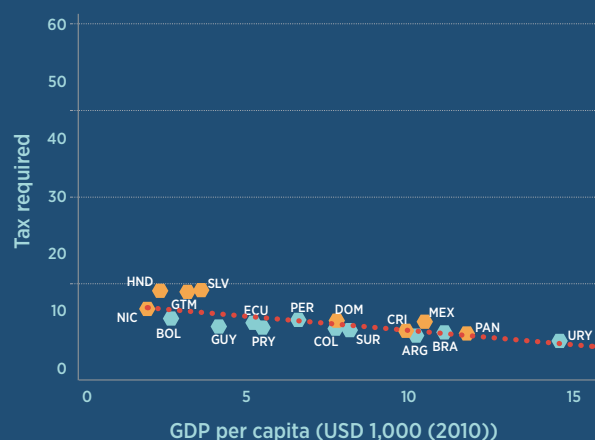
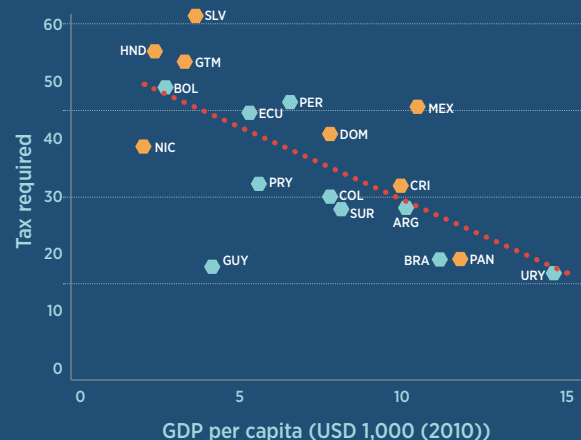


Figure 2.19. Percentage increase required in the marginal tax burden of non-vulnerable formal households in order to reduce the Gini by 10%.



Source: Own calculations based on household income surveys.

4. Conclusion

The results of measuring the net tax benefit of households in El Salvador, Mexico, and Costa Rica show that before spending on education and healthcare is taken into account, all vulnerable households in Mexico and El Salvador pay more in than they get back, which is also true for half of El Salvador's poor households. When spending on education and healthcare is included, we see a substantial improvement in the effect fiscal policies have on vulnerable households. However, in the case of Costa Rica, we find that since the tax authorities have additional sources of revenue, all vulnerable households are net beneficiaries, even when education and healthcare are excluded. The significant burden of employer contributions and income tax brackets play a role in this, and their effects require further study.

Meanwhile, cash transfers are the single most important spending item in terms of increasing the net benefit in the lowest income decile.

While healthcare and education make vulnerable households net recipients on average, the distinction between households that have formal sources of income and those that do not needs to be taken into account. Once this distinction is made, the estimates reveal there to be a disproportionate burden on the formal sector, particularly among the non-vulnerable population, which may significantly affect the incentives to contribute to social protection systems and thereby make it difficult to directly finance both education and health services and to collect tax revenues in general, which are needed to meet all of the other obligations of the state.

The counterfactual of how much extra income tax revenue would be collected if the informal sector were to pay it—as well as an alternative calculation estimating what would happen if only the non-vulnerable informal sector did so—shows that an important source of tax revenue and fiscal fairness exists.

Lastly, the results show that reducing inequality by increasing the income tax rate means targeting the informal sector in a way that **is viable in terms of applying a moderate rate that does not create any major distortions.**

The present analysis provides a number of important insights into public policy. On the one hand, in terms of redistribution, using public spending on education and healthcare is an effective strategy. However, it is important that the coverage of these systems goes hand in hand with improved quality as there are lags in this regard. At the same time, it is important to implement policies to encourage greater formalization of the economy, focusing particularly on fiscal fairness in the non-vulnerable informal sector. To achieve this, changes to the social protection system aimed at reducing the costs of formality and expanding the protection system could be considered (Levy, 2008), as well as efforts to make tax collection more efficient, placing particular emphasis on the non-vulnerable informal sector. The use of technology and data intelligence could make a substantial contribution to the latter.

Appendix 2.1

Details of methodology used in the measurements of each country

El Salvador

Households are estimated to pay 13% of their current cash spending on VAT. Data on current cash spending is explicitly reported in the 2018 Multipurpose Household Survey (EHPM, 2018).

Social security contributions are taken to be those paid by the employee. Based on the report (OECD, IDB, and CIAT, 2016), these contributions are estimated to be 7.7% of an employee's salary. This calculation only applies to those employed in the formal sector.

With respect to income tax, the formally employed are deemed to pay taxes as per the table below. For formal self-employed workers, a 25% tax is included as corporate income tax. The percentage of self-employed persons paying taxes associated with each percentile is taken as the formality rate among the self-employed. In other words, if a self-employed person is in the 80th percentile, the likelihood of his or her being formal is assumed to be the percentage of formal employers that employees in the 80th percentile report in the survey. Furthermore, an additional 10% capital gains tax (stock dividends and interest) is included.

Income bracket (dollars)	Variable income tax amount	Fixed amount
Less than 487.7	0	0
487.8 to 642.86	10% on income over 487.6	17.48
642.87 to 915.82	10% on income over 642.86	32.7
915.83 to 2,058.68	20% on income over 915.4	60.0
More than 2,058.68	30% on income over 2,058.68	288.57

Education spending was calculated based on UNESCO data, according to which the education budget represents 3.6% of GDP, equivalent to 21.6% of all revenue from VAT and taxes on earnings. Thus, the total amount spent on education is calculated to be 21.6% of all estimated taxes, which is distributed among public school students as follows: 57% primary education, 34% secondary, and 9% tertiary (UNESCO).

Spending on healthcare is calculated to be 27.6% of all revenue from VAT and taxes on earnings. The figure of 27.6% is based on WHO data, according to which the government spends 4.6% of GDP on healthcare. The distribution of this expenditure is determined based on the share of the budget that each type of coverage represents. Specifically, according to the official budgets, 57.56% of healthcare spending is allocated to the ISSS (Salvadoran Institute of Social Security) system, 3.3% to the Bienestar Magisterial (teachers' welfare) system, and 39.14% to those with no health insurance. As categories such as "Hospital Militar" (Military Hospital), "Colectivo" (Collective), and so on represent less than 0.5% of the sample, they are simply allocated the ISSS budget.

Government transfers include the cash transfers that households report having received and non-contributory pensions. In addition, households state whether or not they receive water, electricity, and gas subsidies. According to the report (Tornarolli and Vázquez, 2012), spending on the water consumption subsidy is split 8.2%, 15.3%, 20%, 25.5%, and 31.1% among each quintile in ascending order. This spending averages approximately US\$4.5 per person. The electricity subsidy is US\$3-4 per household, depending on the household's electricity usage. Since most households' electricity consumption qualifies them for the 4-dollar subsidy, we assume that only the lowest quintile receives 3 dollars. Lastly, the gas subsidy is 6 dollars per household.

Mexico

VAT is estimated to account for 16% of households' current cash spending, excluding spending on housing, food, and medicines. The information on current cash spending is explicitly reported in the 2018 National Survey of Household Income and Expenditure (ENIGH, 2018).

Social security contributions are taken to be those paid by the employee. Based on the report (OECD, IDB, and CIAT, 2016), these contributions are estimated to be 2% of an employee's salary. This calculation only applies to those employed in the formal sector.

With respect to income tax, the formally⁸ employed are deemed to pay as per the table below. For formal self-employed workers, a 30% tax is included as corporate income tax. The formality rate of self-employed workers in each percentile is assumed to be the same as the formality rate of employees in that percentile. Furthermore, an additional 10% tax on capital gains (stock dividends and interest) is included. The latter are calculated based on information on the sale of shares and withdrawal of funds by households, considering the real yield of the financial market in Mexico in 2018 (2.81%).

Education spending was calculated based on UNESCO data, according to which the education budget represents 4.9% of GDP, equivalent to 38.8% of all revenue from VAT and taxes on earnings.

Income bracket (pesos)	Variable income tax amount	Fixed amount
Less than 490.07	1.92% of income	0
490.08 to 4,910.18	6.4% on income over 490.07	11.11
4,910.19 to 8,629.2	10.88% on income over 4,910.18	288.33
8,629.3 to 10,031.07	16% on income over 8,629.2	692.96
10,031.08 to 12,009.94	17.92% on income over 10,031.07	917.26
12,009.95 to 24,222.31	21.36% on income over 12,009.94	1,271.87
24,222.32 to 38,177.69	23.52% on income over 24,222.31	3,880.44
38,177.70 to 72,887.50	30% on income over 38,177.69	7,162.74
72,887.51 to 97,183.33	32% on income over 72,887.50	17,575.69
97,183.34 to 291,550.00	34% on income over 97,183.33	25,350.35
More than 291,550.00	35% on income over 291,550.00	91,435.02

⁸ In the case of those individuals who charge on a fees-for-service basis, they may pay into the social security system yet not pay income tax. However, according to data from the National Survey of Occupation and Employment (ENOE) for the first quarter of 2019, this corresponds to less than 1% of workers.

Thus, the total amount spent on education is calculated to be 38.8% of all estimated taxes, which is distributed among public school students. The share of resources allocated is based on the report of the Ministry of Finance and Public Credit (SHCP, 2020), which includes a per-pupil spending of 19,300, 17,600, 27,000, 36,900, and 82,700 for preschool, primary, secondary, high school, and tertiary education, respectively.

Healthcare is reported in the survey by means of variables that indicate the amount received in primary and hospital care.

Government transfers include the cash transfers that households report having received and non-contributory pensions.

Costa Rica

Households are deemed to pay 13% of their overall current cash spending in General Sales Tax, and a rate of 5% is applied for electricity consumption. The tax is not payable on food and medicine. The information on current cash spending is explicitly reported in the 2018 National Survey of Household Income and Expenditure (ENIGH, 2018). As the data on income is taken from the National Household Survey (ENAH, 2018), average VAT is calculated for each decile in the ENIGH and applied to each decile of the ENAH.

Social security contributions are taken to be those paid by the employee. Based on the contribution calculator of the Costa Rican Social Security Fund, we apply a rate of 10.5% for employee contributions. However, those employees who earn less than the minimum contribution threshold (275,000 colones) pay 10.5% of 275,000. This calculation only applies to those employed in the formal sector.

With respect to income tax, the formally employed are deemed to pay taxes as per the table below. For formal self-employed workers, a 25% tax is included as corporate income tax.

Education spending was calculated based on information from UNESCO, which indicates that the education budget represents 7% of GDP, equivalent to 62.7% of all revenue from general

Income bracket (colones)	Variable income tax amount	Fixed amount
Less than 840,000	0	0
840,001 to 1,233,000	10% on income over 840,000	0
1,233,001 to 2,163,000	15% on income over 1,233,000	39,300
2,163,001 to 4,325,000	20% on income over 2,163,000	178,800
More than 4,325,000	25% on income over 4,325,000	611,200

sales taxes and taxes on earnings. Thus, the total amount spent on education is calculated to be 62.7% of estimated taxes and is distributed among public school students as follows: 29% primary education, 48% secondary, and 23% tertiary (UNESCO).

Total spending on healthcare is calculated to be 48% of the revenue from general sales taxes and taxes on earnings. The figure of 48% is based on WHO data, according to which the government spends 5.4% of GDP on healthcare. We use a uniform distribution of this expenditure, given Costa Rica's universal insurance scheme.

Government transfers include the cash transfers that households report having received and non-contributory pensions.

Appendix 2.2 2.2 Calculation of tax required based on Ravallion (2009)

We assume a hypothetical redistributive model in which a household's per capita income over and above the vulnerability threshold is taxed a percentage τ . The proceeds are redistributed by means of a progressive transfer equal to a percentage R of the difference between the per capita income of poor households and the poverty line. If the revenue is enough to close that gap entirely, i.e., $R > 100\%$, $R - 100\%$ of the gap between households and the vulnerability threshold starts being transferred. The tax τ required to finance R is calculated according to the following formula:

$$\tau = \left(\min(R, 1) \sum_{i=1}^p (y_p - y_i) + \max(R - 1, 0) \left[p(y_v - y_p) + \sum_{i=p+1}^v (y_v - y_i) \right] \right) \left[\sum_{i=v+1}^N (y_i - y_v) \right]^{-1}$$

In the above formula, y_p is the income of an individual who is on the poverty line and y_v , the income of an individual who is at the threshold of vulnerability. Thus, income vector Y becomes Y' if $R < 100\%$ or Y'' otherwise. Note that $R=1$ eliminates poverty and $R=2$ eliminates vulnerability.

$$Y = \begin{pmatrix} y_1 \\ y_2 \\ \vdots \\ y_{p-1} \\ y_p \\ y_{p+1} \\ \vdots \\ y_{v-1} \\ y_v \\ y_{v+1} \\ \vdots \\ y_{N-1} \\ y_N \end{pmatrix}; Y' = \begin{pmatrix} y_1 + R(y_p - y_1) \\ y_2 + R(y_p - y_2) \\ \vdots \\ y_{p-1} + R(y_p - y_{p-1}) \\ y_p \\ y_{p+1} \\ \vdots \\ y_{v-1} \\ y_v \\ y_{v+1} - \tau(y_{v+1} - y_v) \\ \vdots \\ y_{N-1} - \tau(y_{N-1} - y_v) \\ y_N - \tau(y_N - y_v) \end{pmatrix}; Y'' = \begin{pmatrix} y_p + (R - 1)(y_v - y_p) \\ y_p + (R - 1)(y_v - y_p) \\ \vdots \\ y_p + (R - 1)(y_v - y_p) \\ y_p + (R - 1)(y_v - y_p) \\ y_{p+1} + (R - 1)(y_v - y_{p+1}) \\ \vdots \\ y_{v-1} + (R - 1)(y_v - y_{v-1}) \\ y_v \\ y_{v+1} - \tau(y_{v+1} - y_v) \\ \vdots \\ y_{N-1} - \tau(y_{N-1} - y_v) \\ y_N - \tau(y_N - y_v) \end{pmatrix}$$

In this exercise, we sought to find an R for each country that would reduce the Gini index by 10% and reported the tax τ required for this to occur.

If we assume that only formal households are taxed, and F_i is the binary variable to indicate whether household i is formal or not:

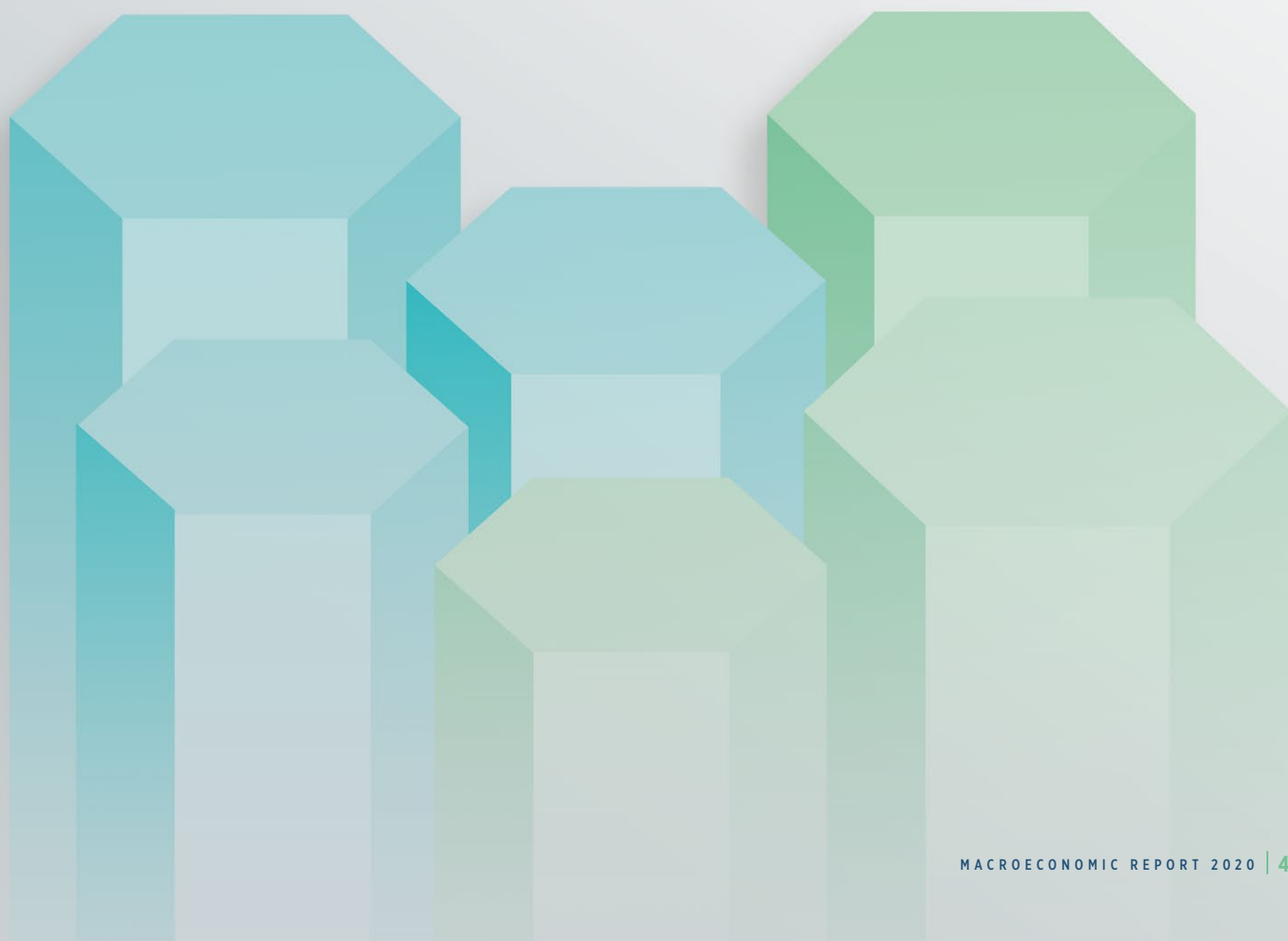
$$\tau = \left(\min(R, 1) \sum_{i=1}^p (y_p - y_i) + \max(R - 1, 0) \left[p(y_v - y_p) + \sum_{i=p+1}^v (y_v - y_i) \right] \right) \left[\sum_{i=v+1}^N F_i (y_i - y_v) \right]^{-1}$$

$$Y = \begin{pmatrix} y_1 \\ y_2 \\ \vdots \\ y_{p-1} \\ y_p \\ y_{p+1} \\ \vdots \\ y_{v-1} \\ y_v \\ y_{v+1} \\ \vdots \\ y_{N-1} \\ y_N \end{pmatrix}; Y' = \begin{pmatrix} y_1 + R(y_p - y_1) \\ y_2 + R(y_p - y_2) \\ \vdots \\ y_{p-1} + R(y_p - y_{p-1}) \\ y_p \\ y_{p+1} \\ \vdots \\ y_{v-1} \\ y_v \\ y_{v+1} - \tau(y_{v+1} - y_v) \\ \vdots \\ y_{N-1} - \tau(y_{N-1} - y_v) \\ y_N - \tau(y_N - y_v) \end{pmatrix}; Y'' = \begin{pmatrix} y_p + (R-1)(y_v - y_p) \\ y_p + (R-1)(y_v - y_p) \\ \vdots \\ y_p + (R-1)(y_v - y_p) \\ y_p + (R-1)(y_v - y_p) \\ y_{p+1} + (R-1)(y_v - y_{p+1}) \\ \vdots \\ y_{v-1} + (R-1)(y_v - y_{v-1}) \\ y_v \\ y_{v+1} - \tau F_{v+1}(y_{v+1} - y_v) \\ \vdots \\ y_{N-1} - \tau F_{N-1}(y_{N-1} - y_v) \\ y_N - \tau F_N(y_N - y_v) \end{pmatrix}$$

CHAPTER 3

Mitigating the Risk of Polarization in the Region

Arnoldo López Marmolejo and Carlos Eggers Prieto



CHAPTER 3

Mitigating the Risk of Polarization in the Region

Arnoldo López Marmolejo and Carlos Eggers Prieto

1. Introduction

Recent events in various Latin American countries and around the world have shown that strong social polarization on ideological, economic, or faith-based grounds can lead to conflict, in turn inhibiting economic growth and development. In particular, a number of cases in South America have attracted international attention, including those of Bolivia, Ecuador, Colombia, and Chile. These conflicts have manifested themselves in the form of civil protest, which on many occasions has resulted in violent clashes, property damage, and a general breakdown in public order.

The countries of the region that comprises Mexico and the Central American isthmus are no exception. Unfortunately, there have been emerging signs of conflict in these countries in recent years. For example:



In 2019 Honduras saw **violent demonstrations against a proposed reform** of its health and education systems, demonstrations that were eventually disbanded.



In January 2017 in Mexico, protests and looting of businesses erupted in the wake of a **20% hike in gasoline prices**.



Between 2016 and 2019, major demonstrations **took place in Costa Rica in response to proposed reforms to taxation and employment in the public sector**.



In 2015, a corruption scandal in Guatemala triggered **mass student protests, which subsequently abated after a number of politicians were put in jail and the election of a political outsider as president**.



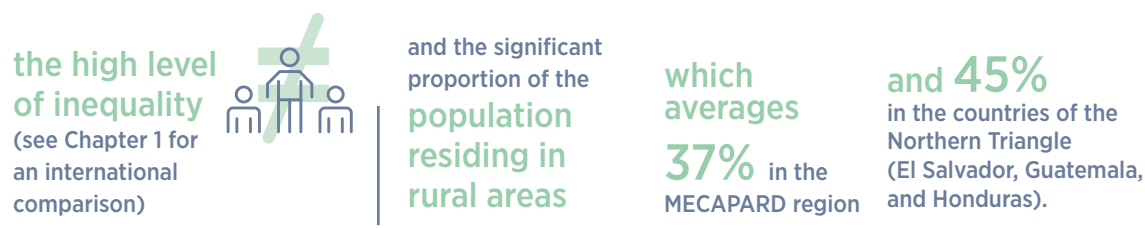
Changes made to the pension system in Nicaragua in 2018 **led to student protests that left many dead and the opposition calling for an early election, which never materialized**.

Various studies have indicated that one of the most important factors underlying the existence of conflicts within societies is the level of polarization (see Esteban and Ray, 2011, 2012; Reynal-Querol, 2002a). Therefore, and given the emerging signs of conflict, it is important to assess the levels of polarization in the countries of the region comprising Mexico, Central America, Panama, and the Dominican Republic (henceforth referred to as MECAPARD). We are not aware of any polarization measurements for these countries. ‘Polarization’ is understood to mean a situation where tensions exist between certain groups within a society, thereby creating a potential for conflict that expresses itself to varying degrees in the form of protests, unrest, and in the most extreme cases, civil war. Those who belong to these groups identify with one another based on specific characteristics, such as social class, ideology, religion, ethnicity, and so forth, while at the same time setting themselves apart from other groups. Polarization is thought to be greater when the groups are relatively similar in size. Intuitively, this occurs because if one group is much larger than the other, the difference between them diminishes the potential for conflict. Similarly, polarization is thought to be greater when the gap between groups is more marked. If the gap is calculated on the basis of each group’s income, we get a measure of what is commonly referred to as “horizontal inequality.”

Initially, the underlying factor in any conflict was thought to be the income inequality between individuals; however, **there is now evidence (Hillesund *et al.*, 2018) to show that the real driving force behind such conflict is the inequality between different groups within a society (horizontal inequality).** Recent studies (Wang *et al.*, 2017, 2018) have shown that, rather than inequality, what has a greater negative impact on respect for private property, mental health, and economic growth is polarization.

The literature (see Reynal-Querol, 2002a, 2002b, 2005) has shown that the ability to mitigate the risk of conflict depends more on the level of inclusiveness and representativeness of a political system than on the existence of democracy per se. The intuition of this is that in inclusive political systems the various groups that comprise their populations manage to get at least some of their agenda incorporated into public policy, thereby raising the opportunity cost of triggering a conflict in order to achieve their goals. For this reason, the end of the chapter includes a discussion on institutional aspects of the inclusiveness of the region’s political system.

Below we present a series of indicators of polarization both by income level and by geographical area of residence (i.e., urban or rural) for the Dominican Republic, Mexico, Panama, and the countries of Central America. These two facets of polarization are included because they represent two particularly relevant features of the region:



2. Results: Application to Mexico, the Central American isthmus, and the Dominican Republic

The income polarization index is calculated using the methodology of Duclos *et al.* (2004). The calculations are based on the available income surveys for the countries from 1995 on. This allows us to estimate a series of historical data for each. The results also allow us to compare the level for any given year against European countries for which estimates already exist.

To calculate the polarization index by area of residence (i.e., rural or urban), we use the polarization index of Esteban and Ray (1994). Details on the methodology used for calculating both measures of polarization can be found in Eggers and López-Marmolejo (2020), along with estimates based on other social characteristics for the region.

2.1 Income polarization

Income polarization arises when a clustering or grouping of significant numbers of individuals with similar income levels exists within the income distribution. The polarization is greater the larger the clusters and the greater the distance between them. Figure 3.1 shows the evolution of the index by country. The results indicate that countries of the MECAPARD region have experienced a slight decrease in income polarization. In the cases of El Salvador, the Dominican Republic, and to a lesser extent, Panama, Mexico and Guatemala, the trend is encouraging.

Nevertheless, the levels in MECAPARD countries are still some way off those of OECD (Organization for Economic Co-operation and Development) countries, as can be seen in the graph below:

Polarization in the region is **50% higher** than in Europe

Figure 3.1. Polarization index by income level:

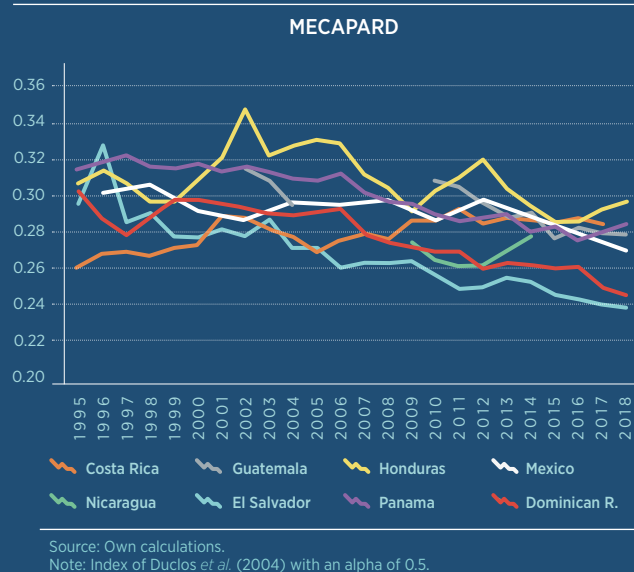
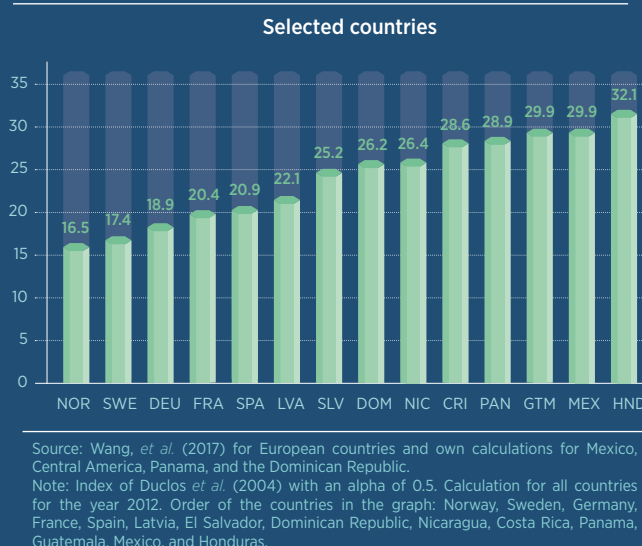


Figure 3.2. Polarization index by income level:



2.2. Geographic polarization: urban and rural areas

The polarization between rural and urban groups presents a slight downward trend in some countries of the region (though this is not uniform), while in others, there have been no significant changes in this regard for the last ten years. Particularly notable is the reduction in El Salvador (see Figure 3.3).

It is important to bear in mind that the population of urban areas has increased while that of rural areas has decreased. It is clear that the population in urban areas has come to constitute the majority in all countries of the region, though by a narrow margin in some. If this pattern continues, the level of polarization may well tend to decrease over time. However, the proportion of people living in rural areas within the region remains high. Moreover, the income difference between these two groups is substantial. These two factors contribute to ensuring a high level of polarization according to this index. Table 3.1 shows the proportion of people in each country who live in urban areas. It is worth noting that countries where the percentage of people living in rural and urban areas is similar (such as Honduras, Panama, and Guatemala) have higher levels of geographic polarization.

Table 3.1 Urban population as a percentage of the total

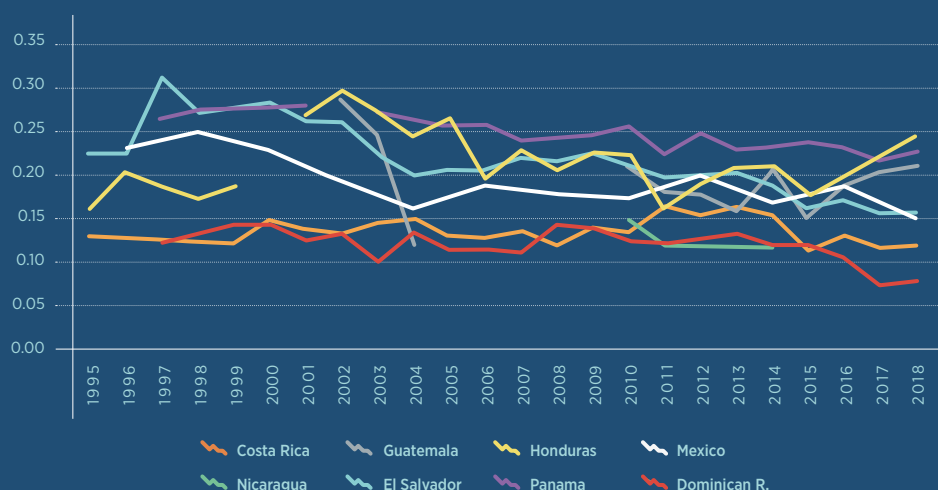
Country	2006	2018
Costa Rica	39.6	69.0
Dominican Rep.	68.5	73.6
Guatemala	38.4	59.5
Honduras	52.2	53.3
Mexico	61.4	60.5
Nicaragua*	47.7	80.3
Panama	54.3	53.2
El Salvador	48.9	51.6

Source: Own calculations based on household surveys.

*Calculations for the year nearest to that shown in the table for which data are available: Nicaragua 2005 and 2014

Figure 3.3. Geographic polarization index:

urban and rural areas



Source: Own calculations.

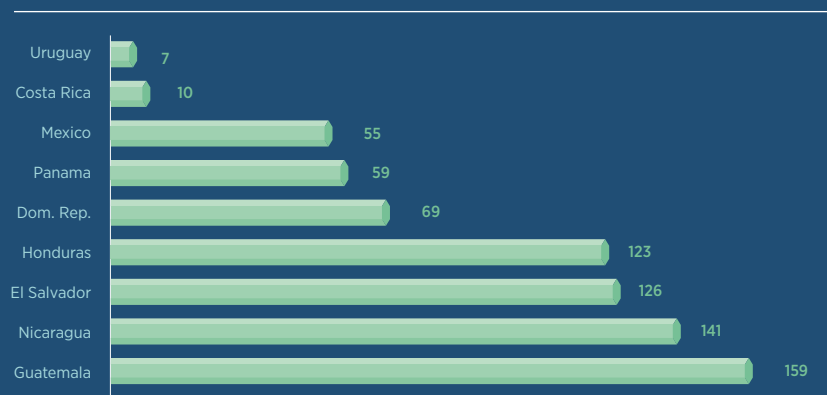
Note: Estimation based on the index of Esteban and Ray (1994).

3. Institutional aspects that help mitigate the potential for conflict

Besides polarization itself, it is important to consider the institutional aspects that influence how this translates into conflict. As mentioned in the introduction to this chapter, government institutions that are more inclusive and representative of different social groups tend to mitigate the adverse effects of polarization on political and social stability. Specifically, inclusive government institutions are considered to be those that give a voice within the political system to groups and ideas that are not in the majority. However, there is a gap between the region and more developed countries with respect to the level of inclusiveness of public institutions. As regards equality of political power by social group, the countries in the region are lagging behind compared to the rest of the world (ranking 55th or lower out of a total of 163 countries), with the exception of Costa Rica, which ranks tenth in the world. Several countries rank even lower than 120th (see Figure 3.4). An analysis of whether political power is distributed according to people's economic status also shows the region to be lagging behind: Mexico is in 49th place, while several countries of the region rank lower than 110th (see Figure 3.5). The highest-ranking country in Latin America is Uruguay.

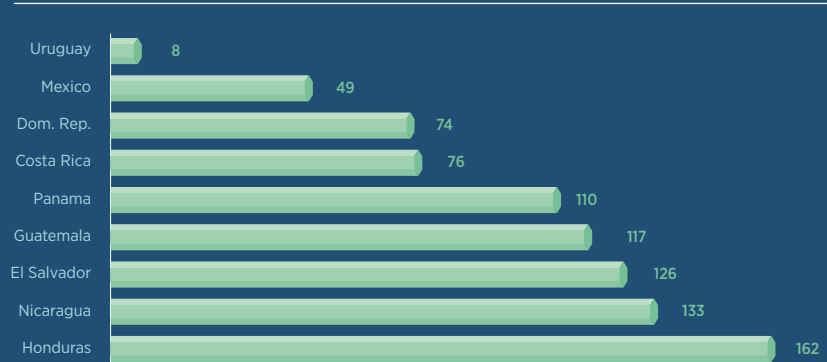
The countries of the region rank lower than **50th in the world** in terms of equal distribution of political power, with several countries ranking below 110th

Figure 3.4. World ranking in equality of political power by social group



Source: Social Progress Index (2020) based on the Varieties of Democracy Project (2019). Country experts' aggregated evaluation of the question: Is political power distributed according to social groups (defined by caste, ethnicity, language, race, religion or some combination thereof)? 0 (unequal power): Political power is monopolized by one social group comprising a minority of the population. 4 (equal power): All social groups have equal political power.

Figure 3.5. World ranking in equality of political power by socioeconomic position



Source: Social Progress Index (2020) based on the Varieties of Democracy Project (2019). Country experts' aggregated evaluation of the question: Is political power distributed according to socioeconomic position? 0 (unequal power): Wealthy people enjoy a dominant hold on political power. 4 (equal power): Wealthy people have no more political power than those whose economic status is average or poor.

With regard to the political inclusion of social minority groups, the Othering and Belonging Institute estimates that **in 2018 the percentage of members of ethnic minorities in the MECAPARD region with no political power or who were excluded stood at 15%, more than double the OECD average of 7%.**

One way to promote the inclusion of ethnic minorities in public policy making is to introduce laws to facilitate their presence in national legislatures. In this regard, Figure 3.6 shows that the percentage of countries in the Americas (rather than just the Central American isthmus, for which data are not publicly available) that have such laws is very low, and far below the worldwide average.

Similarly, we see that the presence of representatives of ethnic minorities in the national legislatures of the region is very low, their holding an average of barely 4% of the total number of seats in those of Mexico and the countries of the Central American isthmus. This is despite the fact that in several countries the number of political parties in the national legislature is very large, which would suggest that ethnic minorities are not gaining access to public decision-making through that channel. The low level of ethnic diversity within the national legislatures of the region stands in stark contrast to the percentage that ethnic minorities represent of the total population of Mexico and the Central American isthmus, where they account for an average of 14% of the population. Figure 3.7 shows a comparison between the percentage of national legislature seats held by members of ethnic minorities and the percentage of the total population that such groups comprise. The 45-degree line indicates perfect representation, i.e., the point where the percentage of seats held by ethnic minorities in the national legislature is equal to the proportion of the population they represent. Most countries fall clearly below this line, meaning their ethnic minorities are underrepresented.

The low participation rate of women in the region's legislatures is also notable. Only in Costa Rica, Nicaragua and Mexico do women get anywhere close to holding 50% of the seats in the national legislature, whereas in other countries of the region, the figure is around 20% (see Figure 3.8), the MECAPARD average being 30% and the Northern Triangle average being 24%.

According to the literature (Reynal-Querol, 2002b), the most inclusive and least conflictive

In most countries of the region, women hold fewer than **30% of congressional seats. The percentage of minorities in national legislatures is 66% below the percentage of the population they represent.**

Figure 3.6. Percentage of countries with legislation to facilitate the presence of minorities in national legislatures by region

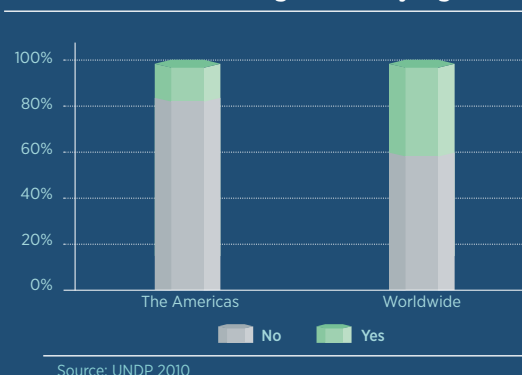


Figure 3.7. Distribution of national legislature seats held by ethnic minorities

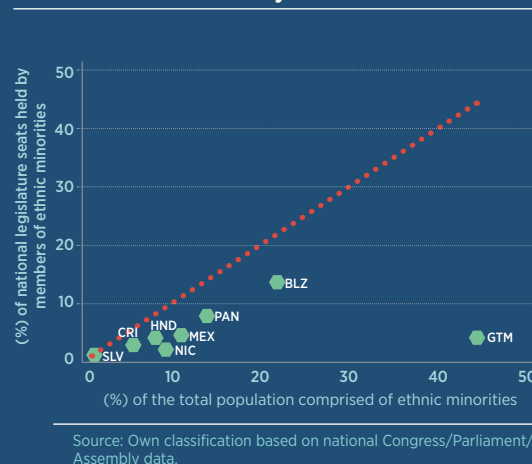
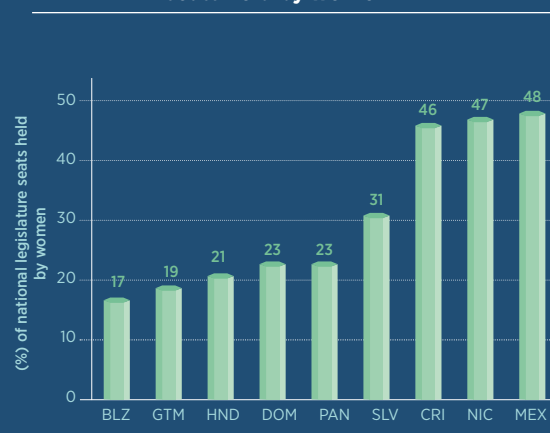
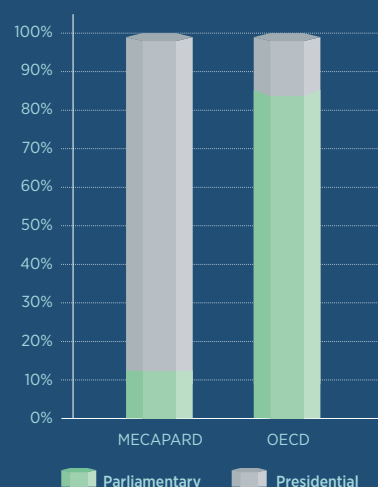


Figure 3.8. Distribution of national legislature seats held by women



Source: Own classification based on national Congress/Parliament/Assembly data. For bicameral systems, the lower house is shown (i.e., the Chamber of Deputies for Mexico and the House of Representatives for Belize). Distribution of national legislature seats at August 2020.

Figure 3.9. Political system by region

Source: World Bank Database of Political Institutions (2012).
 Note: Mexico and Costa Rica are included in the MECAPARD calculation but excluded from that for the OECD.

form of political organization is the parliamentary system, as opposed to the predominant one in MECAPARD countries, the presidential system (see Figure 3.9). The intuition of the above is that in parliamentary democracies, groups unable to attain a majority enjoy a certain degree of representation and influence that allows them to sway policy to such an extent that their support is needed in order to form a government. However, in presidential systems, groups unable to achieve a majority have less chance of seeing their interests reflected in policy, and therefore have a greater incentive to pursue their agenda outside the formal institutional system, which can ultimately lead to riots and clashes. Some systems lie somewhere between the two, for example those in which Congress exercises a significant role in the policy implementation process;⁹ and in which there is not only legislation in place to increase the political representation of minorities but also mechanisms to strengthen the institutionality and independence of political parties without restricting political involvement.

In sum, the institutional structure of the region that is characterized by limited inclusiveness in public policy decision-making could restrict the region's ability to avert any potential conflicts that might result from the high level of polarization.

⁹ However, no such classification is available for the countries of the region.

4. Conclusion

As has occurred in a number of Latin American countries, social protest can quickly degenerate into violent acts that drastically undermine political and social stability. These conflicts are often associated with high levels of polarization.

Compared to other countries around the world, particularly those of the OECD, income polarization in the countries of the MECAPARD region is estimated to be high. At the same time, the polarization between urban and rural populations has remained unchanged in several countries of the region for the last decade.

The advent of the COVID-19 pandemic could increase polarization even further. As seen in Chapter 1, **the nature of this crisis could hit the lower-income population and those living in rural areas hardest, thereby increasing inequality between groups and, as a consequence, polarization.** It is also important to consider the changes in the size of the various groups.

A number of studies have shown that one very important factor in mitigating the potential for conflict that partly results from polarization is the degree of inclusiveness of the system of government. Several of the indicators discussed in this chapter suggest that the level of inclusiveness in the MECAPARD region is somewhat limited. There is an imbalance with respect to the equality of political power of the various social groups and the representation of minorities within the legislature, which impairs their ability to influence public policy decisions. The low levels of participation of ethnic minorities in the region's legislative systems are notable, and in several countries this is also true for women. It would therefore be useful to explore how the system of government could be made more inclusive, and thereby help further the development of the range of social groups and minorities, and thus reduce the threat of social conflict.

Appendix 3.1

Income polarization ($\alpha=0.5$)

Period	Costa Rica	Dominican Republic	El Salvador	Guatemala	Honduras	Mexico	Nicaragua	Panama	Chile
1995	0.264	0.303	0.297	.	0.308	.	.	0.315	.
1996	0.27	0.288	0.329	.	0.315	0.303	.	.	0.306
1997	0.272	0.28	0.287	.	0.308	.	.	0.322	.
1998	0.269	.	0.292	.	0.298	0.307	0.307	0.316	0.311
1999	0.273	.	0.28	.	0.298	.	.	0.316	.
2000	0.275	0.299	0.279	.	.	0.293	.	0.318	0.3
2001	0.29	0.297	0.283	.	0.322	.	0.348	0.314	.
2002	0.289	0.294	0.28	0.316	0.347	0.288	.	0.316	.
2003	0.283	0.292	0.288	0.309	0.323	.	.	0.314	0.307
2004	0.279	0.291	0.273	0.296	0.328	0.298	.	0.31	.
2005	0.271	0.292	0.273	.	0.331	.	0.304	0.309	.
2006	0.277	0.294	0.263	.	0.330	0.296	.	0.313	0.292
2007	0.281	0.281	0.265	.	0.312	.	.	0.303	.
2008	0.278	0.276	0.265	.	0.306	0.299	.	0.298	.
2009	0.288	0.274	0.266	.	0.293	.	0.276	0.297	0.273
2010	0.288	0.271	0.259	0.309	0.304	0.288	0.267	0.291	.
2011	0.294	0.271	0.251	0.306	0.311	.	0.264	0.288	0.292
2012	0.286	0.262	0.252	0.297	0.321	0.299	0.264	0.289	.
2013	0.289	0.265	0.257	0.289	0.305	.	.	0.291	0.286
2014	0.288	0.264	0.255	0.292	.	0.291	0.279	0.282	.
2015	0.286	0.262	0.248	0.279	0.287	.	.	0.284	0.279
2016	0.289	0.263	0.246	0.284	0.287	0.282	.	0.278	.
2017	0.286	0.252	0.243	0.281	0.294	.	.	0.282	0.281
2018	.	0.248	0.241	0.280	0.298	0.272	.	0.286	.

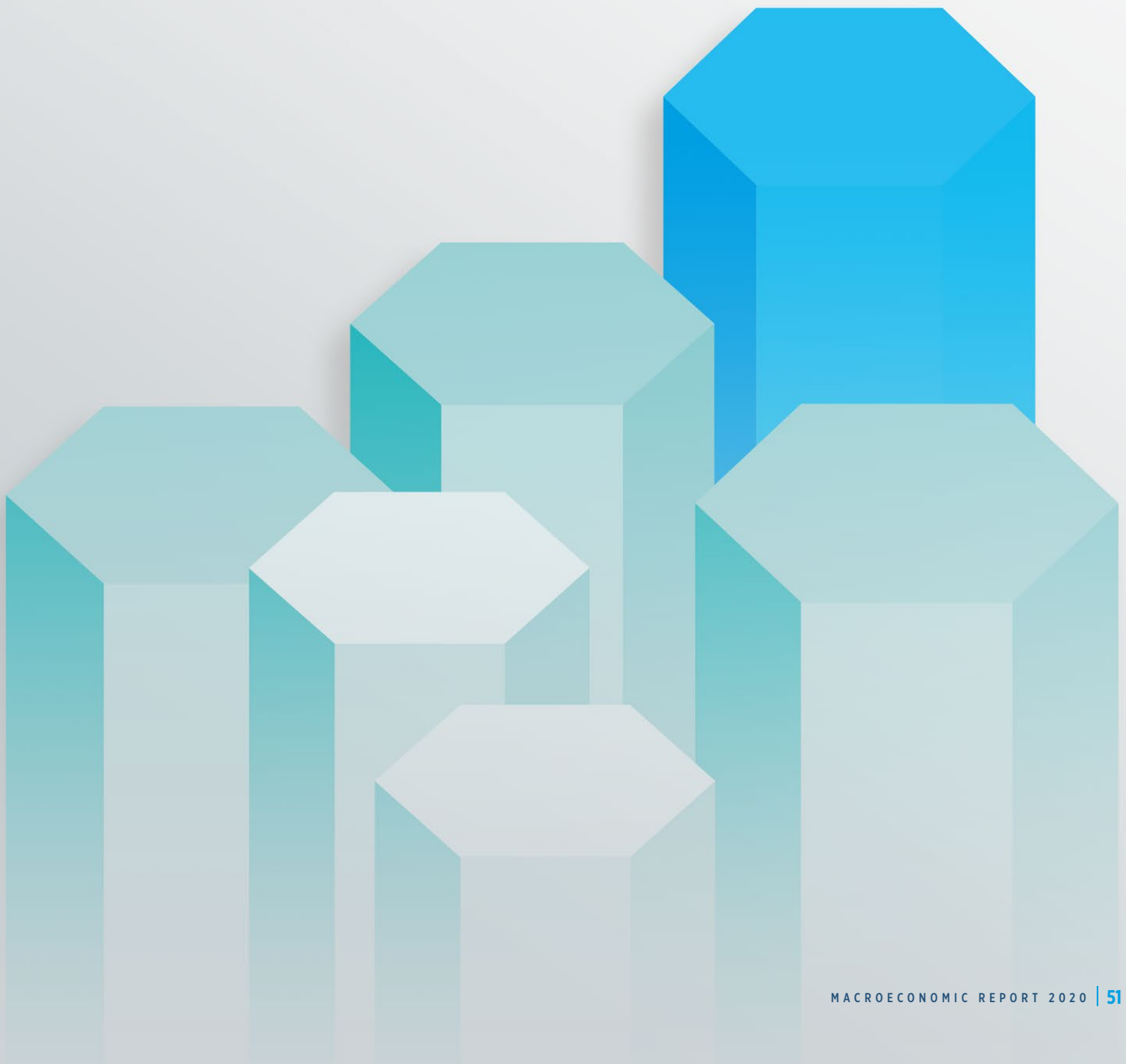
Polarization by geographic area: urban and rural

Period	Costa Rica	Dominican Republic	El Salvador	Guatemala	Honduras	Mexico	Nicaragua	Panama	Chile
1995	0.131	0	0.225	.	0.165	.	.	0.299	.
1996	0.129	0	0.225	.	0.207	0.231	.	.	0.159
1997	0.128	0.125	0.312	.	0.188	.	.	0.264	.
1998	0.128	.	0.271	.	0.175	0.248	0.191	0.275	0.166
1999	0.123	.	0.274	.	0.188	.	.	0.274	.
2000	0.15	0.144	0.282	.	.	0.229	.	0.276	0.182
2001	0.139	0.127	0.261	.	0.269	.	0.245	0.282	.
2002	0.135	0.133	0.26	0.288	0.296	0.191	.	.	.
2003	0.147	0.103	0.224	0.247	0.273	.	.	0.270	0.15
2004	0.15	0.136	0.2	0.123	0.243	0.163	.	0.264	.
2005	0.132	0.115	0.206	.	0.264	.	0.224	0.256	.
2006	0.13	0.117	0.205	.	0.196	0.189	.	0.258	0.114
2007	0.138	0.113	0.221	.	0.23	.	.	0.240	.
2008	0.123	0.145	0.216	.	0.205	0.180	.	0.242	.
2009	0.141	0.14	0.226	.	0.227	.	.	0.245	0.126
2010	0.137	0.126	0.215	0.214	0.223	0.175	0.151	0.255	.
2011	0.164	0.122	0.199	0.181	0.164	.	0.123	0.224	0.068
2012	0.157	0.128	0.200	0.18	0.19	0.200	0.123	0.247	.
2013	0.164	0.134	0.203	0.161	0.209	.	.	0.230	0.077
2014	0.156	0.122	0.189	0.206	0.211	0.170	0.121	0.233	.
2015	0.115	0.122	0.163	0.153	0.179	.	.	0.238	0.084
2016	0.133	0.107	0.173	0.186	0.199	0.188	.	0.232	.
2017	0.119	0.076	0.158	0.205	0.223	.	.	0.218	0.066
2018	0.120	0.080	0.158	0.212	0.245	0.154	.	0.228	.

CHAPTER 4

Public Perceptions in the Context of a Pandemic

Melanie Laloum and Jordi Prat



CHAPTER 4

Public Perceptions in the Context of a Pandemic

Melanie Laloum and Jordi Prat

In addition to assessing the evolution of diverse inequality indicators, it is important to ascertain the public's perception in this regard; therefore, this chapter attempts to juxtapose these two elements. It also describes how the COVID-19 outbreak has changed people's perceptions and priorities in the CAPARD region, a topic discussed in the second part of the chapter. More specifically, changes in public opinion are measured on the basis of opinion polls and comments on social media in three different months in 2020: January, May, and September. Monthly data can constitute an innovative tool with which to assess which public policies might be most appreciated by a society, particularly in the context of a crisis.

Perception and reality in the CAPARD region before the pandemic

Inequality

Despite relatively high Gini inequality coefficients in CAPARD, in most countries of the region people have a relatively weaker feeling of inequality than they do in other Latin American countries. A cross-country comparison (see Figure 4.1) reveals that a higher Gini index is not necessarily mirrored in a stronger sense of injustice. In fact, the countries with the highest Gini coefficients (Guatemala, Nicaragua, and Honduras) showed the weakest perception of injustice. Meanwhile El Salvador, which has the lowest Gini coefficient in CAPARD, had the highest level of perceived inequality. In 2018, almost all countries in the CAPARD region (except the Dominican Republic and El Salvador) had a Gini index above the regional median (of 46.3), yet in those same countries the distribution of income is perceived as unfair according to 55-80% of the respondents, which is lower than the LAC median of 80% of respondents. In Brazil and Colombia, people had a much stronger sense of unfairness with respect to the distribution of income, despite those countries' similar or higher Gini coefficients. At the same time, in 2018 El Salvador had one of the lowest Gini coefficients in LAC, yet one of the highest levels of perceived inequality (around 90%), which is very similar to what was found in Argentina and Chile. The Dominican Republic, which lies right in the middle, had a Gini index of 46.3 and 80% of respondents reporting a feeling of unfair distribution.

In recent years, the countries of the CAPARD region have experienced an improvement in the distribution of income that has not been reflected in a reduction in perceived inequality. Figure 4.2 shows that between 2010 and 2018 almost all LAC countries experienced a fall in their inequality index as measured by the Gini coefficient. Only in Brazil and Costa Rica did the Gini remain unchanged, while in Nicaragua there was a significant improvement (+7.4 points). However, over time there have been a

number of incongruities between the evolution of the Gini coefficient and the evolution of perceived inequality. These contradictions are to be found in most LAC countries, but particularly in Panama and El Salvador. The increase in the proportion of people who felt that the income distribution was unfair was particularly marked in Panama (+16 percentage points) and El Salvador (+13 percentage points), even though the Gini index of both countries fell (-2.1 and -7.1 points, respectively). Costa Rica's Gini coefficient remained stable, but perceived inequality increased by 7 points. The Dominican Republic and Guatemala are the only CAPARD countries that experienced both an improvement in their income distribution (i.e., a fall in the Gini coefficient) and a decrease in perceived inequality.

Unemployment

Concern over unemployment seems to be more closely linked to job insecurity than to the unemployment rate. In 2018, Costa Rica and Honduras had one of the highest unemployment rates in LAC, yet public concern over unemployment there was among the lowest (see Figure 4.3). Furthermore, the unemployment rates among the citizens of El Salvador, the Dominican Republic, and Nicaragua were below the regional median, yet the percentage of people concerned about unemployment was higher. This incongruity between concern over unemployment and the unemployment rate seems to be associated with the precariousness of the labor market and limited access to a social protection network, which can perhaps be understood by taking a look at the rate of informality (see Figure 4.4). El Salvador, the Dominican Republic, and Nicaragua had among the highest informality rates anywhere¹⁰ in the CAPARD region (over 60% of the workforce), coupled with a very high rate of concern over unemployment.¹¹

¹⁰ Measured based on the percentage of the working population that does not pay into the social security system.

¹¹ As discussed in Chapter 1, economies with high levels of informality are more vulnerable to economic shocks, as a larger proportion of the population have limited access to the social safety net.

Figure 4.1. Perceived unfair distribution vs. Gini index in 2018 (or most recent date for which data is available), % of respondents

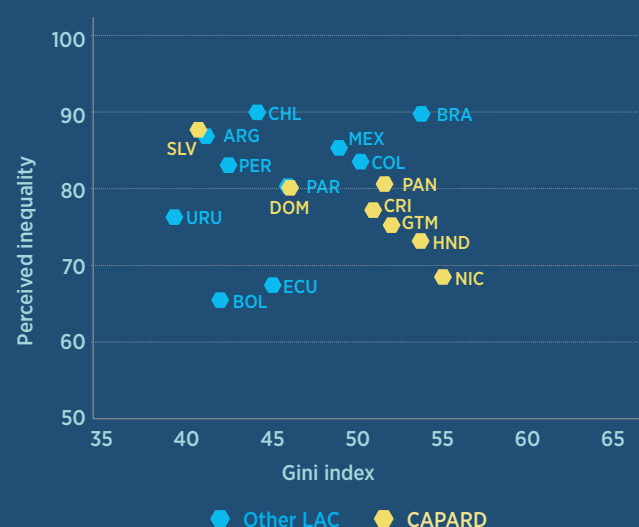
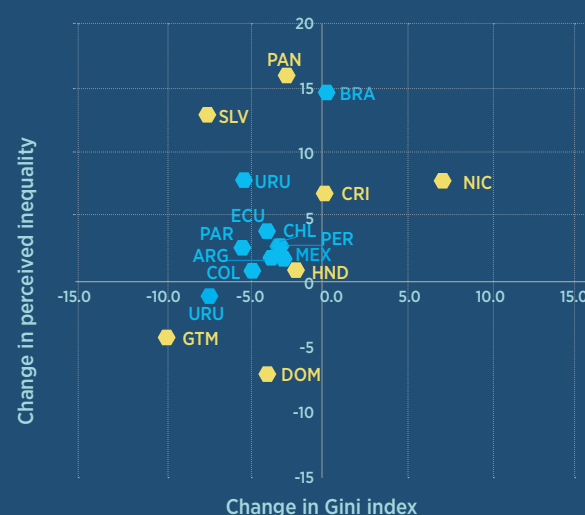


Figure 4.2. Change in perceived inequality and the Gini index between 2010 and 2018 (or most recent date for which data is available), % of respondents



Source: Own elaboration based on surveys of hours, World Bank and Latinobarómetro.

Question: "How fair do you consider the distribution of income to be in (country)?"

Figure 4.3. Unemployment rate vs. concern over unemployment in 2018 (or most recent date for which data is available)

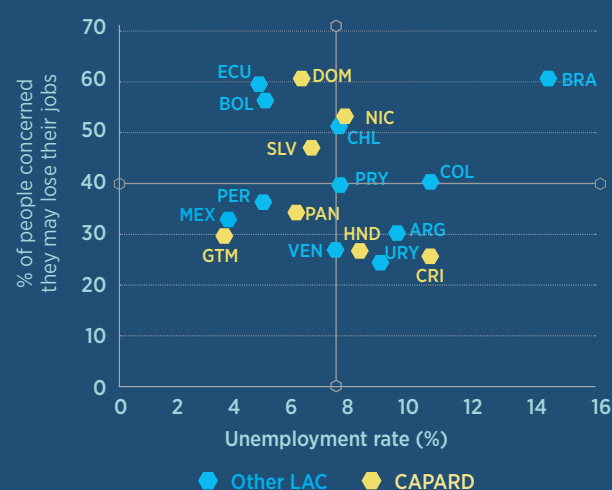
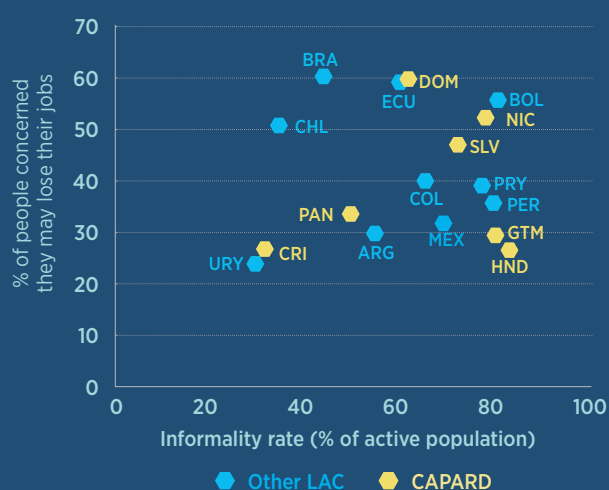


Figure 4.4. Informality rate vs. concern over unemployment in 2018 (or most recent date for which data is available)



Source: Latinobarómetro and national sources of unemployment statistics.

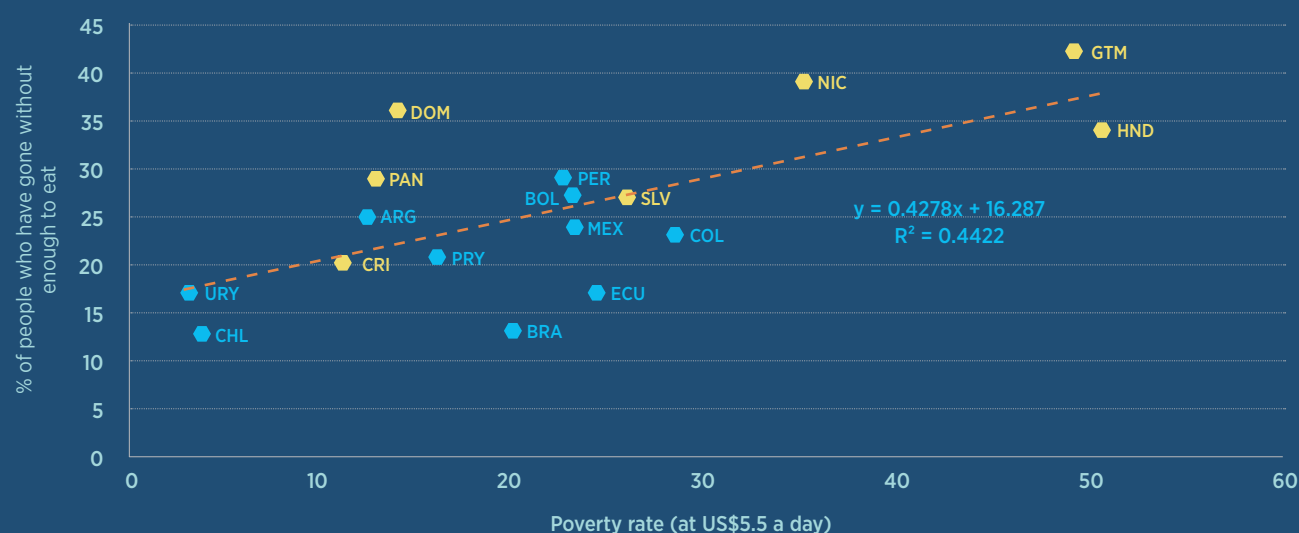
Question: "How concerned would you say you were about losing your job or being unemployed in the next twelve months?" Response: "Concerned"/"Very concerned."

Food insecurity

There is a positive correlation between perceived food insecurity and the level of poverty. In 2018, nearly one in three people in the CAPARD region reported having gone without enough food to eat either occasionally or often, a slightly higher proportion than the LAC median. This perceived food insecurity is consistent with poverty rates calculated on the basis of a poverty line of US\$5.5 a day (see Figure 4.5). The countries with the highest poverty rates in the region (Guatemala, Honduras, and Nicaragua) were also the ones that reported the greatest number of cases of food insecurity.

Besides the distribution of income, other factors impact upon the level of perceived inequality.

One way to get a better understanding of the relationship between inequality and people's perception that the distribution of income is unfair is to look at multi-dimensional inequality too. For example, the UNDP's Human Development Report (2019) states that while disparities in people's most basic needs (e.g., life expectancy at birth, access to primary education and basic technologies) have been reduced, a new crop of inequalities is emerging. These new gaps can be found in things such as access to advanced technologies, tertiary education, and the climate crisis, and reflect the new capabilities people require in order to prosper in the 21st century. Similarly, gaps in income and wealth often translate into political inequality, which can feed perceived inequality. Ridgeway (2013) emphasizes the importance of inequalities of status as well as those based on resources and power. Inequality of status creates differences between groups on the basis of factors such as gender, race, and lifestyle, thereby creating long-lasting inequality.

Figure 4.5. Relationship between the poverty rate and perceived food insecurity in 2018

Source: World Bank and Latinobarómetro.

Question: "How often have you or your family gone without enough food to eat?"

Crime and violence

Public insecurity and violence are perceived as one of the country's main problems¹², a perception that is linked to the region's high crime rate. By 2018, approximately one in three CAPARD citizens considered gang violence and crime to be either their country's foremost or second most important concern. This was higher than the LAC average (23.7% of citizens polled) and was linked to gangs (El Salvador, Guatemala, Honduras), street violence (Costa Rica, Panama, and the Dominican Republic), and domestic violence (Nicaragua and the Dominican Republic), among others. This sense of public insecurity appears to be related to the high rates of homicide and other crimes. El Salvador and Honduras had homicide rates of over 40 cases per 100,000 people in 2018, higher than the LAC average of 18. In 2018, Costa Rica had the highest rate of holdups in the entire LAC region, with 1,588 per 100,000 people. The number of home burglaries per 100,000 people in Guatemala, Panama, Costa Rica, and Honduras was over 100, though this was lower than in Chile and Ecuador. Guatemala had the third-highest number of victims of human trafficking in LAC after Mexico and Peru. Moreover, ECLAC's Gender Equality Observatory for Latin America and the Caribbean noted that in 2017 the Dominican Republic had the second-highest rate of women's deaths at the hands of their intimate partner or former partner in Latin America¹³ (1.5 cases per 100,000 women), second only to Belize (2.6 per 100,000 women). According to the UNDP's Regional Human Development Report 2013–2014, given that the security of citizens is a public good, insecurity reinforces perceived inequality and erodes public confidence in institutions.

¹² According to the annual Latinobarómetro survey, in which they were asked: "In your opinion, what is the most important problem facing the country?"

¹³ Does not include countries in the Caribbean.

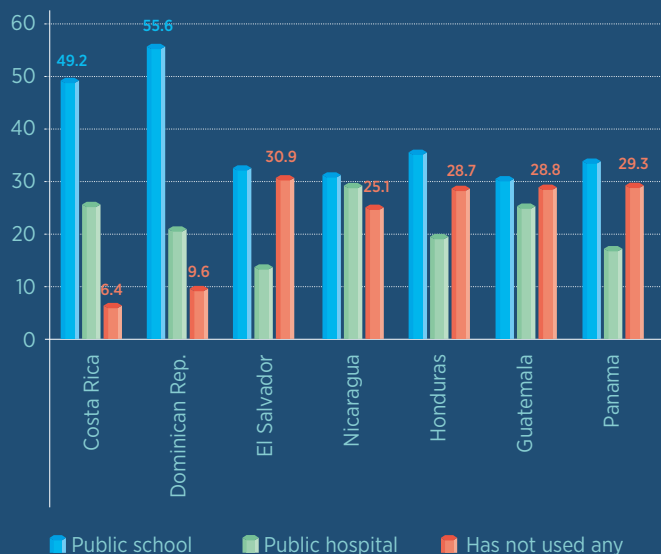
Public Services

There is dissatisfaction with public education and health services (see Figure 4.6). Around 30% of the CAPARD population polled (excluding Costa Rica and the Dominican Republic) said they had not used any of these public services; meanwhile, fewer than 30% of users said they were satisfied (excluding Costa Rica and the Dominican Republic on the issue of education), which is below the Latin American average of 33%. There is limited provision of public education and health services. With the exception of Costa Rica, CAPARD countries have the lowest secondary-school enrollment rates in Latin America. In Guatemala, Honduras, and Nicaragua, these rates fall below 50%. Public health coverage is also low (see Chapter 1). At the same time, in some CAPARD countries a high proportion of the rural population (between 10% and 30%) have no access to the electricity or drinking water supply.

Institutions

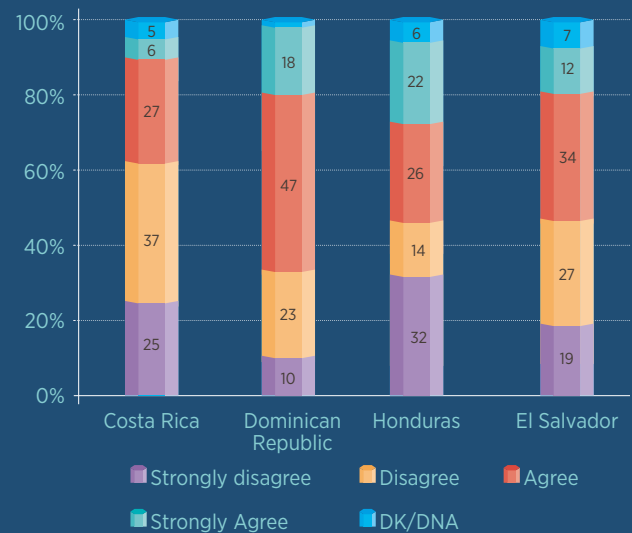
There is a perception of inequality before the law that reinforces perceived inequality. Even if monetary inequality is reduced, the discontent associated with inequality may persist if certain practices in the public sector and business sector that are a reflection of the inequality before the law are not rectified. The Corruption Perceptions Index (2019) shows that in most CAPARD countries (except for Costa Rica and Panama) there is a higher level of perceived corruption than the Latin American average. According to polls carried out by the Global Corruption Barometer (2019), nearly 20% of people surveyed in Honduras, Guatemala, and the Dominican Republic reported having paid a bribe to obtain public services, a higher percentage than the Latin American average (16%). However, this percentage doubles with respect to bribes paid to the police. Indeed, in some countries of the region there is a relatively high tolerance for such practices (see Figure 4.7).

Figure 4.6. Public services people are most satisfied with in 2018 (% of respondents)



Source: Latinobarómetro.

Figure 4.7. Tolerance of corruption (% of respondents)



Source: CID Gallup.

Reaction to the statement: "A certain degree of corruption is OK, as long as the country's problems get solved."

Meanwhile, confidence in the government is low. Over 80% of respondents in the 2019 Global Corruption Barometer poll claimed to have little or no confidence in the government. This is perhaps reflected in the low levels of support for traditional political parties in recent years. According to CID Gallup, between 50% and 80% (depending on the country) of voters in CAPARD countries are undecided as to which political party to support (except for the Dominican Republic, where the figure is around 20%).

Effects of the health crisis on public perceptions

This section uses databases from: (i) polls conducted by CID Gallup¹⁴ and (ii) CivicLytics social network monitoring, in order to assess how public perceptions change from month to month.

COVID-19 has intensified concerns over unemployment and corruption. According to the most recent polls, unemployment continued (as at May 2020) to be the number one problem facing the country according to the citizens of Guatemala, El Salvador, and Costa Rica, whereas in Panama and Honduras it was corruption. These two issues are often those most frequently cited in CAPARD countries. In September, corruption was considered the country's main problem by Costa Ricans, while Nicaraguans felt that theirs was unemployment. It should be noted that in May, health-related concerns (COVID-19 or lack of hospitals) climbed to first place in Nicaragua and the Dominican Republic, and remained the public's main concern in the latter in September.

The topics of public health and insecurity predominate on social media (see Figure 4.8). According to data collected by CivicLytics, the main topics mentioned by those on social media were public health (between 60% and 80% of the comments)—even before the health crisis—and crime and violence (between 20% and 40%). The prevalence of public health concerns in social media comments since the beginning of the year may be explained by the media coverage of COVID-19 in China in early January and in Europe at the end of that same month. Though there was a decrease in September compared to May, public health continued to be the main issue. The lesser frequency of comments on crime and violence in May seems to have had something to do with the lockdown and the reduced likelihood of street crime.

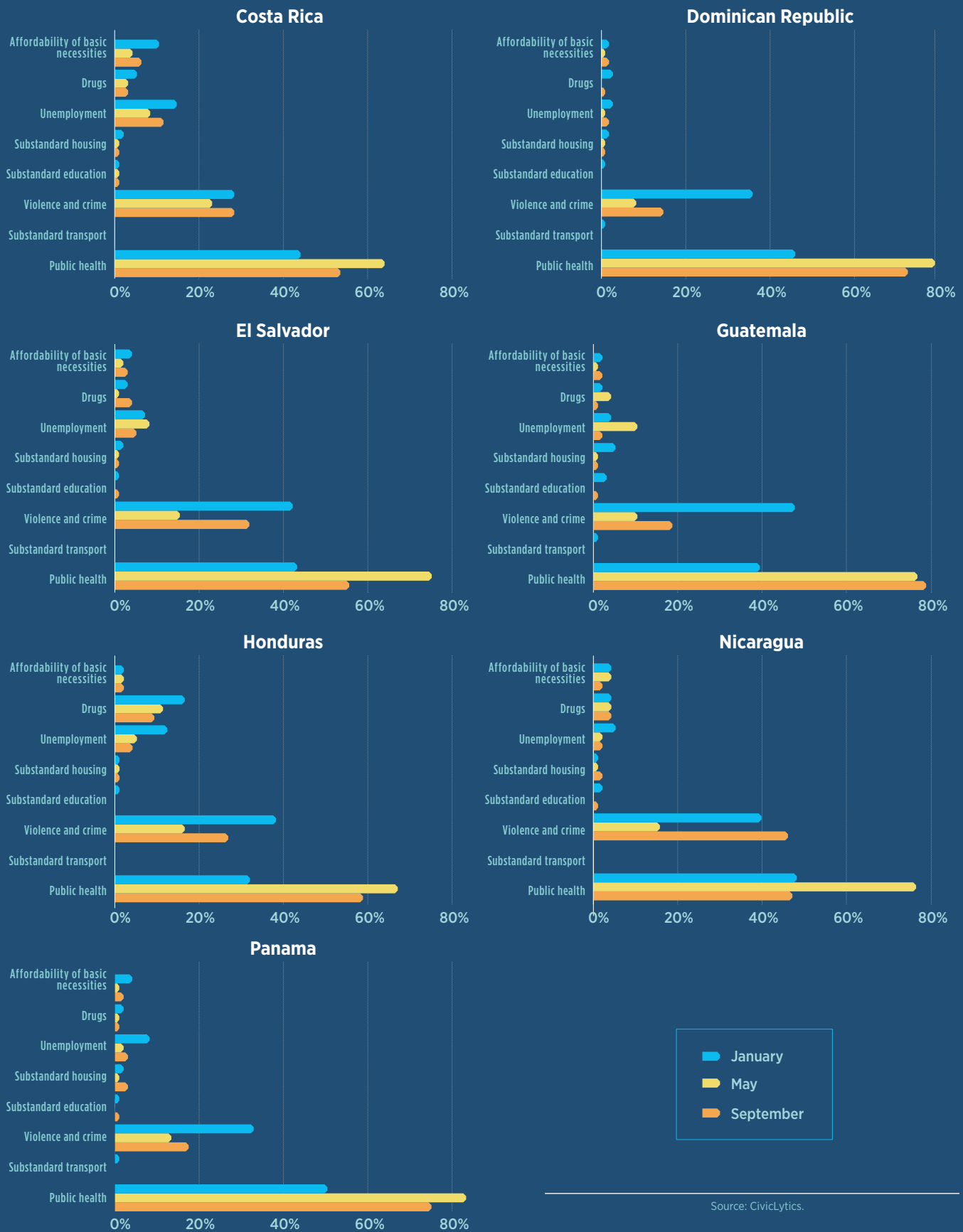
Table 4.1 Main problem facing the country (% of responses)

Country	Costa Rica			Dominican Rep.			El Salvador			Guatemala			Honduras			Nicaragua			Panama		
2020 MEASUREMENT	January	May	Sept	Enero	May	Sept	January	May	Sept	January	May	Sept	January	May	Sept	January	May	Sept	January	May	Sept
Unemployment	23	33	28	14	14	26	32	32	29	26	41	33	27	26	21	16	21	34	15	19	24
Corruption/ government	31	23	34	15	17	9	10	8	8	22	20	15	16	31	43	28	14	17	46	45	32
Covid-19 / lack of hospitals	-	10	10	-	40	31	-	3	15	-	13	25	-	14	7	-	31	5	-	-	11
Cost of living	14	18	13	-	-	6	8	27	22	3	-	6	6	-	5	20	11	10	-	8	11
Insecurity	11	7	4	51	17	16	13	9	8	17	12	8	12	2	3	5	2	16	16	9	6

Source: CID Gallup. National Public Opinion Polls. January, May, and September 2020.

Question: "What is the main problem facing our country?"

¹⁴ At least 1,200 people in each country were polled. The social media study includes comments from Twitter and other Internet sources, such as Facebook, and includes at least 23,000 comments for each country. The surveys include people from across the country and have a margin of error of ± 2.8 points and confidence level of 95%.

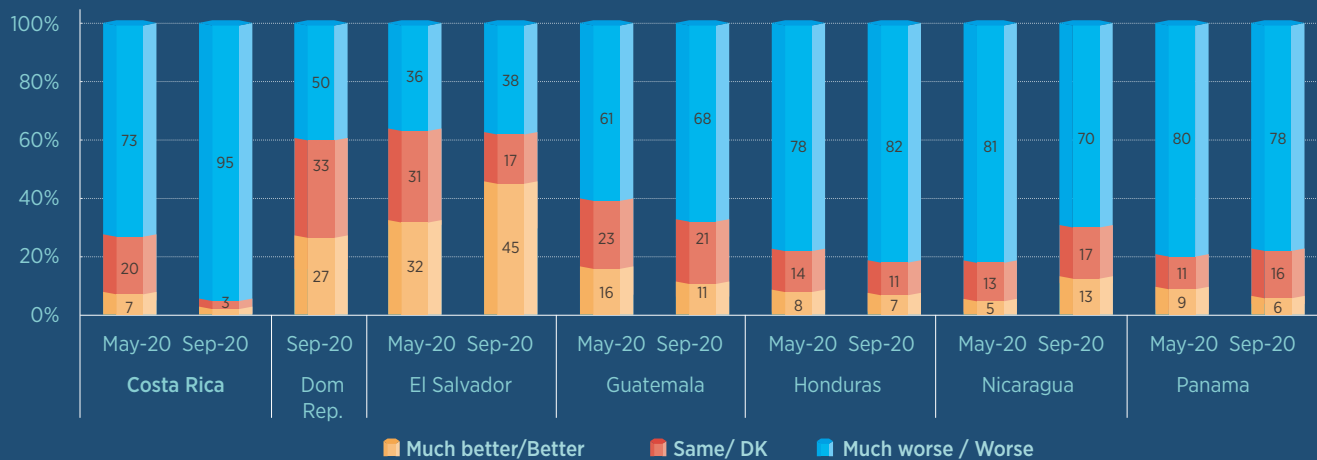
Figure 4.8. Main concerns expressed by people in social media conversations, 2020

Source: CivicLytics.

The number of people who have a negative view of the economic situation has risen, though there was a marginal improvement in numbers in September (see Figure 4.9), except in Costa Rica and Guatemala. The proportion of people who said the current situation is either better or the same as it was a year ago was below 50% in all countries except El Salvador, which would imply that they are more pessimistic than they were last year.

In keeping with the above, over half of the region's households felt that their household finances had worsened compared to last year. It is worth noting the relatively low percentage (25%) of Salvadorans who believe that their situation has worsened, which may have something to do with the government support provided to vulnerable households and the high popularity of the president, which could convey optimism. On a similar note, the Dominican government implemented a cash transfer program to support workers who had lost their jobs and a new president took office in August, both of which may be contributing factors in the slightly more positive view Dominicans have compared to their neighbors.

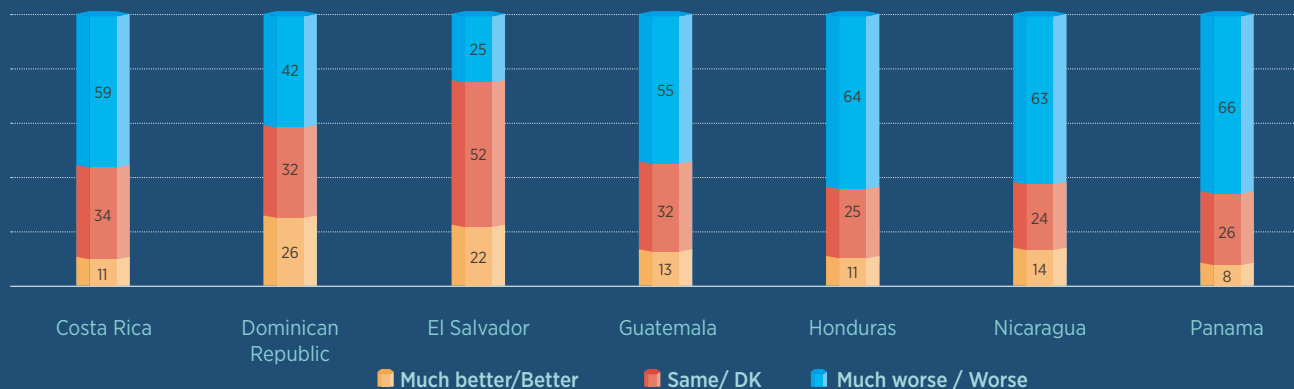
Figure 4.9. Economic situation of the country compared to one year ago (%)



Source: CID Gallup. National Public Opinion Polls. January, May, and September 2020.

Question: "How do you feel about the situation the country is in today compared to a year ago?"

Figure 4.10. Financial situation of households compared to last year (%)



Source: CID Gallup. National Public Opinion Poll. September 2020.

Question: "How do you feel about the situation in your household today compared to a year ago?"

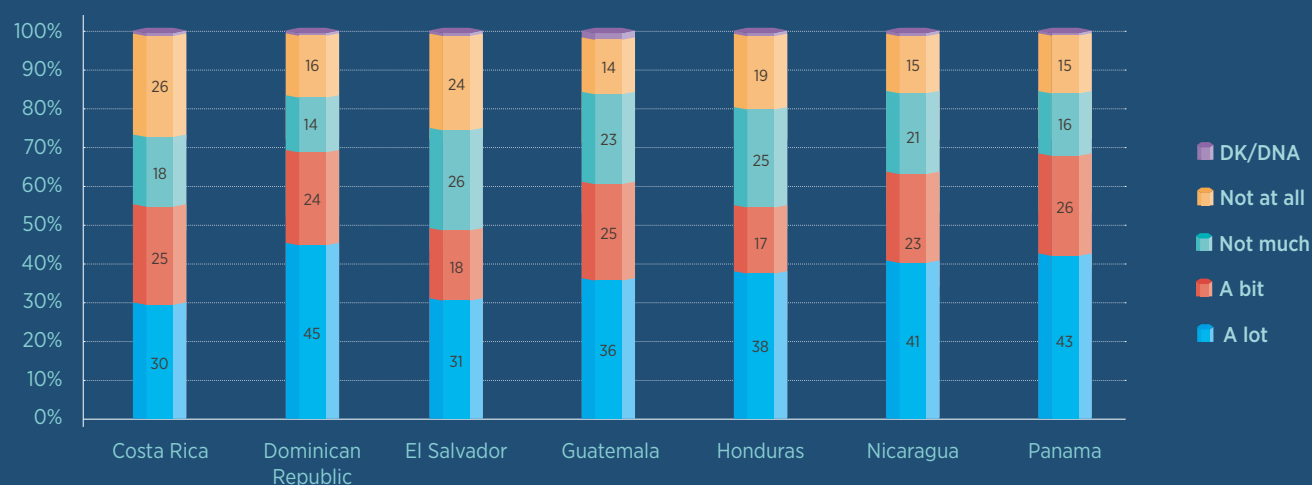
The main concerns of households are unemployment and the cost of living. According to the latest CID Gallup polls, the main issue for households in Costa Rica, Honduras, and Panama continues to be unemployment. In the remaining countries (the Dominican Republic, Guatemala, El Salvador, and Nicaragua), people's greatest concern is the cost of living. Together, these two issues were cited by around half the respondents, which can be explained by the job losses and/or loss of earnings experienced by households in those countries. In Costa Rica, as a result of the coronavirus crisis the unemployment rate reached an all-time high in August of 26.2%, while in Panama 280,000 employees were furloughed in late July (affecting 22.2% of the formal population). The IMF forecasts an increase in Honduras's unemployment rate from 4.1% in 2019 to 5.7% in 2020, while in the Dominican Republic, formal employment is expected to drop by 13% between March and August.

Food security

The loss of earnings caused by the current crisis has led to changes in the household market basket, indicating an increase in food insecurity due to the pandemic (see Figure 4.11). Over 50% of all CAPARD citizens feel that their basic market basket has changed as a result of their limited means or supermarket shortages. However, this change in the basic market basket has been less significant in countries with more advanced systems of social protection (e.g., Costa Rica) or which have provided substantial support to their vulnerable populations in the form of cash transfers (e.g., El Salvador).

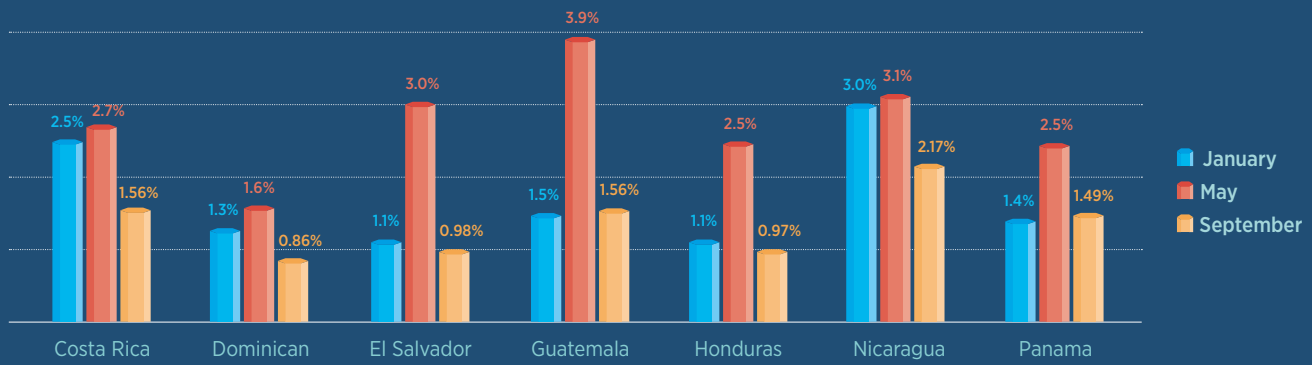
On social media, the highest volume of mentions about food insecurity (as measured based on comments about food shortages, hunger, and starvation) was in May, which would seem to suggest that the most critical point of the pandemic occurred at around that time (see Figure 4.12). The products most often described as scarce (or overpriced) were beef and rice. For most countries, this concern diminished as commerce resumed in those countries. It should be noted that Nicaragua, Guatemala, and El Salvador all had high volumes of comments regarding food needs in May, though their food distribution policy and unconditional transfer programs appear to have had a positive effect on food security comments by September 2020.

Figure 4.11. Change in household consumption (%)



Source: CID Gallup, National Public Opinion Poll, September 2020.

Question: "How much has your basic family shopping basket changed in the last four months as a result of money issues or shortages at the supermarket or other places where you buy food?"

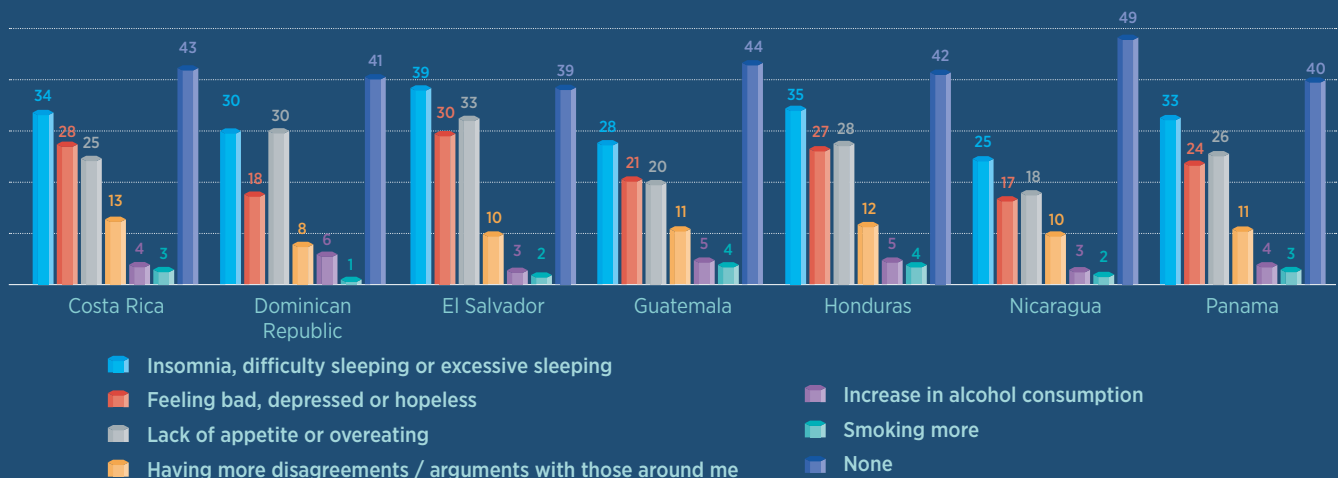
Figure 4.12. Evolution of the importance given to food insecurity in social media conversations (% of comments)

Source: CivicLytics.

Emotional crises

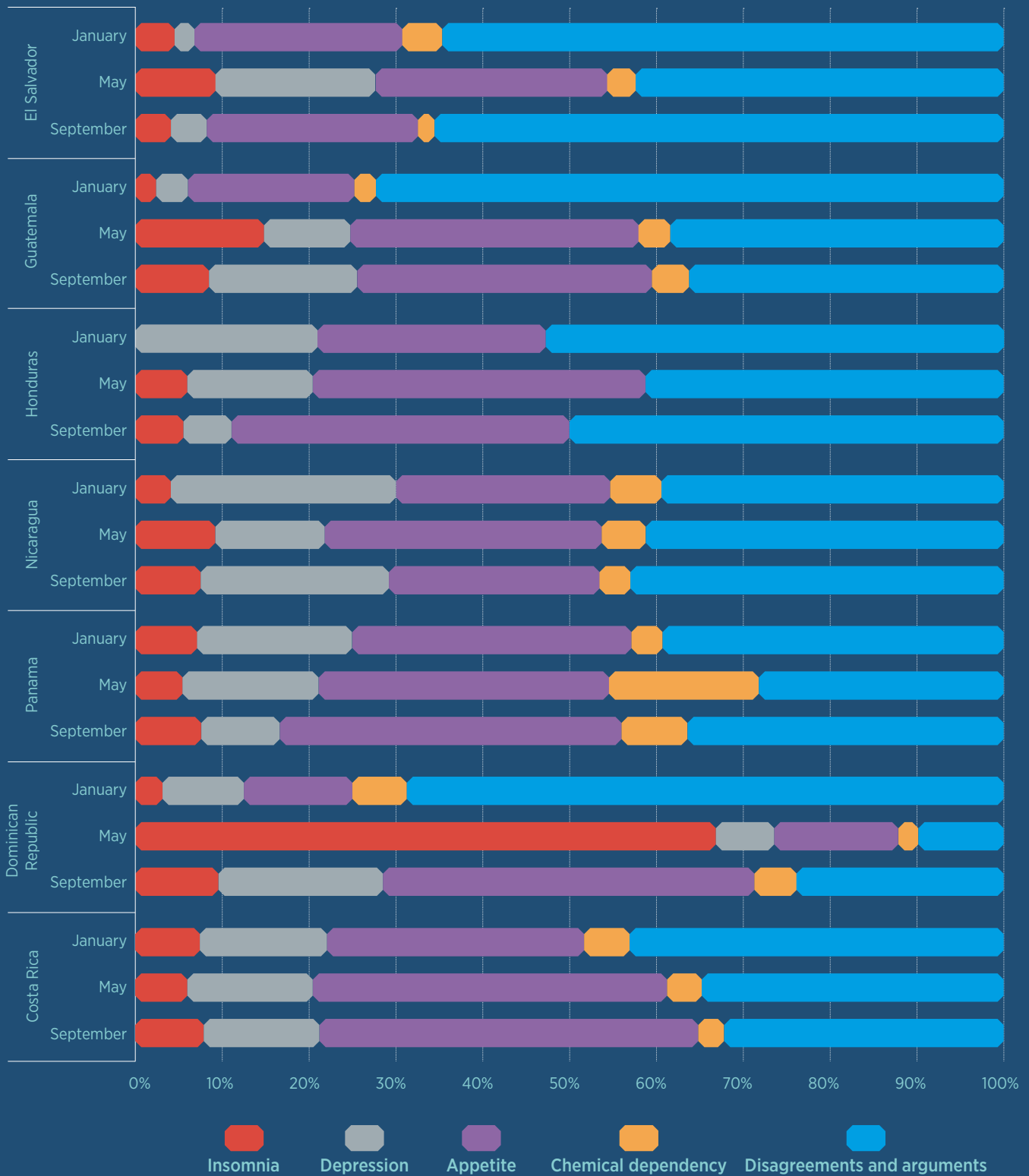
The crisis appears to have caused greater stress among families, which has tested people's emotional stability even more (see Figure 4.13). Around 30% of respondents reported difficulty sleeping, while significant numbers of people reported experiencing a lack of appetite and symptoms of depression. All of this is consistent with higher levels of stress due to the lockdown and diminished earnings as a result of the pandemic. It should be noted that an average of 40% of respondents reported that their mental health had remained relatively stable.

The increased discussion on emotional stability was also evident on social media (see Figure 4.14). Results from social media reflect similar behavior to that found in polls, albeit at a relatively low level. In Costa Rica alone, over 4% of online discussions in May touched on the topic of mental health, while in Nicaragua, such concerns have been diminishing over time. A lack of appetite and disagreements/arguments are the most common topics in conversations on mental health issues. In the Dominican Republic, there was a significant rise in the number of cases of insomnia in May, though by September it had fallen back to levels comparable with those of the rest of the region.

Figure 4.13. Emotional stability of citizens (% of responses)

Source: CID Gallup.

Question: "In the wake of the Coronavirus pandemic, can you please say which of the following (if any) you have experienced ALMOST EVERY DAY for the last 2 weeks."

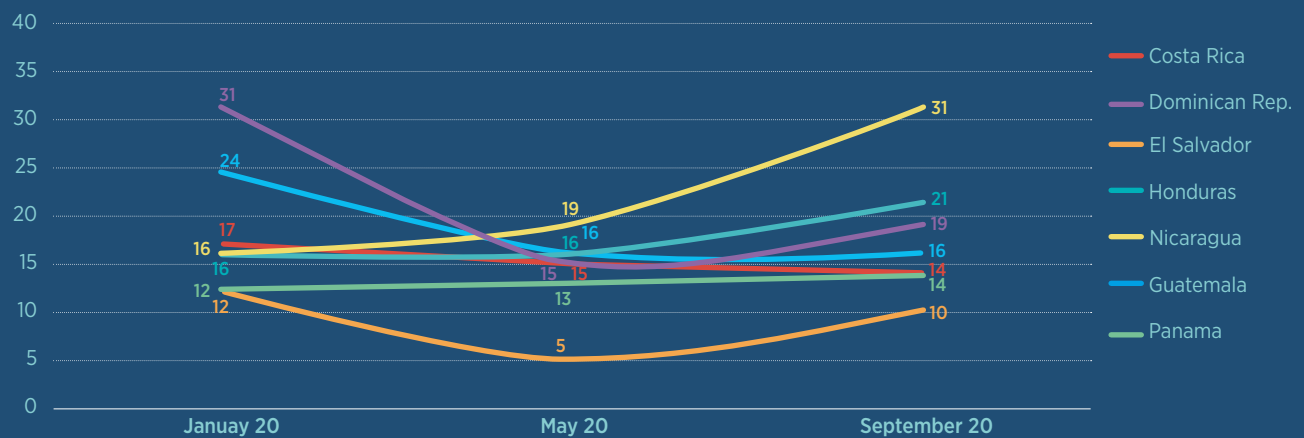
Figure 4.14. Most common issues related to mental health

Source: CivicLytics.

Crime and violence

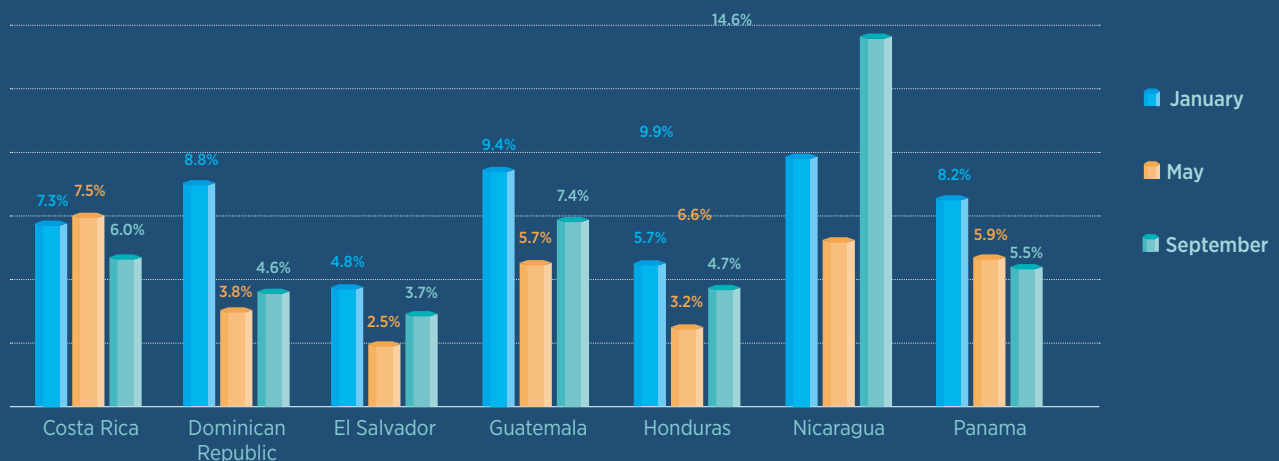
In the early months of the pandemic, there was a decline in the public's perception of crime, though this trend has been reversed as economies have begun to reopen. At the beginning of the year, around 18% of respondents in Costa Rica, Honduras, and Nicaragua stated that at least one person in their household had been the victim of a robbery or holdup in the previous four months; among the Dominicans polled, the figure reached almost 31%. The lockdown triggered by the pandemic prompted a decrease in numbers in all of these countries in May. The only countries where this declining trend continued through to September were Costa Rica and Guatemala (see Figure 4.15). This sentiment also manifested itself on social media: the proportion of comments relating to crime and delinquency fell by almost half in May, before rising slightly in September. Similarly, there was a particular emphasis on crime issues in Nicaragua in September, which is consistent with the results of the opinion polls (see Figure 4.16). According to the Nicaraguan Observatory of Violence, the increase in criminal activity in the country has to do with the illegal possession of weapons as a result of the social and political crisis of 2018, the worsening economic crisis, unemployment, and the release of over five thousand prisoners.

Figure 4.15. Percentage of households in which one of the members has been the victim of a crime



Source: CID Gallup. / Question: "Have you or has anyone in your family who lives at this address been the victim of a robbery or holdup in the last four months?"

Figure 4.16. Relative degree of focus on crime in social media conversations (% of all comments)



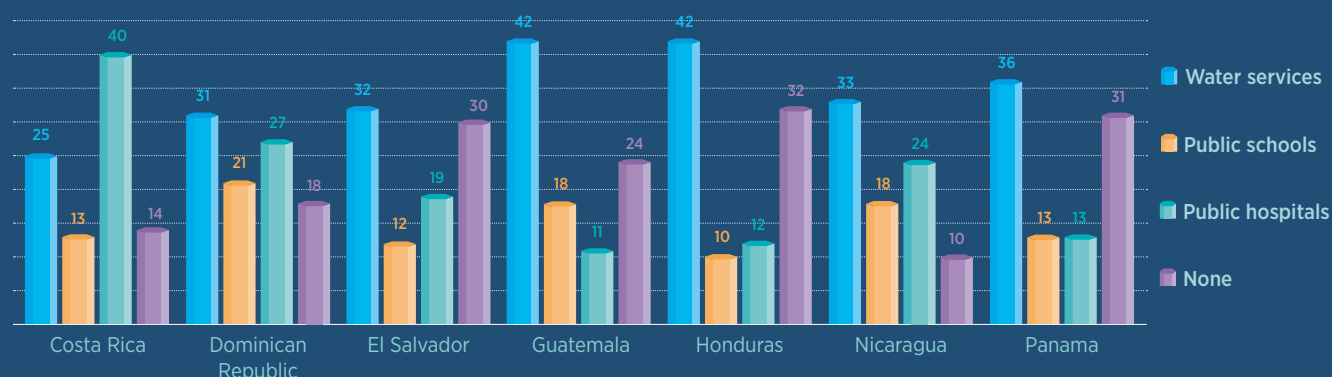
Source: CivicLytics

Satisfaction with public services

The people of the region are relatively dissatisfied with the provision of public services, the water service being the worst rated. In El Salvador, Honduras, and Panama, 30% of respondents said they were not satisfied with any of the public services. Around 30% of people in the CAPARD region are satisfied with the public water service; in the case of public education services, fewer than 20% of respondents reported being satisfied. Similarly, the region's inhabitants (except for those in Costa Rica, Nicaragua, and the Dominican Republic) expressed their discontent with public hospitals (see Figure 4.17).

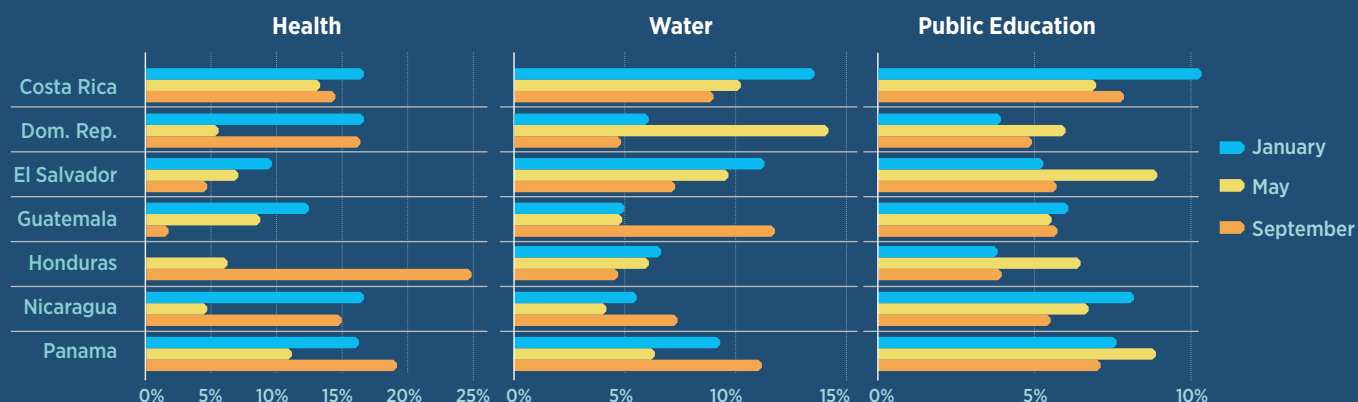
Levels of satisfaction with public services are more mixed on social media. In most countries, the level of satisfaction with water services decreased with the advent of COVID-19, probably due to the fact that a lack of potable water increases the risk of infection. The only countries that have managed to recover pre-pandemic satisfaction levels have been Guatemala, Nicaragua, and Panama. Meanwhile, levels of satisfaction with the health system are more varied. Most countries experienced a significant increase in satisfaction with respect to this service after May, except for El Salvador and Guatemala, where the level fell in September. People's level of satisfaction with public education rose in many countries in May (except for in Costa Rica and Guatemala) but dropped off in September (see Figure 4.18).

Figure 4.17. Public service people are most satisfied with (%)



Source: CID Gallup. / Question: "Which of the following public services are you most satisfied with?" (More than one answer is acceptable).

Figure 4.18. Approval of public services (%)



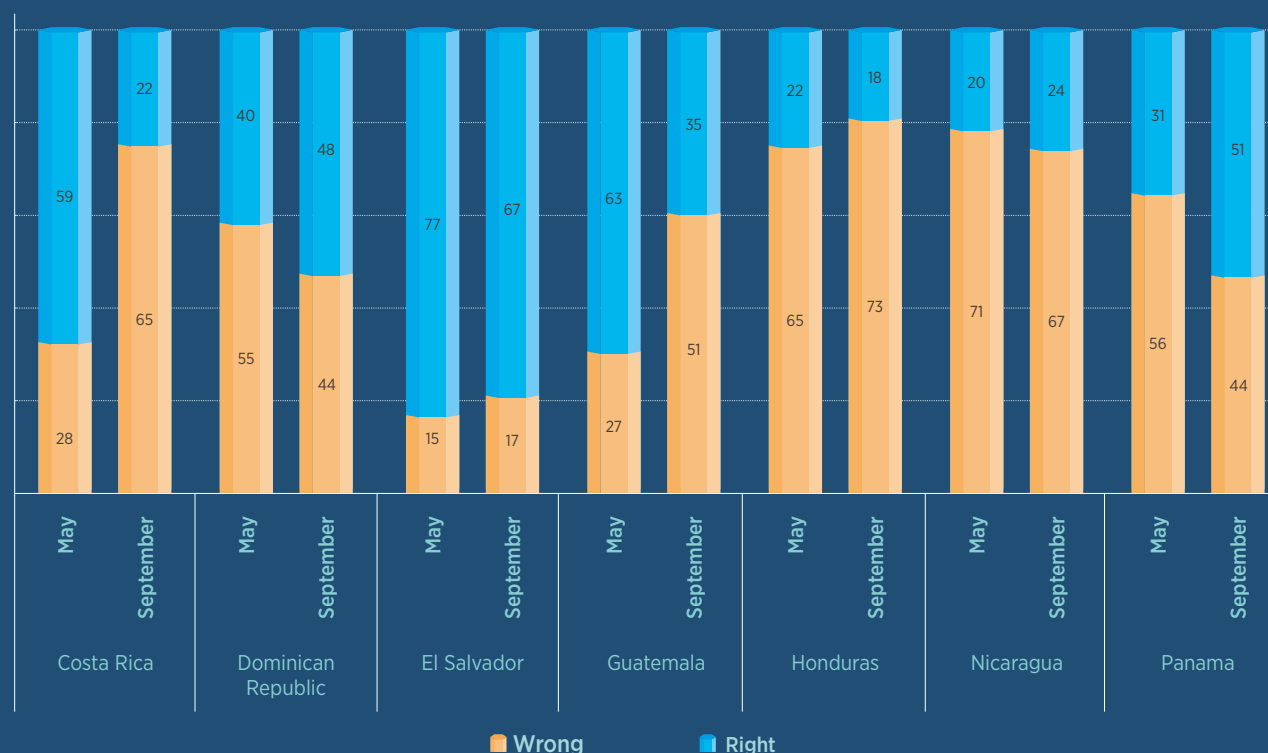
Source: CivicLytics.

Institutions

The most important topic on social media with regard to trust in institutions is **governance**. According to CivicLytics, 64% of comments concerning trust in institutions relate to matters of governance. It is an issue that involves all branches of government, but one that chiefly concerns the administration, the president, and the forces of law and order (the police and the army). The next most important topic based on social media comments on governance (with 10% of references) concerns public confidence in health sector institutions, followed by institutions related to tourism, the economy, employment, and infrastructure (with fewer than 5% of mentions).

In this context of increased turmoil, existing challenges have become more acute, thereby generating **pessimism regarding the direction the country is taking**. The current situation of uncertainty, long periods of quarantine, and limited opportunities to generate income has triggered fear and frustration among the population. This climate of pessimism is compounded by the failure of governments to devise, implement, and communicate any kind of clear strategy for mitigating its negative impact. Indeed, CID Gallup polls show that the crisis has fueled pessimism with regard to the country's future: more than 50% of those polled by CID Gallup in September felt that their country was headed in the wrong direction (see Figure 4.19). The case of Costa Rica is particularly striking given the obvious worsening of this sentiment between May and September. In contrast, the most optimistic is El Salvador, where almost 70% believe that their country is heading in the right direction, a reflection of the confidence Salvadorans have in President Bukele as a result of his handling of the economic and health crisis.

Figure 4.19. Direction the country is headed (% of respondents)



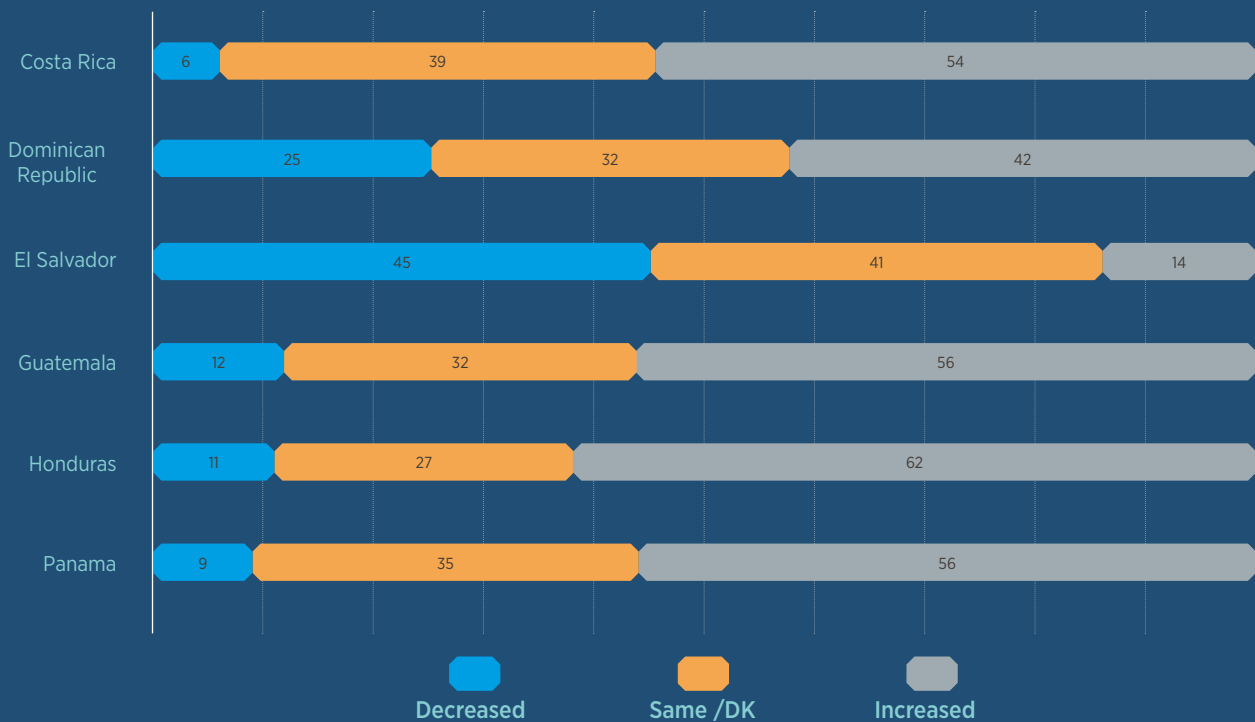
Source: CID Gallup.

Question: "In your opinion, taking into account everything that is going on in (country), how do you think the country is doing?"

Meanwhile, the current economic and health crisis poses significant challenges to public institutions and public confidence in them. Due to its exceptional nature, the health crisis has increased the likelihood of governments rushing into policy decisions that could well have negative consequences. At the same time, there is a risk that the level of impunity will increase as a result of increased pressures on the institutions responsible for security and justice, and that there will be a rise in crime, cyber-fraud, and corruption in government procurement, among others (Global Impunity Index, 2020). All these factors impact on the degree of confidence people have in public institutions, and on the level of perceived corruption in particular.

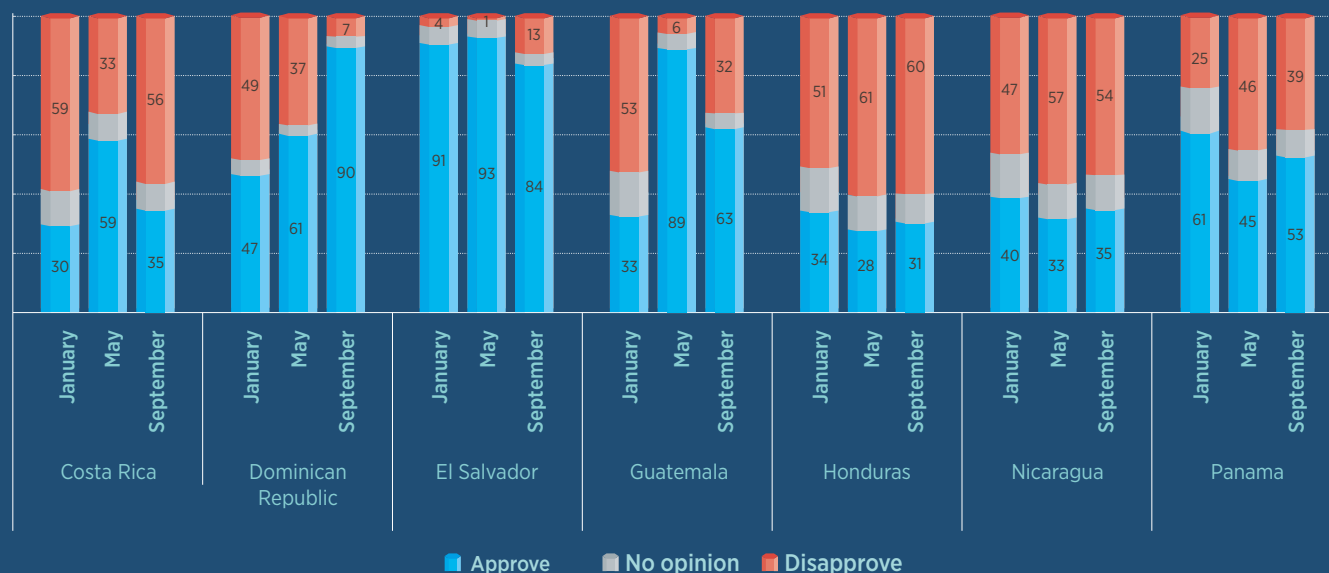
The health crisis has caused a rise in perceived corruption in a number of CAPARD countries. Over 50% of respondents in Costa Rica, Guatemala, Honduras, and Panama felt that corruption has increased during the crisis (see Figure 4.20). In Costa Rica, Honduras, and Panama, scandals involving hospital procurement and equipment purchases (e.g., facemasks), alleged payments to officials, and a general lack of compliance have led to corruption once again being viewed as the country's main problem. In the Dominican Republic, fewer people (42%) named it as their country's worst problem, which could have something to do with the change of president. One case worth highlighting is that of El Salvador, where only 14% of those polled believed that corruption had increased, probably a reflection of their approval of President Bukele's handling of the crisis.

Figure 4.20. Perceived levels of corruption, September 2020 (%)



Source: CID Gallup.

Question: "In your opinion, during the crisis corruption has..."

Figure 4.21. Leadership approval rating (%)

Source: CID Gallup.

Note: In August in the Dominican Republic and January in Guatemala, there was a change of government, which may have affected people's opinions from one measurement to the next.

Question: "Overall, do you approve or disapprove of (name) as president?"

Fluctuations over time in the approval ratings of leaders appear to be linked to people's opinion of their handling of the pandemic. In May, a number of governments, including those of Costa Rica, Guatemala, and El Salvador, appeared to have been successful in providing an effective response to the health crisis, which resulted in better approval ratings. However, as infections rose, this popularity waned. Meanwhile, in the Dominican Republic in May, people felt that the crisis had been well managed, and in July the election of a new president was followed by a significant rise in the government's approval ratings (see Figure 4.21).

Despite the perceived increase in corruption or dissatisfaction with the government among some people in the region, 3 out of 4 people in Costa Rica, El Salvador, and the Dominican Republic still believe democracy to be the best kind of system. In the other countries of the region, the figure is slightly below 50%.

Outlook for the future

As the crisis continues to unfold, people have a relatively pessimistic outlook for the future, except in El Salvador and the Dominican Republic. With an economic outlook index of less than 50 with respect to one year from now, in September people's expectations for the coming year were gloomy in Costa Rica, Guatemala, Honduras, Nicaragua, and Panama (see Figure 4.22). The countries where people have the grimmest expectations for the future of the economy are Honduras and Nicaragua, though it should be noted that the political situation there before the pandemic was highly polarized. Once again, the recent election won by Luis Abinader in the Dominican Republic has given people more hope for the future. This feeling is also shared by the people of El Salvador, who rate their President Nayib Bukele very highly. It is worth noting that several countries show marginal improvements in September compared to May in terms of their outlook for how things will be in a year's time.

Figure 4.22. Family's financial situation in a year's time (percentage index)

Source: CID Gallup.

In conclusion, despite advances in poverty and inequality, there has been no decrease in perceived injustice in the region, indeed quite the contrary. This may have to do with multidimensional issues of governance, corruption, inequality, and so on that impede any improvement in perceived justice.

The pandemic is clearly having both short- and long-term effects on the countries of the region. The COVID-19 crisis has exposed major gaps in public service coverage, e.g., in healthcare, education, and the penetration of digital technologies. The digital divide may contribute to widening others, such as that in education; the digital divide also affects CivicLytics's reach due to people's limited access to social media platforms and the type of people who use Twitter. At the same time, there has been a deterioration in terms of people's feelings regarding the economy, a fact that often affects government approval ratings and demands that a government not only implement effective policies, but also ensure transparency and integrity in their execution.

The crisis has affected people's views regarding the soundness of their institutions. Frequent news stories on cases where there was a lack of transparency in health sector spending have led to increased concerns over corruption, including constant comments regarding governance on social media. Another notable feature is people's distrust towards political parties, which has been growing since even before the crisis.

It is important to note that in some cases a president's popularity has been reflected in optimism as to their handling of the crisis. Therefore, the quality of a country's institutions and the perception of its government—something that has long since been a concern throughout the region—have taken on a particular relevance during the crisis.

In sum, it is important to harness all available tools in order to better address the concerns and needs of the people of the CAPARD countries. More frequent monitoring of public concerns and expectations via opinion polls and social networks, particularly in times of crisis such as this, can help governments and decision makers to be more effective in designing public policy.

CHAPTER 5

Analysis of Inequality by Country





Analysis of Inequality

Belize

Janelle Leslie and Lucía Martín



Evolution and determinants of poverty and inequality

According to two existing assessments, between 2002 and 2009, inequality in Belize remained moderately high, while poverty increased significantly; however, no up-to-date information is available. Income inequality remained fairly high in this period, with a Gini coefficient of 0.40 in 2002 and 0.42 in 2009 (Government of Belize, 2004; 2010). The national poverty rate increased substantially from 34.1% to 41.3%, while the extreme poverty rate rose from 10.8% to 15.8%. This is consistent with the rise in poverty in five of Belize's six districts during the same period.¹⁵ The increase in poverty in the country is in stark contrast to the progress made in the rest of Latin America during these years. The country was to have carried out its Population and Housing Census between May and July 2020, but on account of the decision taken by the National COVID-19 Incident Management Team, Belize's Institute of Statistics announced its postponement until 2021.

In 2009, poverty was mostly concentrated in rural areas and predominantly affected ethnic minorities. With poverty rates of 56.2% and 60.4%, respectively, the poorest districts in 2009 were Corozal and Toledo, both of which have significant rural and indigenous populations. More than half the country's population were living in rural areas, where poverty was approximately twice as high as in urban areas (i.e., 55% versus 28%). There are four main ethnic groups in Belize: mestizo (48% of the population), Creole (27%), Mayan

¹⁵ Belize is divided into the following six administrative districts (from north to south): Corozal, Orange Walk, Belize, Cayo, Stann Creek, and Toledo.

(11%), and Garifuna (7.1%). The highest poverty rates were in Mayan communities, which accounted for one-third of the country's population and half of whom were classified as destitute.

The main cause of the rise in poverty in this period was the sluggish economy. Though the economy grew rapidly between 2002 and 2004, income per capita subsequently remained virtually unchanged due to the fact that the economy was growing at the same rate as the population. Despite major new construction projects in San Pedro and Cayo, their overall impact on the wider economy was limited. Meanwhile, key agricultural sectors (such as sugar, bananas, papayas and the fisheries industry) experienced severe contractions. Job creation also fell, which is why the unemployment rate closed at 14% in 2009. Furthermore, in 2007 the Corozal and Orange Walk districts were hit by Hurricane Dean and in 2008 large areas of the country were affected by flooding. Along with the global recession, in 2008 and 2009 food and fuel prices aggravated the social impact on the country.

The evolution of per capita income suggests that poverty has remained high since 2009. Between 2009 and 2019, the growth rate of both real GDP and the population have been the same at 2.1% a year, which has resulted in GDP per capita stagnating. In contrast to the previous decade, GDP growth became less volatile, whereas the population continued to grow rapidly, partly due to high levels of immigration from El Salvador, Guatemala, and Honduras.

The COVID-19 pandemic is expected to have a severe social impact on Belize, with a rise in both the poverty rate and inequality. The 2020 pandemic has rocked the foundations of the economy due to the unprecedented impact on the tourism industry. Given the country's dependence on tourism flows, the International Monetary Fund (IMF) estimates that its economy will shrink by 16% in 2020, thus pushing the economy back to the size it was in 2013. In light of the severe impact the pandemic has had on the tourism sector, the IMF estimates that the unemployment rate will nearly triple from 9.1% in 2019 to 25% in 2020.

The economy will contract by **16%** in 2020, thus pushing the economy back to the size it was in 2013

In response to a lack of social statistics, the IDB conducted an income-mapping exercise with the aid of satellite images showing improvements in terms of income distribution before the pandemic struck the country. The IDB study (Hersh *et al.*, 2019) suggests that the poorest districts continue to be Corozal in the north and Toledo in the south. Taking the 5th percentile of national income as the poverty line, virtually all poverty is confined to these two areas. A comparison of the IDB assessment and the 2009 poverty map shows that poverty in the Orange Walk and Stann Creek districts has fallen.¹⁶

The pre-pandemic improvements in income distribution may be a reflection of the boom in the tourism sector, so these gains could be wiped out by the slump in the latter in 2020. Apart from its traditional tourist destinations such as San Pedro and the Cayes, a number of other tourist attractions have become more popular in recent years, including Placencia and Daringa in Stann Creek, and the archaeological sites of Orange Walk. Owing to the higher resolution of the IDB's poverty maps—i.e., at the enumeration-district (ED) level rather than just the ward level—, the people of Daringa appear to be significantly less poor than those in the surrounding areas. Similarly, the town of Punta Gorda in the Toledo district, a poor neighborhood, appears to be less so than the surrounding EDs.

The COVID-19 crisis will hit the income and consumption of the majority of the population, particularly the poorest, who depend largely on informal activities and microenterprises. Two thirds (39,000) of the approximately 60,000 people employed in tourism in Belize work in the informal sector; nonetheless, informal workers are also at risk. Of the 81,000 Phase I applications to the COVID unemployment relief program (representing 43% of the workforce) launched by the government in April 2020, 44% came

¹⁶ The resolution of the IDB's poverty maps is at the enumeration-district level, whereas previous maps provide disaggregation at the ward level only, which makes direct comparisons difficult.

from employees in the formal sector, 28% from the informal sector, and the remaining 28% from people out of work.

Vulnerable population groups (including children, ethnic communities, people with disabilities, women, and migrants) are expected to be hardest hit due to their higher poverty rate and, therefore, fewer resources available to them to mitigate the impact. Women are particularly vulnerable due to the fact that they are three times more likely than men to be unemployed, and the fact that they work mainly in the tourism sector. In 2019, approximately 14% of Belize's population were immigrants, the influx of whom has posed a severe challenge to the provision of social services such as social protection, education, and healthcare.

COVID-19 is expected to further widen existing gaps in access to education and healthcare. School closures have caused an unprecedented upheaval in the education system, with the government shifting from school-based learning to home-based learning. This approach places the most vulnerable students at a disadvantage due to unequal access to distance-learning resources, online-learning opportunities, and computers. Fewer than half of all primary school students (46%) and just over half of all high school students (58%) have Internet access at home, which tends to be more restricted in poor households and rural areas. Only 44% of primary school students and 55% of secondary school students have access to a computer at home. Moreover, students are probably not the only ones who use the computer, since only one third of households have a member who owns one and only 32.4% of them have a tablet; in rural areas, these numbers are even lower, i.e., 28.5% and 26.1%, respectively. In terms of access to healthcare, the country has approximately 700 public hospital beds and seven isolation units for COVID-19 patients. Belize City, one of the richest cities in the country, is the best endowed with hospital facilities due to its high population density.

As for access to healthcare, there are approximately **700 beds** available at public hospitals in the country for COVID-19 patients, along with seven isolation units.

Public policy proposals

Belize would benefit from having a consolidated social protection strategy in place. The current system does have its strengths, such as a high level of domestic funding, a modern structure for classifying expenditures, and versatile programs that could potentially become integrated. However, it also suffers from certain weaknesses, such as a lack of information-sharing among social programs, low coverage, negligible redistributive effects, and a lack of up-to-date data for evidence-based policymaking (United Nations, 2016).

The social protection network is mainly made up of five programs, all of which have low coverage and are loosely targeted: (i) the *Unemployment Relief Program* (URP), which was launched and implemented in 2020 to provide direct cash transfers to those who lost their jobs as a result of the COVID-19 crisis (Government of Belize, 2020); (ii) the *Building Opportunities for Our Social Transformation* (BOOST) conditional transfer program, which targets poor households; (iii) the *Food Pantry* program, which seeks to tackle malnutrition by providing a weekly subsidized food basket; (iv) non-contributory pensions, provided to women over 65 and men over 67 who have little means of support; and (v) the *Roving Caregivers* program, a parenting education and early stimulation program for children under three.

In 2011, an estimated 25% of social safety net benefits leaked to the nonpoor (Izquierdo *et al.*, 2018). Consequently, Belize should take this opportunity to consolidate data on all beneficiaries into a single social registry and to improve targeting. The creation of the URP made it possible to gather information on over 80,000 vulnerable people. This provides a unique opportunity to build a broad social register that brings together data from all the social and cash transfer programs. This information could be supplemented by other administrative data sources. To gauge the quality of current targeting, Belize could examine the overlap between the poorest areas identified through poverty mapping and the lists of beneficiaries of existing safety net programs.

Alongside the implementation of a unified register of beneficiaries, initiatives need to be undertaken to improve the systems for paying them. According to the National Financial Inclusion Strategy 2019 (NFIS, 2019), 97% of the beneficiaries of cash transfers from the Ministry of Human Development (e.g., BOOST transfers) received these funds through credit union accounts. While the payment system is not interoperable, there are existing models that would allow interconnection between credit unions and local banks through the use of prepaid debit cards at bank ATMs and in POS transactions, which would enable greater coverage in the payment system.

In a post-COVID world, it is essential to rationalize safety net programs by implementing coordinated targeting mechanisms and creating a comprehensive social protection system. The URP will also need to be reduced and support provided to its beneficiaries in their process of rejoining the labor market.



Analysis of Inequality

Costa Rica

Priscilla Gutiérrez and Mauricio Monge



Evolution of inequality and poverty

Despite having grown an average of 4% a year in the last two decades, Costa Rica has seen little change in its poverty rate during this time and experienced one of the biggest increases in income inequality in LAC. Poverty, as measured according to Costa Rica's official poverty lines, has remained at around 20% and has particularly affected female-headed households (45%), indigenous people (70%) and people of African descent (30%). Both the general poverty and extreme poverty rate are higher in rural areas (24.2% and 6.9% in 2019, respectively), where 27% of the country's population are concentrated. Furthermore, in the last five years, Costa Rica has gone from being one of the least unequal countries in LAC in 2000 to now being close to the median. Inequality began to rise in the period from 2001 to 2007, when the country reached growth rates of 5% a year; its Gini index has remained at 48.5 on average since the 2008–2009 crisis, during which time growth averaged 3.6% a year. By 2019, the income of the richest 10% of households was 25 times higher than that of the poorest.

Even though the various regions of the country have similar levels of inequality, their level of social development is not. The Social Development Index (SDI)¹⁷ shows that only 13.4% of the country's 483 districts have a level of social development that could be considered high, while 55.8% have a low or very low level of development. Of the 100 districts with a high SDI, 97 are located in the Greater Metropolitan Area¹⁸ (GMA), while 92 of the 100 districts with the lowest are outside the GMA. The regions closest to

¹⁷ An administrative statistics-based tool that includes education, health, citizen participation, economics, and security in order to provide a better understanding of the development situation from a territorial perspective.

¹⁸ The GAM comprises 31 cantons and 164 districts, and is where 85% of the urban population, 75% of employment, and 82% of the country's sales are concentrated.

the GMA are characterized by their higher density, superior urban services, and better sources of salaried employment, in contrast to the more remote regions, which lack the proper infrastructure and have lower levels of education, as well as more limited economic opportunities.

COVID-19 will have a negative impact on economic growth and a regressive social impact, with an increase in unemployment, poverty, and inequality that affects women in particular. Due to the lower worldwide growth projections and prolonged lockdown measures, the Central Bank of Costa Rica (BCCR) has estimated that GDP will fall by 5% in 2020, while the IMF estimates a downturn of 5.5%. The drop in growth has fueled an increase in unemployment, which was already on the rise before COVID-19 and could double as a result of the pandemic, affecting women more than men. In October, the unemployment rate stood at 22% (526,000 people), while the underemployment rate was at 24%.¹⁹ The economic impact of the crisis and its impact on employment are being disproportionately felt by women due to: (i) their lower rate of participation in the economy compared to men (46% as opposed to 70.7% for men); (ii) the fact that they dedicate more time to family-related and household chores (36 hours for women as opposed to 14 hours for men); (iii) the fact that they are more involved in sectors that have been particularly hard-hit by COVID-19 (51.4% of women work in retail, hotels, restaurants, and paid domestic services). Unemployment will impact on poverty, which reached 26% in July 2020.

Determinants of inequality

The increase in inequality and the stagnation of poverty are linked to the dual nature of the productive structure and to the lack of alignment between production and job creation. The country's productive apparatus is characterized by a combination of high-productivity firms (both domestic and multinational) coexisting alongside small domestic companies with low, diffuse productivity. While this simple black-and-white characterization is not entirely accurate, generally speaking those sectors with lower productivity levels have a greater capacity to create jobs, though low-skill and less well-paid ones. In contrast, the country's most productive sectors—which are generally focused on non-traditional agriculture and new services and located in free-trade zones—provide more-skilled jobs but have less capacity to create them. Moreover, the formal employment generated by private enterprises is highly concentrated in the top income decile, which generates three quarters of the country's formal jobs.^{20,21}

The structure of the labor market, which shows a marked disparity between public and private wages and salaries, has also contributed to the increase in inequality and the stagnation of poverty. Earnings from employment account for over 80% of total household income.²² Thirty percent of workers are in elementary occupations, while 8.8% of those in work are situated at the top of the employment pyramid. At the same time, the main determinant of the rise in income inequality has been the level of wages of skilled workers, primarily in the public sector. On average, public sector salaries are 39% higher than those in the private sector, one of the widest wage gaps in the LAC region.²³

The wage gap between the public and private sectors averages **39%** one of the widest in the region

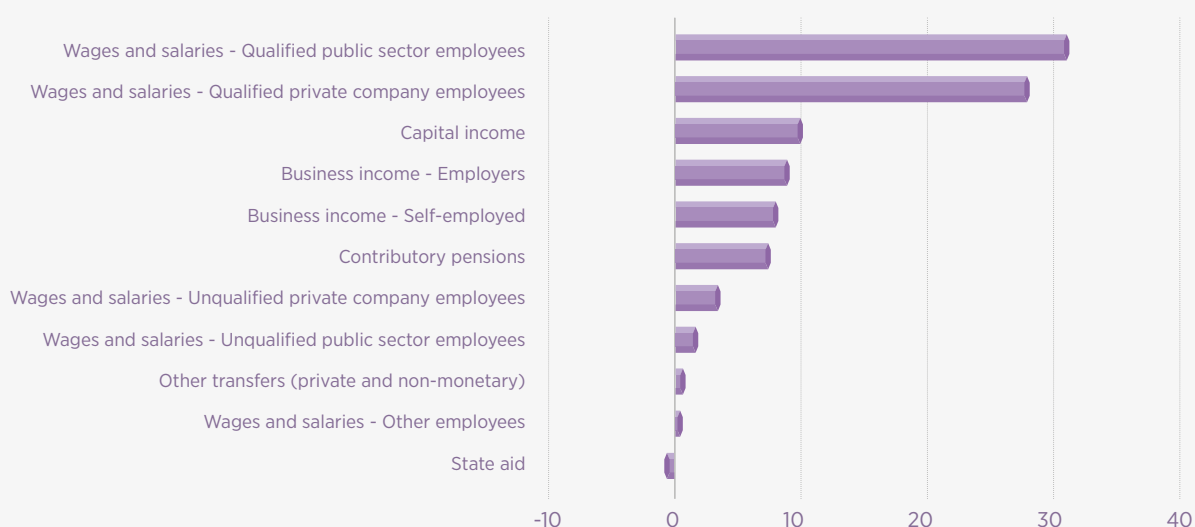
¹⁹ Costa Rican National Institute of Statistics and Census (INEC).

²⁰ *Programa Estado de la Nación en Desarrollo Humano Sostenible* ["National Program for Sustainable Human Development"] (2019).

²¹ The informality rate in the country is somewhere between 40% and 60% (INEC).

²² *Programa Estado de la Nación en Desarrollo Humano Sostenible* ["National Program for Sustainable Human Development"] (2015).

²³ Updated calculations from the publication "Better Spending for Better Lives" (IDB, 2018).

Figure 5.1. Relative contribution to inequality of each source of income

Source: OECD (2017).

Most young people who finish school and attempt to enter the labor market lack the skills they need to succeed. Few youngsters obtain any kind of vocational qualifications and only 20% of those who go on to higher education actually graduate. Sixty percent of those who get a college degree study humanities or education-related subjects, while only 10 percent study engineering or basic sciences, both of which are in high demand in high-growth sectors. This state of affairs is the result of the challenges faced by students throughout their formative years: poor coverage and low quality in preschool education, high dropout rates and limited quality in regular high schools, low completion rates in technical high schools and at the tertiary level, and a lack of relevance of the school syllabus and of vocational training courses.

Unequal access to social services affects the most vulnerable members of the population. In poor families, the head of household has an average of 6 years' schooling; in vulnerable households it is 7 years; in consolidated-middle-class households 10; and in upper-class households 15 years of schooling. In terms of ethnicity, in 2011, the average schooling of indigenous and Afro-descendent people was estimated at 5.7 and 7.7 years, respectively, while the national average was 8.7 years. The proportion of people with no formal education at all is 15% among adults and 34% among immigrants. At the same time, 79% of households in the top income quintile have a computer at home, while in the bottom the figure is only 25%; furthermore, 40% of households have no cable, fiber-optic or dial-up access to the Internet. As for access to the social security system, 15.1% of the population—mostly informal or temporary workers, poor refugees, undocumented immigrants, indigenous people, and other non-specified poor—have no coverage, a figure that rises to 21.8% in the North Huetar region.

Public policy proposals

Consolidating a social authority and overcoming the fragmentation of social programs present a number of challenges. Social spending represents 20.9% of GDP; however, it primarily benefits highly qualified and formal workers, which constitutes an obstacle to reducing poverty. The social protection and employment sector (SPE) accounts for the highest percentage of social spending (40%), one of the highest levels in LAC. However, despite there being some 46 social assistance programs, coverage remains low, particularly among the poor.²⁴ The social protection sector comprises more than 22 institutions, each of which acts independently, with the result that the services provided are disjointed, duplicated, and fragmented, and at the same time there are leakages in social spending.²⁵

Some social programs have achieved good results in the education sector. Though it has decreased, intra-annual desertion is higher in early education and in technical high schools. Eight out of every 100 students drop out of the school system in the latter. The most affected level is evening high school (both regular and technical). The reduction in intra-annual desertion may be associated with the work of public programs such as *Avancemos* ("Let's go forward," a conditional transfer program) and *Yo me apunto* ("Count me in"), which focus on retaining students and bringing back those who have dropped out of the system, most of whom enroll in the evening program.

Eight out of every 100 students enrolled in vocational education drop out

Particularly for women, who bear the greatest burden as caregivers, the Child Care and Development Network (REDCUDI) has been a valuable tool, though one whose coverage remains limited. Some 396,000 women are currently out of the labor market for reasons linked to caregiving. It is estimated that total poverty would be reduced by half if women outside the labor force were to find jobs. While REDCUDI coverage did grow by 156% from 2010 to 2016, it is still not enough to reach the potential beneficiary population of 472,572 people under the age of 7, only 10% of whom were covered in 2016. The network reaches only 28% of the 184,000 potential beneficiaries living in poverty or a state of risk and social vulnerability. The existing choice of care centers is limited, particularly in cantons outside the Central Region.²⁷

The availability of programs aimed at helping people find employment and access training in order to enhance their employability is limited, although there has been an effective response during the pandemic. Currently, the main policies aimed at helping those who lose their jobs are: (i) mandatory severance pay; and (ii) the Labor Capitalization Fund (FCL), a savings fund amounting to 3% of the employee's salary that employers pay into and which forms part of an employee's severance package. As a result of COVID-19, Congress approved the delivery of all or part of the FCL to employees whose working hours were cut or who were furloughed (previously, these resources could only be withdrawn when the employment relationship was terminated as a result of resignation, dismissal or retirement). At the same time, the government implemented the *Bono Proteger* subsidy, which provides those who either lose their jobs, have their working hours cut or are furloughed with financial assistance for a period of three months. By November 2020, 696,519 such subsidies had been paid out.

By November, almost **700,000** Proteger subsidies had been given out

While pensions are generous, the pension system faces a number of challenges in terms of sustainability. Workers pay an average of 10% of their wages in contributions, but their replacement ratio is 60% (as opposed to the 49% of OECD countries). Various actuarial studies have determined that the reserves of the Costa Rican Social Security Fund for the Old-Age, Invalidity and Survivors Benefit—the largest and most important fund of its kind in the country and into which 1.7 million people pay contributions—will run out sometime between 2025 and 2041 unless reforms are implemented within the next few years.

²⁴ The school nutrition program has the highest coverage (33% of the entire population in 2013 and 53% of the poorest quintiles). The conditional cash transfer program *Avancemos* is the second largest social assistance program. However, it is estimated that in 2013 it covered only 15.3% of the entire population, 24.2% of the poor, and 11.4% of the nonpoor (Robles *et al.*, 2015; World Bank, 2015).

²⁵ Leakages in targeted spending amount to 1.9% of GDP "Better Spending for Better Lives" (IDB, 2018).

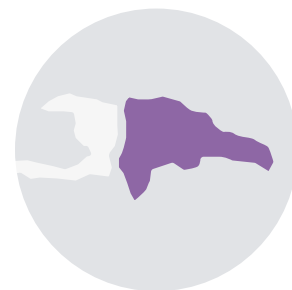
²⁶ Students who failed to complete the school year in the same year in which they enrolled.

²⁷ Strategic Plan - National Child Care and Development Network (REDCUDI) 2018–2022, IMAS.



Analysis of Inequality

Dominican Republic



Fanny Vargas and Joaquín Zentner

Evolution of inequality and poverty

In recent years, the Dominican Republic has made significant progress in terms of reducing both poverty and, to a lesser extent, inequality. Between 2014 and 2018, the overall poverty rate fell from 31.3% to 17.9%. This was facilitated by a significant improvement in people's real incomes as a result of economic growth, low inflation, and increased social spending.²⁸ Cash transfers had little impact on reducing poverty and income inequality.²⁹ Meanwhile, there has been less progress in terms of inequality, and the Gini index, calculated on the basis of per capita income, rose from 45.5 in 2014 to 43.9 in 2018.

These gains are now in jeopardy as a result of the COVID-19 pandemic. The pandemic and the efforts to contain it brought much of the country's economic activity to a halt during the period from March to May, paralyzed international tourism between March and July, and reduced both exports and, to a lesser extent, remittances.³⁰ This situation is compounded by a labor market in which most workers are informal (55%

²⁸ In 2018, social spending in the Dominican Republic accounted for nearly 50% of total public spending and 8% of GDP. It has increased in recent years, mainly due to increased spending on education (up to 4% of GDP), which accounts for more than 50% of all social spending, followed by health at 22%, and social protection at 19% (MEPYD, 2018).

²⁹ MEPYD (2019).

³⁰ Although the inflow of remittances fell sharply in March (by 22%) and April (by 32%), they subsequently recovered and by July were up 5% compared to January–July 2019 (Central Bank of the Dominican Republic).

in 2019),³¹ hold unstable jobs or cannot work from home, which makes it difficult to enforce compliance with health measures, implement employment protection schemes, and deliver social assistance. The level of informality is even greater in those sectors most impacted by the pandemic, such as commerce and transportation. Preliminary estimates indicate that unemployment will increase by between 6% and 9%³² and the poverty rate to 24.2% of the population, and that the Gini index could rise from 45.9 to 47.

The crisis may further intensify regional and gender inequalities. Regions with a high level of tourism activity, such as Yuma and parts of the North Cibao and Northeast Cibao can be expected to be most affected by the crisis, and their low or moderate levels of poverty and inequality can be expected to increase to reach the national average. As a result of COVID's impact on services, the urban and peri-urban areas of Greater Santo Domingo and Santiago—where almost half the population is concentrated—are likely to see a greater rise in poverty and inequality than rural areas. Women—who prior to the pandemic had a higher poverty rate than men (19.6% versus 17.6% in 2017), lower labor force participation rate (52.6% versus 78.4% in 2019), higher unemployment rate (9.3% versus 3.6%)³³ and lower wages³⁴—may be more severely impacted by the COVID crisis. They are mostly employed in the service sector (90%), predominantly in health services (77%), education (67%), tourism (59%), and others (69%); a high proportion of them are self-employed (25%) or work in domestic service (13%), sectors and occupations that have been harder hit by the pandemic. However, preliminary data suggest that as of August 2020 the loss of formal employment has been greater among men than women (16.9% versus 13.3%),³⁵ which may be an indication that the impact of the pandemic has been greater in male-dominated activities, such as construction or industry; no data are yet available on the loss of informal employment. Meanwhile, the suspension of face-to-face classes will affect the participation of many poor women in the workforce due to the lack of childcare options available to them.

The loss of formal employment as of August 2020 **has been greater among men than women 16.9% versus 13.3%**

Determinants of inequality

Deep inequalities that prevent the poorest from accessing the basic goods and services needed for social mobility persist. Substantial income gaps can be found in education: at the primary school level, there is a 72% difference between the gross enrollment ratio of nonpoor and extreme-poor students; for secondary school students, the difference is 47%. Teenagers between 15 and 19 years of age in the highest income quintile are 24 percent more likely to have completed primary school; people between 20 and 24 in the richest quintile are 87 percent more likely to have completed secondary school than their counterparts in the poorest quintile.³⁶ Other services show a similar pattern: 9.2% of households in the poorest quintile remain unconnected to the public electricity grid. Nationally, only 54% of households get water from the public water supply for domestic use; in rural areas the figure drops to 32% and among very low-income households it is 10%, in contrast to the 82% of the richest quintile. Only 29% of the poorest households and 63% of those in the second poorest quintile have access to a private toilet, whereas among the richest households everyone does. The richest households are 42% more likely than poorer households to receive a municipal solid waste collection service.³⁷

31 Central Bank of the Dominican Republic (2020).

32 World Economic Outlook (IMF, April 2020).

33 Central Bank of the Dominican Republic (2020).

34 Women earned 9% less per hour on average than men, a gap that increases to 25% in the informal sector, where 40% of women are employed (SISDOM 2017).

35 IDB (2020).

36 SISDOM (2017).

37 National Bureau of Statistics (2019).

A key factor in determining social disparities is the inability of the public sector to effectively distribute enough resources to provide quality public services. The level of public social spending has reached a historic low (7.6% of GDP versus 10.9% in LAC),³⁸ and the reforms needed to modernize and streamline the state apparatus for providing quality social services based on principles of social equality have been slow in coming. The low level of social spending is indicative of the fact that vulnerable groups have little capacity to influence the distribution of public resources. Despite the high growth of recent years, most people report being dissatisfied with the functioning of the economy (39% totally dissatisfied, 45% somewhat dissatisfied); similarly, the perception of many is that the country is governed for the benefit of a few (84% of those surveyed) and that the distribution of income is unfair (56%). Over half the population (53%) want to emigrate.³⁹ The popular perception is that public services are of poor quality, which is why the more well-off have turned to private services for their education, healthcare, and transportation needs, at a high cost to households.

Public policy proposals

The main redistribution policy aimed at the poor is the *Progresando con Solidaridad* (“Progress through Solidarity” or PROSOLI) social intervention program, which comprises conditional cash transfers, socio-educational support, and liaison with government programs and services. PROSOLI includes two targeted subsidies and three conditional transfers, and reaches about 800,000 beneficiaries, mostly women (67%).⁴⁰ The low value of the transfers (around US\$25) and the high rates of leakage and undercoverage⁴¹ have meant that PROSOLI’s impact has been modest,⁴² though it has had a medium-term impact on multidimensional poverty and living conditions.⁴³ In response to the pandemic, PROSOLI was temporarily expanded under the *Quédate en Casa* (“Stay at Home”) scheme, which expanded coverage to reach 2.6 million beneficiaries to include those above the poverty line who are vulnerable, and increased the size of the subsidies to approximately US\$90; some 450,000 households now receive additional transfers of US\$36.

The country has no unemployment insurance scheme, which makes nonpoor groups even more vulnerable. While Law No. 87-01 does provide for the introduction of unemployment insurance, it has yet to come into effect. The only type of financial compensation available to workers in the formal sector is severance pay, which is paid when an employer terminates a worker’s contract without good cause. The crisis has shaken up this system, as many companies have reported that they are struggling to pay the severance pay owed to those that have been laid off.⁴⁴

In the absence of any kind of unemployment insurance system for workers, the government created two cash transfer programs. The *Fondo de Asistencia Solidaria a Empleados* (“Humanitarian Assistance Fund for Workers” or FASE) is intended to prevent layoffs at companies with furloughed employees that have temporarily ceased operations due to the downturn in economic activity (FASE 1) and manufacturing companies and SMEs that are still operating and have kept on all their staff as usual (FASE 2). The value

38 2010–2018 average (CEPALSTAT, 2019).

39 The percentage of people wishing to emigrate was around 50% between 2011 and 2018 (Latinobarómetro, 2018).

40 Social Subsidies Administration Unit (Administradora de Subsidios Sociales or ADESS, 2019).

41 43% of nonpoor beneficiaries and 56% of extreme-poor beneficiaries are not covered by the program. SCL/CDR calculations based on the Central Bank of the Dominican Republic’s 2014 National Labor Force Survey.

42 It is estimated that without the targeted transfers, poverty and extreme poverty rates in 2014 would have been 6% and 24% higher, respectively. The Gini coefficient would have been 0.464 instead of 0.453. The analysis includes conditional monetary transfers, SFS Subsidized Contributions, and PROSOLI’s

43 Center for Effective Global Action (CEGA, 2019).

44 Bonilla (2020).

of the transfers ranges from US\$90 to US\$157, which covers 70% of the employee's salary, with the employer covering the rest (FASE 1) or paying a flat-rate contribution of US\$90 per worker (FASE 2). To qualify, companies must keep on all of their workers and pay social security contributions, which means that a large percentage of the workers are excluded.⁴⁵ The *Pa' Ti* ("For You") program launched in May delivers US\$90 a month to some 200,000 self-employed workers who have been unable to work due to social/physical distancing measures and are not receiving any help from any of the other programs. The beneficiaries of the *Pa' Ti* program were identified using records from the formal credit system, which resulted in a substantial share of vulnerable self-employed workers being left out, though some of these may be covered by the *Quédate en Casa* program.⁴⁶

The other source of transfers, albeit one with significant gaps in coverage, is the Health and Social Security System. In June, only 75.8% of Dominicans were covered by the Family Health Insurance (SFS), (in 2019, the figure was 79%); of these, 51% were affiliated through their employer under the Contribution-Based Scheme (CB), 47% are affiliated under the Subsidy-Based Scheme (SS), and 2% are pensioners. Those not covered are primarily the self-employed (36% of the working population) and the unemployed. With 1.2 million formal workers being furloughed during the emergency, a special extension of the CB coverage was required, as it would have ended a few months after their employment contracts were suspended;⁴⁷ unless additional measures are taken, the expected rise in unemployment will mean further reductions in health coverage by the end of the year. In response, the government has been carrying out mass registration in the SS of the non-affiliated population, as a result of which by October 2020 up to 92% of the population were covered by the SFS. The coverage gap is wider in the pension system, which only 44% of the EAP pay into due to the high level of labor informality.⁴⁸

92% of Dominicans are covered by the Family Health Insurance

In order to avoid sacrificing all the progress made in recent years, support for the most vulnerable members of the population needs to continue, and the support programs themselves need to be made more efficient. The *Plan Quisqueya Empieza Contigo* ("The Quisqueya Plan Starts with You" or QEC), FASE, and *Pa' Ti* cash transfer programs need to remain in place for as long as the emergency continues, and with the help of additional tools designed to identify and register them in aid programs, protection should be extended to include the vulnerable population in the informal sector.⁴⁹ Furthermore, all other social assistance spending needs to be rationalized by improving interinstitutional coordination in order to promote the *Sistema Único de Beneficiarios* ("Single Beneficiary System" or SIUBEN) as the main targeting tool, giving priority to programs that complement PROSOLI/QEC and are based on a life-cycle approach. Subsequently, the design of the benefits needs to be improved: the amounts transferred should be increased and the benefits classified based on the quality-of-life index, whereby greater resources would be allocated to poorer households to ensure they obtain a larger share of the basic family food basket. As the economy recovers, strategies for removing nonpoor beneficiaries from these programs will have to be devised.

Similarly, formal employment needs to be preserved and support provided for those wishing to move out of the informal sector and into the formal. Job-sharing or reduced working hours schemes are encouraged as a means of minimizing formal job losses, as well as measures aimed at maintaining

45 Approximately 50% of all workers work for informal businesses. Poor or vulnerable workers at these companies receive the *Quédate en Casa* allowance if they are poor but lack the job protection provided by the FASE program.

46 According to the 2018 Continuous National Workforce Survey (ENCFT), almost all of the 1,741,133 self-employed workers were informal. Furthermore, 15% were in poverty and 37% were poor or vulnerable (UNDP, 2019).

47 Resolution No 498-03 of the National Social Security Board.

48 National Social Security Board (CNSS, 2020).

49 The use of big data and artificial intelligence tools is recommended, tools based, for instance, on an analysis of electricity, water, or phone bills; mass text messaging of potential applicants; and the use of collaborative economy platforms. For the purposes of this effort, it is also essential to ensure greater database interoperability between the Social Security Treasury Office and the Single Beneficiary System (*Sistema Único de Beneficiarios* or SIUBEN).

the human capital of those out of work, including temporary employment, training, and job placement programs. QEC beneficiaries can take advantage of the training available under the PROSOLI program, while other informal workers who are registered under the social protection system can be given training in order to reduce the negative impact on labor productivity and be enrolled in job placement schemes in order to make it easier for them to rejoin the workforce. These programs need to be aligned to the key sectors defined in a national strategy for economic reactivation and the creation of formal jobs.

In order to start growing again in a more equitable way, the gaps in income and disparities in the quality of social services must be overcome. Increased investment is needed to bolster the supply of healthcare services, with an emphasis on equality, prevention, coverage, and quality. The integrated healthcare services network model needs to be implemented in an effective manner and the budget allocated to primary care and health promotion/prevention be increased. The minimum quality standards and guidelines for healthcare facilities also need to be revised. Skill development should be encouraged among healthcare professionals and service quality monitoring and assessment mechanisms be put in place. As for education, the challenges created by COVID-19 make it more difficult to ensure coverage for the poorest and most vulnerable and that they acquire skills through a combination of face-to-face teaching and distance learning. Increased investment is recommended in order to provide low-income students with greater connectivity and better access to technological platforms and tools during the crisis, as well as to encourage online teacher training and to continue broadening the range of educational content available in other formats (i.e., radio, television, and so on).

Increased investment is needed **to bolster the supply of healthcare services,** with an emphasis on equality, prevention, coverage, and quality

The most pressing challenge is to mitigate the negative effects of the pandemic and address the challenges in an inclusive, robust, and sustainable manner. The State needs an overhaul in order to make the institutional apparatus more modern, transparent, and efficient, and thereby enhance the provision and quality of public goods and services and expand social protection networks. The priority should be to improve the health, education, and public transportation services on which the poor and vulnerable rely, and to facilitate their access to the formal labor market in order to provide equal opportunities for all Dominicans. That way, a stock of human capital will be developed that will drive the economy's productivity and real wage growth, while social mobility increases.



Analysis of Inequality

El Salvador

Juan José Barrios and Julia Escobar



Evolution of inequality and poverty

Over the past twenty years, a significant reduction in poverty has been achieved. Despite the structural issues of El Salvador's economy and persistent development gaps, social indicators show a continuous decrease in poverty in the period 2000–2019. Extreme poverty in the country fell by half, from 27% to 11.1%, while general poverty nationwide decreased from 46% to 28.5%, a drop of 19 pp. As a result, in 2019, the levels of both general and extreme poverty were close to the regional average, with the country achieving a faster rate of poverty reduction than the Latin American average.

The dynamics of migration and remittances have been decisive in reducing poverty. In 2018, remittances amounted to 21% of GDP, much higher than the LAC average of 1.5%. This inflow of funds is received by 21.7% of the country's households, making it an important source of income, primarily in rural areas. Given that the changes in poverty and inequality indicators have occurred within a context of slow economic growth, the evidence suggests that they are largely the result of patterns of emigration and remittances (Acevedo and Cabrera, 2014) rather than structural changes in the economy.

Multidimensional poverty has also decreased, though disparities in the provision of basic services and in access to education existed even before the 2020 crisis. The country has serious deficiencies in terms of social infrastructure. More than 600,000 of the country's inhabitants (27% of the rural population) have no potable water supply. According to the Multipurpose Household Survey (EHPM), in 2019, 81% of households nationwide were connected to a piped water supply, compared to 67.3% in rural areas. Moreover, 48% of the water supply has been classified as intermittent, while 50% of the population

have reported issues with the quality of water supplied. Over 95% of domestic wastewater is discharged untreated and in many cases the infrastructure is inadequate.

There has been no change in the consolidated middle class, despite an increase in income prior to COVID-19. Though the median monthly household income rose from US\$274 to US\$500 between 1999 and 2019, the proportion of the population classified as middle class fluctuated between 17% and 24.6%. The growth in income has been insufficient to close the gap with LAC countries, where the middle class account for an average of 32% of the population. This same period saw a considerable increase in the vulnerable population, defined as nonpoor households with incomes of between US\$5 and US\$12.4 a day. This group went from being a third of the country's total population to almost half, one that is exposed to a multitude of risks, such as changes in the price of the market basket of consumer goods, economic recessions, and external shocks. These households also constitute the income group most likely to emigrate and that which receives the largest proportion of remittances from abroad (Duryea and Robles, 2016).

Between 1999 and 2019, the proportion of the population classified as middle class

fluctuated between 17% to 24.6%

In terms of inequality, El Salvador has the second lowest Gini in Latin America behind Uruguay. In the period 2000–2019, the Gini coefficient fell from 0.54 to 0.41, whereas the regional decrease was from 0.55 to 0.48. At the same time, if we consider the Palma index (which shows where inequality is most acute), in 2000 the richest decile had four times more than the poorest 40 percent, while in 2018 this figure was 1.9 times more, suggesting a lower concentration of wealth in the upper part of the distribution among Salvadoran households. The impact of the pandemic on income and employment could cause a significant rise in income inequality, with an increase in the Gini index from 40 to around 42.

The fall in remittances and the job losses⁵⁰ associated with COVID-19 could lead to a significant increase in poverty. More specifically, estimates suggest that the poverty rate could increase by around 7.4 pp, i.e., an additional 478,000 people with a daily income of less than US\$5 a day. The consolidated middle class, made up of people with incomes of between US\$12.5 and US\$62 a day, could shrink from 25% of the population to 19% in 2020.

Determinants of inequality

A person's standard of living is largely determined by their rurality, formality, and education. El Salvador is a more urban country than its neighbors; however, 62% of its 1.85 million poor live in rural areas. The rise in income level has not been evenly distributed across the country and an analysis of subnational data from 2000 to 2018 shows that poverty fell from 71% to 47% in rural areas, whereas in urban areas the decrease was from 26% to 17%. At the same time, higher poverty rates are also strongly associated with informality: 73% of the Economically Active Population (EAP) do not pay into the social security system, but account for 94% of all those classified as poor. Furthermore, data disaggregated at the regional level show that the highest rate of extreme poverty can be found in departments with rural and border populations, such as Ahuachapán in the west (42%) and Morazán in the east (47%). The urban areas where national economic activity is concentrated, such as San Salvador and La Libertad, have much less poverty (14% and 25%, respectively) than the rest of the country. Moreover, the highest poverty rate among people over 18 is in those with no schooling (41%). Among adults who have not completed primary education, poverty levels reach over 35%, while only 25% and 9% of those with a secondary-level or higher-level education, respectively, are poor. In terms of the overall number of poor (1.85 million) with each level of schooling, 68% have a primary-level education or less, 25% a secondary-level education, and 7% a college-level education.

⁵⁰ It is estimated that up to 15% of formal jobs could be lost as a result of the pandemic.

While income distribution indicators point towards sustained improvement, the disparities in educational opportunities continue to fuel intergenerational immobility. As access to education in poorer households is restricted by factors related to insecurity and poverty, education itself can create a permanent source of intergenerational inequality. An analysis of household surveys and the relationship between the educational level of parents and their children by Berhman *et al.* (1999) shows that mobility in El Salvador is not only low, but that its long-term evolution shows that it remained stagnant between 2000 and 2010, before starting on a downward trend lasting from 2010 to 2018. This apparent inconsistency between the indicators of income inequality and mobility, while not intuitive, does confirm the results of previous research (see Torche, 2014). Factors related to social mobility and intergenerational inequality explain, at least in part, the marked contrast between the progress made in terms of income inequality and the public's perception of the distribution of wealth. As described below, social discontent is quite unrelated to the Gini and appears to be more closely linked to the perceived lack of opportunities and poor quality of services among the public.

Despite being the country with the lowest income inequality in the region, El Salvador has the highest level of dissatisfaction with regard to inequality. According to Latinobarómetro, between 1997 and 2001, the proportion of people who felt that income distribution in El Salvador was unfair rose from 60% to 87%, the highest in the region. In regard to the relationship between socio-political discontent, mobility, and inequality, Friedman (1972) argues that two societies with the same income distribution but differing degrees of mobility will produce different results, due to the fact that inequality will be viewed differently. Meanwhile, Quah (2020) suggests that social mobility has played a greater role in explaining the intensity of conflicts than the level of inequality per se. In the same vein, Protzer (2019) associates the emergence of populist figures with a lack of social mobility.

The highest poverty rate among people over 18 years of age is in those with no schooling
(41%)

According to the public, the country's main problem by far before the crisis was citizen insecurity. The proportion of people who ranked citizen insecurity, including violence and gangs, as the country's biggest problem almost tripled between 2008 and 2018, from 22% to 60%. When asked about the main issue for each individual rather than for society, most people believed it was the economic situation, with 55% choosing it in 2008 and 52% in 2018. Other possible triggers of discontent and dissatisfaction include poor social security coverage, inadequate access to the water system, and problems with urban transportation. Before the last presidential elections, only 1 in 10 Salvadorans believed the country was progressing and in 2018 confidence in public institutions and the political system reached an all-time low. However, the 2019 electoral process may have provided a temporary escape valve for burgeoning social discontent. The public's strong confidence in the government may have reached a turning point, thus decreasing the likelihood of civil unrest, at least in the short term. According to various local analysts, as well as the findings of a number of recent local perception surveys, while the new government does enjoy a high level of public acceptance, if the country's structural problems (such as income and opportunity inequality) are not addressed, social discontent could well set off on another upward course.

Public policy proposals

A series of social programs have been implemented in line with the Sustainable Development Goals (SDGs). Of the seventeen SDGs, El Salvador has prioritized six,⁵¹ so a package of specific programs was developed to address the issues of healthcare, nutrition, and social protection, including *Comunidades Solidarias Rurales* (“Rural Supportive Communities”) the conditional transfer program for families in extreme poverty in operation since 2009. The special program *Salud de la Niñez, Mujer y Adolescencia* (“Health for Children, Women, and Adolescents”), which seeks to provide excluded groups with greater access to better quality healthcare. In operation since 1984, the *Alimentación y Salud Escolar* (“School Food and Health Program”) seeks to help improve the dietary condition of students through a series of subprograms aimed at improving learning conditions, attendance rates, and retention in the school system. One of the most important educational programs is the *Dotación de Paquetes Escolares* (“Provision of School Supplies”) program. Programs aimed at making it easier for people to enter the labor market include *Empresa Centro* (“Central Enterprise”), a program for young people between the ages of 18 and 25 that offers a mixture of theoretical and practical training in partnership with the private sector.

The redistributive effect of social policy has had a modest effect on poverty reduction. Beneke *et al.* (2017) find evidence that direct transfers from government social programs have had a limited effect on poverty and inequality. In particular, the authors explain that while direct transfers from social programs do contribute to poverty reduction, when indirect taxes are taken into account the effect disappears, as from the second income decile on people pay more in direct and indirect taxes than they receive in transfers and subsidies.

The primary driver of the growth of the middle class has been formal job creation in the private sector. The increase in the broader middle class (i.e., including vulnerable people) is associated with higher incomes, mainly for formal workers (who pay into the social security system), and this explains over 50% of the reduction in poverty. Disaggregating by sector reveals that what has driven this change is incomes in the tertiary sector, including commerce, restaurants and services, which is to be expected given that these comprise almost 80% of employment.

There is much room for improvement in the country’s social protection systems. Most subsidies fail to reach the poorest households. The government has sought to improve the targeting of these subsidies due to the importance of enhancing fiscal space. While efforts have been made as regards distribution, the resources involved remain significant and there is room for improvement when it comes to targeting, the sectors with the least distributive impact being water and transport. Considering the total amount of subsidies, households in the two poorest quintiles receive a smaller share than the percentage of the total population they represent. Households in the lowest quintile receive 13.8% of all subsidies, while those in the second lowest receive 18.7%. This shows that there is room for improvement where targeting is concerned, which would help ensure public resources are put to better use. In this regard, continued efforts to develop a population information database, such as that which could be created from the Single Registry of Participants (RUP), would enable the government to better identify those who should receive subsidies and to improve accountability.

51 (i) End poverty in all its forms everywhere; (ii) end hunger, achieve food security and improved nutrition; (iii) ensure healthy lives and promote well-being for all at all ages; (iv) ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; (v) achieve gender equality and empower all women and girls; (vi) ensure availability and sustainable management of water and sanitation for all.

Targeted programs have a limited reach. Those programs that have proven effective at targeting the most vulnerable have had a modest impact due to limited coverage and reach. One example is *Transferencias Monetarias Condicionadas Familias Sostenibles* (“the Conditional Cash Transfer Program for Sustainable Families, formerly known as *Comunidades Solidarias* (“Supportive Communities”), the most important income redistribution program, which in 2015 covered 100,000 families but whose reach remains limited. Studies show that the direct transfers are well-targeted at the most vulnerable segment of the population, but both the coverage and the value of the transfers are low (the amount a family receives varies according to the number of children and ranges from US\$15 to US\$20 a month, which represents 10 percent of a family’s expenses). This has little impact on reducing poverty and inequality indicators.

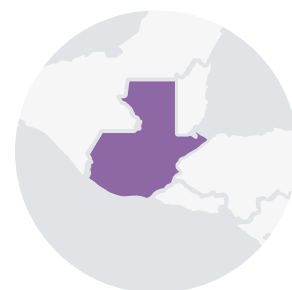
El Salvador has no system of population registration that would enable its social protection system to deal with the impact of the crisis at the household level more effectively. Having a register of the poor and vulnerable population is extremely important in all types of emergencies. In El Salvador, such a system could be used to achieve fiscal savings and to protect the population in the kind of emergency currently unfolding. In 2010, the RUP was launched for the purpose of keeping a register of all the households and individuals in ‘precarious urban settlements’ (or AUPs); however, only 145 such AUPs have been identified in five of the country’s departments.



Analysis of Inequality

Guatemala

Jordi Prat and Gisele Teixeira



Evolution of inequality and poverty

Guatemala is characterized by a young and very ethnically and culturally diverse population. In 2018, Guatemala's population was estimated to be 16.3 million people, of whom 34% were aged between 0 and 14 years old, 61% between 15 and 64, and the remaining 5% 65 or older. While the average annual growth rate of the population has decreased in recent years, it remains high. Ladinos comprise 56% of the population, with the remainder made up of Mayans (42%), Xincas (2%), and others (2%). It should be noted that those classified as indigenous are divided into at least 22 linguistic communities (INE, 2019a).

Half the population is concentrated in five of the country's 22 departments. These are: Guatemala, Alta Verapaz, Huehuetenango, San Marcos, and Quiché. The department of Guatemala is home to more than 20% of the population, while 46% of the population reside in rural areas.

Guatemala's economic performance is largely dependent on agricultural products and remittances. Guatemala is a small, open economy whose performance is linked to that of its trading partners. Its economy is dependent upon the price of its main agricultural export products, which will remain relatively low, though on a very slight upward trend. Moreover, the main generator of foreign exchange in the country are remittances, which accounted for the equivalent of 13% of GDP in 2019 and help prop up aggregate demand.

As a result of the COVID-19 crisis, there is expected to be a downturn in economic activity in 2020, though less so than in the rest of Latin America and the Caribbean. The country went from an average annual growth rate of 1% between 1981 and 1990 to one of 3.5% between 1991 and 2019, which is very similar to the CAPARD average and higher than the LAC average of 2.7% (IMF, 2019). The economy's low volatility is the result of macroeconomic stability and a relatively diversified export structure. However, in light of the coronavirus crisis, the main multilateral institutions estimate that economic activity will contract by between 1.5% and 4.1% in 2020, before returning to its former dynamism in 2021.

The country has failed to close the gap in per capita GDP with its major trading partners. GDP per capita grew by an average of 1.4% a year from 1998 to 2008, then slowed down between 2009 and 2018, when it averaged 1.0% a year, below the 2.8% a year CAPARD average of the same period. In 2018, Guatemala's per capita GDP amounted to only 51% of that of LAC and 13% of that of the United States, the result of high population growth and modest, low-volatility economic growth.

Given that Guatemala's growth has not been pro-poor, poverty is expected to increase as a result of the pandemic. In 2014, the poverty rate reached 59.3% of the population, i.e., 2.9 pp higher than in 2000, whereas in the same period extreme poverty increased more sharply, rising from 15.7% to 23.4%. This is in contrast to what happened in LAC as a whole, where the poverty rate fell from 43.8% to 29.6% on average over the last decade. In other words, for every percentage point of average annual growth in LAC, the poverty rate fell by 5.3 pp, whereas in Guatemala the decrease in poverty with the same growth was practically zero. Guatemala's poverty and extreme poverty rates are expected to increase by approximately 3.5 pp in 2020 as a result of the downturn in economic activity and lower employment levels.

Poverty rates are higher in rural areas and in indigenous communities. In 2014, the poverty rates for rural and indigenous people (who account for 50% and 39% of the total population, respectively) were 76.1% and 79.2%, higher than the national average. Of all those classified as impoverished, indigenous people make up 52% of the general poor and 66% of the extreme poor. In the same year, extreme poverty in rural areas reached 35.3%, more than three times the rate of urban areas, where it is 11.2%.

Economic activity is expected to contract by between 1.5% and 4.1% in 2020, before returning to its former dynamism in 2021.

Figure 5.2. Poverty rate (% of population), 2014

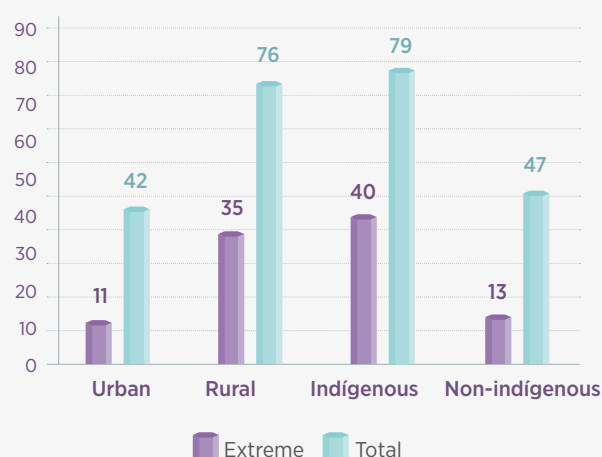
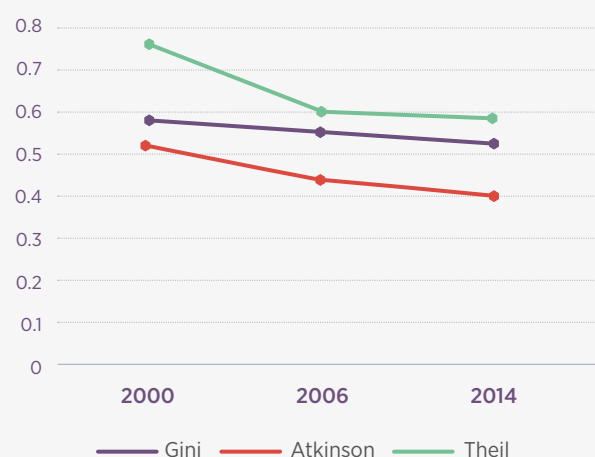


Figure 5.3. Inequality indicators



Source: INE 2014

Despite the improvement of recent years, inequality as measured by the Gini coefficient is expected to increase in 2020. Estimates based on household surveys show that the Gini inequality coefficient in LAC (traditionally the most unequal region in the world) fell from 0.53 to 0.5 on average between 2006 and 2013. In Guatemala, the Gini coefficient also fell during this time from 0.56 to 0.53, although it remains higher than the regional average and is expected to increase. Similarly, the Economic Commission for Latin America and the Caribbean (ECLAC) predicts that inequality in the distribution of income will rise to 0.54 in 2020 as a result of the COVID-19 crisis.

Only **59% of households have indoor plumbing** and in 7 out of the 22 departments, the figure is less than 50%

Housing conditions and limited access to public services reflect other dimensions of poverty. Only 59% of households have indoor plumbing and in seven of the country's 22 departments, the figure is less than 50%. Eighty percent of the country's households are connected to the electricity grid, but in the predominantly rural, high-poverty department of Alta Verapaz, only half of all households are. At the same time, 54% of households use firewood as the main source of heating for cooking. At the national level, 26% of homes have a dirt floor, a figure that rises to 64% in the department of Alta Verapaz (INE, 2019a).

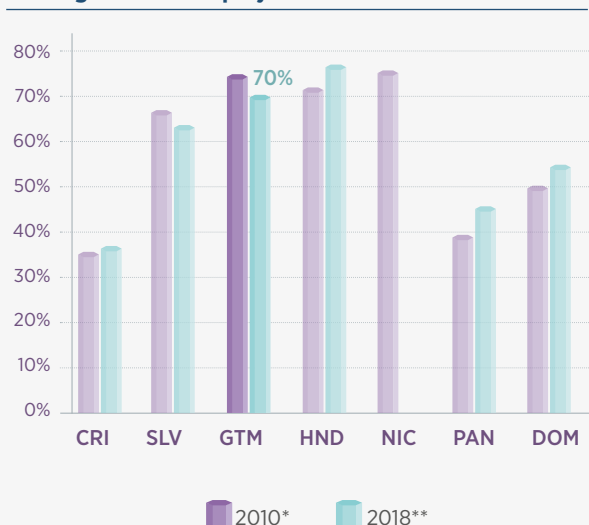
Determinants of inequality

Despite the economic stability and low level of public debt, the low tax burden limits the State's capacity for social spending. Both fiscal and monetary policy have been prudent and kept public debt at around 25% of GDP in recent years, and inflation at around 4% a year, which is within the Central Bank target. Moreover, the debt level is lower than in other Central American countries and countries with similar credit ratings. However, the country's tax burden is among the lowest in the world. Between 2013 and 2019, annual public revenue averaged 11.5% of GDP. At the same time, in the same period the level of public spending averaged only 13.2% of GDP, one of the country's lowest levels of social spending. In 2018, social spending in Guatemala totaled 7% of GDP, whereas the LAC average was 11.3% (ECLAC, 2020).

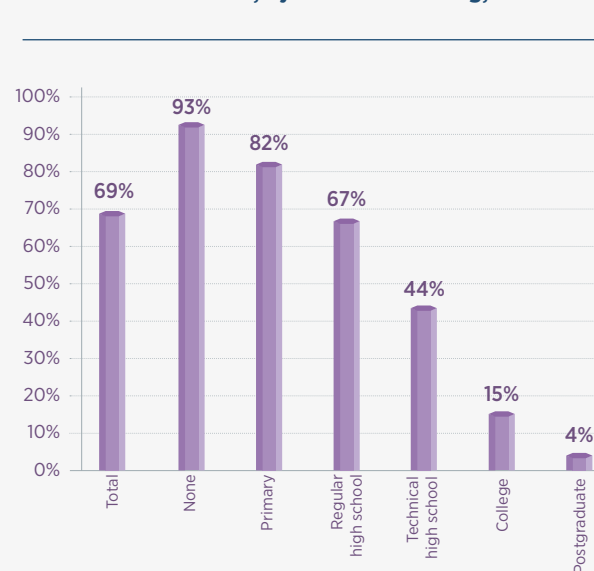
Low levels of public spending, with little opportunity for social progress, have limited the effectiveness of the fight against inequality. In 2018, public spending on healthcare and education in Guatemala amounted to 1.1% and 3% of GDP, respectively, compared to 2.2% and 4% of LAC's GDP. Nearly 30% of young people did not take part in any educational or work activities in 2017 and in 2019 approximately 70% of the working population had no more than an incomplete secondary education. The stagnation of per capita income has been affected by the existence of weak mechanisms for redistribution, which have resulted in greater inequality of opportunities and have affected people's ability to reap the benefits of growth: the average monthly income of the richest quintile is 15 times higher than that of the poorest quintile (INE, 2019b).

According to the Human Capital Index, in 2018 the country ranked **109 out of 157 countries**

Shortfalls in human capital have hampered the inclusiveness of growth. According to the Human Capital Index, in 2018 the country ranked 109 out of 157 countries, below most LAC countries that year (except Haiti) and below its 2017 ranking (World Bank, 2018). As an example, the adult productivity of a Guatemalan child who receives a full education and the services needed to enjoy good health is twice as high as one who does not.

Figure 5.4. Share of informal jobs in total non-agricultural employment

Source: World Development Indicators.
 [Note: *PAN (2011); ** HND and DOM (2017).]

Figure 5.5. Share of employed persons working in the informal sector, by level of schooling, in 2015

Source: INE 2016

Informality in Guatemala is among the highest in LAC and affects its most vulnerable to varying degrees. The employment rate in the informal sector has barely decreased at all in ten years and amounts to nearly 70% of all those employed in the country; however, the informality rate is higher among indigenous people (85%), rural workers (75%), and those with a very low level of schooling (82%). The sectors of the economy that are the biggest employers, such as agriculture (32% of those employed) and commerce (27%), have high rates of informality (90% and 74%, respectively) and lower productivity. The average monthly income of those employed in the informal sector is 2.2 times less than that of those in the formal sector. Furthermore, 20% of the working population do not earn enough to take them out of extreme poverty (INE, 2019b).

Public policy proposals

Guatemala should implement a strategy of economic reactivation to improve the country's medium-term socio-economic dynamics. The COVID-19 crisis has had a severe impact on the socio-economic conditions of Guatemalan society, so the country needs to implement a comprehensive strategy of economic reactivation. Biosafety protocols should be implemented for all activities, investment in productive and social infrastructure should be expanded, and the foundations be laid for expanding basic services in order to build human capital.

Improving the labor market for young people can yield a multitude of benefits. For one of the youngest countries in the region, the challenge is to ensure young people continue with their education until they acquire the qualifications and skills that will allow them to earn a decent living, and to propose courses of action aimed at encouraging the incorporation of young people into the formal labor market. Enhancing human capital and mitigating the negative impact of the pandemic on opportunity gaps is critical.

The COVID-19 crisis has shown that expanding the digital infrastructure is crucial for achieving further development. The pandemic has highlighted what were already worrying social divides in Guatemala, such as the differences between social classes in terms of digital access. Efforts by public institutions to promote the development and deployment of telecommunications and broadband will help put the country on the path towards the adoption of digitalization as the linchpin of economic growth, social inclusion, and equal access to opportunities.

Promoting public and private investment is key to reviving the economy. Public investment contributes to a more competitive economy and helps boost private investment. The country shows significant deficiencies in indicators related to the provision of water, electricity, telecommunications, and road transport. At the same time, investing in infrastructure has a major impact in terms of reviving the economy in the short term, and facilitating greater and more inclusive growth in the medium term. In this regard, improving processes to expedite the design and implementation of public projects and make the most of the opportunities provided by public-private partnerships should be a priority.

Strengthening institutionality and transparency. Guatemala needs to promote greater transparency and accountability in its public institutions and reform its regulatory framework in order to create a favorable business climate and reduce the obstacles to investment, competition, and adequate provision of public goods, which would contribute to a more effective reduction in the high levels of poverty.



Analysis of Inequality

Haiti

Jennifer Linares and Boaz Anglade



Evolution of inequality and poverty

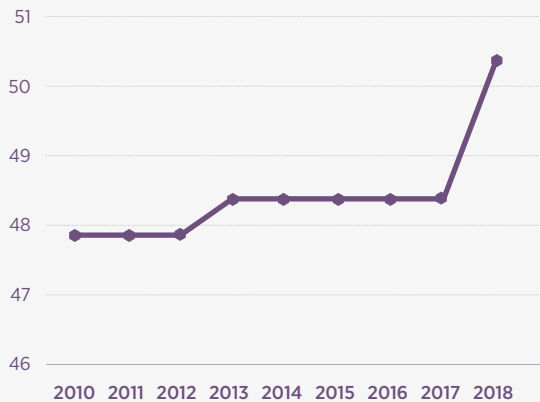
Income inequality is high in Haiti, where fewer than 3% of the country's communes have a Gini below 0.50. According to the World Bank, in 2012 Haiti's Gini coefficient was 0.61, a figure that had remained virtually unchanged since 2001.⁵² At 0.68, the Gini coefficient estimated by the Haitian Institute of Statistics (IHSI) that same year was even higher than the World Bank estimate.⁵³ According to the IHSI, incomes within each of Haiti's ten departments vary considerably: in fact, 89% of household income inequality in 2012 was intra-regional. This heterogeneity is confirmed by a 2020 IDB study that measured poverty and inequality in 2012, 2014, and 2019 at even more disaggregated geographic levels (i.e., at the level of commune and communal section), based on information gathered from satellite images and cellphone metadata. The resulting inequality maps show a great deal of heterogeneity in terms of inequality within each of Haiti's ten departments. The exercise also found that only three of the 140 communes⁵⁴ analyzed had Gini coefficients below 0.50, these being: Cité Soleil, Delmas, and Tabarre in the department of Ouest (where the capital is located).⁵⁵

⁵² World Bank (2014). A similar trend can be seen when using the *Standardized World Income Inequality Database* (or Solt's SWIID, 2019). In the last ten years, only one household survey (ECVMAS) has been conducted in Haiti (in 2012), while no population census has been carried out since 2003. Therefore, measuring the evolution of income inequality over the last ten years on the basis of official data remains a challenge.

⁵³ Note that these values differ significantly from the Gini coefficients reported by the World Bank and SWIID. In these databases, the Gini indices are standardized in terms of the definition of well-being and the adult equivalence scale in order to allow for comparison with other countries.

⁵⁴ Haiti has 145 communes.

⁵⁵ It is important to remember that the fact that an area has a low level of income inequality (as in the case of Cité Soleil) is no indication of the level of wealth of its households but instead merely provides an idea of the comparative differences in incomes between the households within it. Therefore, a low Gini coefficient could indicate that households within a given area have similarly low income levels.

Figure 5.6. Atkinson Inequality Index (%)

Source: United Nations Development Programme (2019a).

An alternative measure of income inequality shows a decline in the latter over the last decade. Even though the Gini coefficient is a widely used measure of income inequality, it is important to note that it is not consistent across subgroups; in other words, if inequality decreases in one subgroup (e.g., a region) and remains unchanged in the others, the Gini may not reflect this change correctly. For this reason, the United Nations Development Programme uses Atkinson's measure of inequality, which, in addition to demonstrating consistency across subgroups, is also sensitive to inequality at the lower end of the distribution by assigning greater weight to it (UNDP, 2019). This measure shows that income inequality in Haiti has been increasing over the last decade, with the sharpest rise occurring in 2018 when the economy entered into a sharp downturn. The persistent shocks that have hit the Haitian economy over the past two years, including that of COVID-19, could make this situation even worse.

Composition of Social Classes

Economic and demographic patterns vary considerably from one class to another. To determine the composition of the various social classes in Haiti, Székely *et al.* (2020) use data from the 2012 household survey and the World Bank definitions of poor, vulnerable, middle, and upper classes.⁵⁶ According to this method, 90.6% of the Haitian population are classified as “poor,” 6.9% as “vulnerable middle class,” 2.4% as “consolidated middle class,” and only 0.2% as “upper class.”⁵⁷ Access to basic services, ownership of durable goods, and educational attainment vary considerably among these groups, as shown in Table 5.1.

Table 5.1 Economic and demographic characteristics in Haiti, by income level

Indicator	Poor	Vulnerable middle class	Consolidated middle class	Upper class
Percentage of housing with the necessary infrastructure for and access to basic services				
Electricity	26.1	50.8	49.1	100.0
Access to potable water	23.8	31.1	34.6	44.5
Permanent floor	59.4	82.0	84.1	100.0
Ownership of durable goods				
Owns a refrigerator	5.9	17.4	23.6	75.7
Owns a vehicle	1.7	5.1	6.8	57.9
Education level				
Percentage of adults over 25 with tertiary education	1.7	3.0	6.2	10.2
Percentage of households with at least 1 member who has access to social security	6.7	9.3	8.0	-
Average years of schooling of people between 25 and 65 years old	6.9	8.0	8.4	10.2
Average years of schooling for the children in the household aged between 15 and 17 years	6.4	7.7	9.4	-
Average years of schooling of the head of household	5.6	6.8	7.2	11.5

Source: Székely *et al.* (2020).

⁵⁶ Those classified as poor have a daily per capita income of less than US\$5. The vulnerable middle class earn between US\$5 and US\$12.40 a day. The consolidated middle class have a daily income of between US\$12.40 and US\$62. Lastly, the upper class receive a daily per capita income of over US\$62 in 2011 PPP dollars.

⁵⁷ This differs from the percentages classified as poor based on the national income poverty rate (58.5%).

Determinants of inequality

There are a number of factors underlying the high levels of income inequality in Haiti. According to Ghayad *et al.* (2019), the persistence of inequality is associated in part with the dominance of major sectors of the Haitian economy that date back to the Duvalier era, when monopoly rights were granted in key industries, along with exclusive import licenses for key consumables. Moreover, the Haitian tax system tends to be regressive and relies heavily on indirect taxes. In the 2019 financial year, taxes on earnings accounted for only 26% of all tax revenue, whereas the TCA (sales tax) and customs duties accounted for 28% and 26.3%, respectively.

Furthermore, over 75% of Haiti's rural population—the most vulnerable—works in the agricultural sector, one that faces numerous challenges, including low productivity,⁵⁸ a lack of transparency in land registration, financing issues, and a high incidence of natural disasters. According to the World Bank (2014), half of the rural population also reports agriculture as their only source of income, an activity that provides barely enough sustenance for many rural households. Consequently, a large proportion of people in this sector suffer from food insecurity. In fact, 1 in 3 people in Haiti were food insecure before the onset of the pandemic (World Food Programme, 2020) particularly in the country's northwest region. This situation could get even worse in the wake of the pandemic if humanitarian services are not deployed promptly in order to mitigate the impact of rising inflation, disruptions to food value chains, and the lack of market access in these regions.

**1 in 3
Haitians**
were food
insecure before
the onset of
the pandemic

Public policy proposals

In recent months, the government has made significant progress in social issues thanks to the adoption of the National Social Protection and Promotion Policy (PNPPS). The aim of this policy is to reduce the existing fragmentation in current social programs and increase the coverage and effectiveness of social safety nets by establishing a limited number of unconditional and quasi-universal cash transfer programs for vulnerable groups. Cash transfer programs that are straightforward in design have proven effective in other low-income countries and can potentially be implemented more quickly than conditional cash transfers. Furthermore, according to Banerjee *et al.* (2019), more refined targeting programs tend to be less effective in countries that are unable to identify beneficiaries or which lack the capacity to implement such programs; the authors also provide evidence in favor of using simplified and unconditional cash transfers in countries like Haiti. Along with the significant food deliveries and transfers the government is providing with the support of the IDB and other international agencies, this policy will be essential to mitigate the effects of the pandemic.

Despite these advances, it is important to note that Haiti spends relatively little on healthcare and education. According to Ghayad *et al.* (2019), Haiti's spending on these two items amounted to less than 4 percent of GDP in the 2018 financial year, well below the regional average of over 8 percent. With the advent of COVID-19, the Haitian government increased the amount allocated to health spending by a factor of four, bringing the budget allocated to the Ministry of Public Health and Population to 10.9% of the entire 2020 budget. It will be important for the government to continue allocating substantial budget resources to the social sector after the pandemic is over in order to ensure that the people of Haiti, particularly those in rural areas, have access to basic services.

Lastly, it will be important to make significant additional investments in infrastructure, particularly transport infrastructure, in order to reduce the high cost of mobility for Haitians living in remote areas. This will be key in the Nord-Ouest department, which is practically cut off from the rest of the country and suffers the most acute levels of food insecurity. Investing in quality infrastructure will allow Haitians to connect with other productive sectors and generate productivity gains.

⁵⁸ Between 1991 and 2012, agricultural productivity decreased at a rate of 2.1% a year.



Analysis of Inequality

Honduras

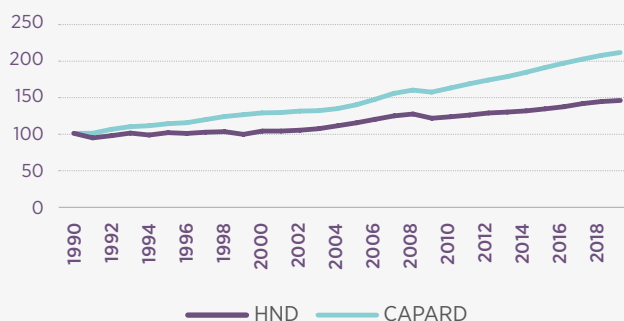
Jordi Prat, Rosmery Zelaya y Samuel Jiménez



Evolution of inequality and poverty

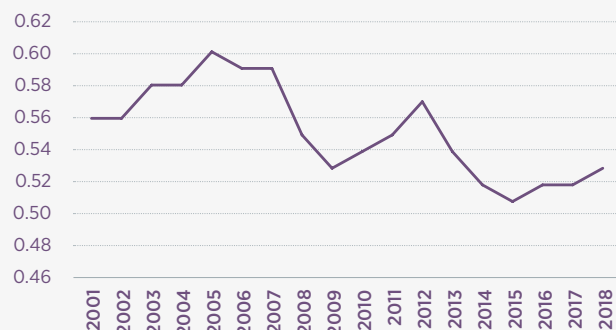
Honduras has exhibited modest growth in recent years, as the economic framework has become **more consolidated**. Between 2010 and 2019, the economy achieved an average annual growth rate of 3.5 percent, reaching a peak of 4.8 percent a year in 2017. However, the economy then slowed down to a rate of 3% in 2019. One achievement of the Hernández administration (2014–2019) was the recovery of macroeconomic stability with the support of the IMF's Monetary Program. As a result, it managed to consolidate public finances, as a result of which the central government's deficit decreased from 8% of GDP in 2013 to 2.5% in 2019, in compliance with the Fiscal Responsibility Act (the *Ley de Responsabilidad Fiscal* or LRF), which in turn helped bring about an improvement in the country's ratings according to international risk rating agencies. Meanwhile, as shown in Figure 5.7, growth per capita has been lower than in the rest of the CAPARD region.

Figure 5.7. GDP per capita, PPP (1990=100)



Source: World Development Indicators.

Figure 5.8. Inequality in Honduras (Gini coefficient)



Source: National Institute of Statistics.

Labor-intensive sectors have been less dynamic, which has restricted social progress. The agriculture and manufacturing sectors have poverty levels of 78.9% and 59%, respectively. Though the communications and financial brokerage sectors have been more dynamic in recent times, they are not the most labor-intensive, which means that they are of little benefit to the country's poor given their limited access to sources of employment, as well as their low value added.

The COVID-19 health crisis has had a major impact on Honduras and the region at large. The economy has been severely hit by the health crisis and the social/physical distancing measures implemented to prevent the spread of the coronavirus. By the end of June 2020, the projections of various national and international bodies had worsened. At the end of 2019, the country's Central Bank forecast GDP growth of nearly 3% in 2020; however, in June it revised this estimate to an eventual contraction of between 7% and 8%. By July, most SMEs were already struggling to stay in operation and, according to various business associations, around 40% of companies were close to shutting down. Tax revenues in June were 37% lower than had been projected for the first semester, while at the same time the authorities increased social and healthcare spending in an effort to mitigate the effects of the pandemic through measures that include increased social transfers, opening new healthcare centers, and establishing medical crews, among others.

Over the past twenty years, the pattern of Honduran economic growth has been characterized by factor accumulation and stagnant productivity. One growth accounting exercise showed that the economy grew by 3.9% between 2000 and 2016, driven by factor accumulation, with capital accounting for 2% and labor accounting for 1.7%, and an almost insignificant 0.2% share corresponding to total factor productivity (TFP), which can be understood to mean that there were no efficiency gains in the country's productive infrastructure, deficiencies in its human capital, weaknesses in its institutions, and little innovation, among other issues. It should be noted that the economic growth recorded in recent years is lower than would be expected with an average total investment level of 22% of GDP. Consequently, international competitiveness as measured by the World Economic Forum's 2018 Global Competitiveness Index (GCI) indicates low levels of productivity. Honduras ranks 101st out of 140 countries according to the ICG (having ranked 103rd out of 135 countries in 2017).

Economic growth in recent years has been lower than would be expected with an average total investment level of **22% of GDP**

Honduras finds itself in a vicious circle of inequality: a high level of poverty and a limited middle class. Between 2001 and 2018, the Gini coefficient fell slightly by 3 pp, from 0.56 to 0.53, though it was very volatile. This is due to a combination of two effects: an increase in income in the lower deciles and a decrease in income in the top decile, which is in turn associated with the dynamics of the agricultural sector and the expansionary effects of remittances over the last twenty years. When the population is distributed by income level, we see that the country has a small middle class and a high level of income inequality: 30% of the population live on US\$4-10 a day (vulnerable); 22% on US\$2.5 a day (extreme poor); 20% on US\$4 a day (poor); 16% on US\$1.25 a day (overall extreme poor); 11% on US\$10-50 a day (middle class); and 1% live on US\$50 or more a day (top 10%) and receive 37% of domestic income.⁵⁹ The high level of inequality between groups is reflected in the fact that the average per capita income of the richest quintile is 20 times higher than that of the poorest. It should be noted that the coverage of the social security system is very limited, with no more than 17% of the EAP paying into it.

⁵⁹ Hernández Oré *et al.* (2016).

Inequality and poverty levels could rise as a result of the pandemic. Estimates suggest that the poverty rate could increase by 5 pp in 2020.

The homicide rate fell by half: from

86.5 in 2011 to 41.4 per 100,000 inhabitants in 2018

One of the greatest achievements of the current administration has been the significant reduction in the homicide rate; however, there are still challenges yet to be overcome in order to ensure economic recovery and a good business environment. The homicide rate fell by half, from 86.5 per 100,000 inhabitants in 2011 to 41.4 in 2018. The progress made in terms of security is therefore noteworthy, though challenges remain if the country is ever to find itself among the LAC countries with the lowest homicide rate and thereby foster a better business climate, and at the same time boost investment and economic growth. It should be noted that these economic developments have not been enough to stem mass emigration.

Determinants of inequality

For more than thirty years, the performance of the Honduran economy has been volatile, characterized by a crisis every ten years or so. Since the country's return to democracy, the economy has grown at an average rate of 3.5% a year, below the CAPARD average. Due to the high fertility rate, per capita growth has been slow, averaging close to 1% a year. If this trend continues, it will take Honduras nearly thirty years to reach Costa Rica's current level of GDP per capita. This lag is largely attributable to the negative effects of an unstable political cycle, internal macroeconomic imbalances (fiscal imbalances, debt crises, and so on), and vulnerability to external shocks and natural disasters.

The high level of informality and underemployment constitute obstacles to the creation of high-value-added opportunities. Between 2001 and 2019, the low level of education limited the demand for highly specialized jobs. This has resulted in almost permanent levels of unemployment and high levels of informality, with low-value-added jobs and limited possibilities to increase earnings. In 2019, the rate of underemployment reached 60.6%, while the rate of informality reached 85.1%. Moreover, the most labor-intensive sectors, such as agriculture and services, have the highest rates of informality (85% and 81%, respectively in the examples cited) and the lowest labor productivity, which results in low wages.

In 2019, the rate of underemployment reached

60.6%, while the rate of informality reached 85.1%

The fact that the agricultural sector is highly vulnerable to shocks limits the possibility of lasting poverty reduction. This is due to both external factors, such as the variability of raw material prices, and internal factors, such as persistent droughts, which are also linked to climate change. According to the Germanwatch Global Climate Risk Index Report (2014), Honduras, Myanmar, and Haiti were, in that order, the countries most affected by natural disasters between 1993 and 2012. Consequently, the negative effects of adverse natural weather events resulted in an estimated loss of 2.6% of GDP, which in turn resulted in a drop in family incomes and reduced access to social services. According to the World Food Program, nearly 60% of Hondurans suffer from food insecurity, while in the Dry Corridor, where poverty is most acute, 58% of children under five suffer from chronic undernourishment. The impact of all these elements on poverty is significant, as a high percentage of the population are involved in the agricultural sector.

The absence of any long-term strategy for reducing poverty and inequality meant that economic growth was not very inclusive. According to Dollar and Kraay (2002), economic growth does not benefit the poor if the most dynamic sectors of the economy have a small proportion of poor people. We have seen that the least dynamic sectors in Honduras since 2000 have been those that are most labor intensive and have limited value added. In fact, according to figures from the National Institute of Statistics (INE), the sectors with the highest concentration of jobs among the economically active population in 2018 were agriculture (30% of the EAP), commerce (17.3%), and manufacturing (12.7%). Meanwhile, communications and financial services, which are relatively less labor-intensive, accounted for 0.8% and 1% of economic growth, respectively. The sluggish reduction in the poverty rate puts Honduras among the poorest countries of LAC.⁶⁰ This is also down to the limited coverage of the social safety net.

The Honduran tax system is regressive and has a high dependency on consumption taxes. The IDB study *Recaudar para crecer* found the Honduran tax system to be regressive from the first to the fifth quintile of household income. Its analysis of taxes by type shows Honduras's value added tax to be regressive, as the bottom income quintile bears a higher tax burden than the top due to non-targeted exemptions. The rest of the country's taxes are highly regressive, with excise taxes accounting for more than 60% of all tax revenue. At the same time, in 2018, the pre-tax Gini coefficient was 0.53, which is higher than the tax concentration index of 0.47 and implies a negative differential or Kakwani index of 0.06. This means that the distribution of relative burdens is regressive.

Low levels of human capital have stunted social progress. The intergenerational transmission of poverty and inequality is largely due to chronic undernourishment and the fact that so many people drop out of school. In particular, the most extreme consequence of hunger is child undernourishment, which has a decisive impact on school performance and, subsequently, on productive capacity, thus negatively affecting society's potential for development. While Honduras has made progress in terms of educational coverage, the quality of education remains low; at the same time, life expectancy has increased and infant and under-five mortality rates have fallen steadily. Despite improvements in health indicators, there are still deficiencies that place Honduras as the country with the second highest rate of undernourishment in children under 5 years old in CAPARD. The low level of education limits the capacity of young Hondurans to generate income.

There are still deficiencies that make Honduras the country with **the second highest rate** of malnutrition in children under five

Violence and a lack of opportunities have resulted in high levels of emigration and a high dependency on remittances. For decades, Hondurans have pursued new opportunities abroad and today more than 15% of the working-age population live abroad. This phenomenon became particularly noticeable in the wake of the catastrophic impact of Hurricane Mitch in 1998. Added to this, violence entails an economic cost that amounts to nearly 10% of GDP, while spending on security reduces private sector profits by nearly 9%. In 2019, remittances represented more than 20% of GDP and have served as a source of income for a significant portion of the population. It is clear that emigration has acted as an escape valve that reduces the social tension inherent to an economic model that provides limited opportunities.

60 In March 2019, a technical committee set about revising and updating the monetary poverty measure. According to preliminary results based on the new measurement, the percentage of poor households in 2018 was 48.3%, almost 20 percentage points below the previous poverty measurement of 61.9%.

Public policy proposals

The COVID-19 crisis represents an opportunity to forge a new social contract. The health emergency provides an opportunity to launch a discussion on a strategy to overcome Honduras's high levels of poverty and inequality. At the very least, this should address the following issues: (i) the effectiveness of public social spending; (ii) fiscal governance; (iii) informality; (iv) education and its relevance; (v) violence prevention and law enforcement; (vi) the labor market for women and young people; and (vii) the digital economy.

Work also needs to be done on creating productive opportunities. The crisis has laid bare the need to diversify global value chains, so Honduras could take advantage of this new reality to expand its stake in existing ones or into new sectors with a vision of integration and medium-term strategic planning, while implementing financing schemes to facilitate the reactivation of SMEs in order to generate sustainable jobs and income. The performance of emergency social programs needs to be evaluated and the quality of human capital improved, both of which are key elements in providing the population with an opportunity to generate more income.

Connectivity is crucial
to promoting
development in
a positive way

In the short term, there should be investment in logistics and digital infrastructure in order to revive the job market and generate employment. Connectivity is crucial to promoting development in a positive way. The deployment of telecommunications and broadband will help put the country on the path towards making digitalization the linchpin of economic growth, social inclusion, and equal access to opportunities. Investing in logistics infrastructure would create jobs in the short term and generate further growth. Additionally, it would enable businesspeople in remote areas (i.e., rural and peri-urban areas) to become more competitive.

Enhancing human capital is key to ensuring more inclusive growth. The working-age population as a percentage of the total will increase over the next twenty years, which represents an opportunity for the country. One of the challenges here is to ensure young people continue their education until they get some qualifications and develop the skills required for them to earn a decent living, and another the need to propose courses of action aimed at encouraging the incorporation of young people into the formal labor market. Enhancing human capital and mitigating the negative impact of the pandemic on opportunity gaps is crucial. Programs and projects aimed at reducing both poverty and extreme poverty ought to consider early childhood development and nutrition as a primary and cross-cutting issue, given that the lack of cognitive development in childhood can lead to delays in learning, as well as to poorer school performance throughout life.

Improving the quality of social spending is vital. Honduras should seize the opportunity presented by the pandemic to examine the effectiveness of social spending and improve transparency and accountability. Fiscal institutions need to be strengthened and there needs to be a move towards results-based budgeting that guarantees better use of public resources. This could improve the business climate in Honduras by raising the quality of the human capital that may be demanded by higher-value-added companies. Similarly, a holistic vision of the cycle of investment projects is required, so as to ensure better provision of public goods. This would help bring about an effective decrease in informality and increase the income of a large number of Hondurans.



Analysis of Inequality

Mexico

Ana Karen Díaz and Agustín Filippo



Evolution of inequality and poverty

Mexico is one of the most diversified economies in the region and enjoys a considerable degree of integration into the international arena. However, its socio-economic structure has for many years been marked by stark disparities and serious social deficiencies. In 2018, inequality measured in terms of the Gini coefficient was at 0.469.

In 2018, Mexico's middle class of approximately 90 million people accounted for 71% of the population. Within it, there was one band (26% of the population) with relatively higher incomes that constituted the consolidated middle class and another with lower incomes (45% of the population) that constituted the vulnerable middle class. It is important to stress that although this population group is classified as middle class, this does not mean that their living conditions are either optimal or homogeneous. Their average income is still relatively low and, more strikingly, approximately 40% of them suffer some form of social deprivation.

Towards the bottom of the income distribution, we find a section of the population that includes those living in poverty, a group that comprises approximately 34 million people or 27% of the population. If we add those classified as poor and middle class together, we arrive at 99% of the population (the rich being the remaining 1%). Obviously, these measurements differ depending on the criterion used and according to CONEVAL (2019); for example, in 2018, 49% of the population were affected by income poverty and 42% by multidimensional poverty. A subset of the most deprived numbering approximately 10 million people (or 7 percent of the population) were living in extreme poverty.⁶¹

⁶¹ CONEVAL's income line is US\$8.5 (PPP 2011). The multidimensional approach requires someone to have an income below that line and also to be socially deprived in some way in order to be considered poor.

Incomes have increased slightly over the last ten years, especially in the lower part of the distribution. This resulted in 4 percent of the population climbing above the poverty line to join the middle class. At the same time, the income of the vulnerable middle class grew by an average of 0.6% a year, while that of the consolidated middle class fell by an average of 0.3%.

Determinants of inequality

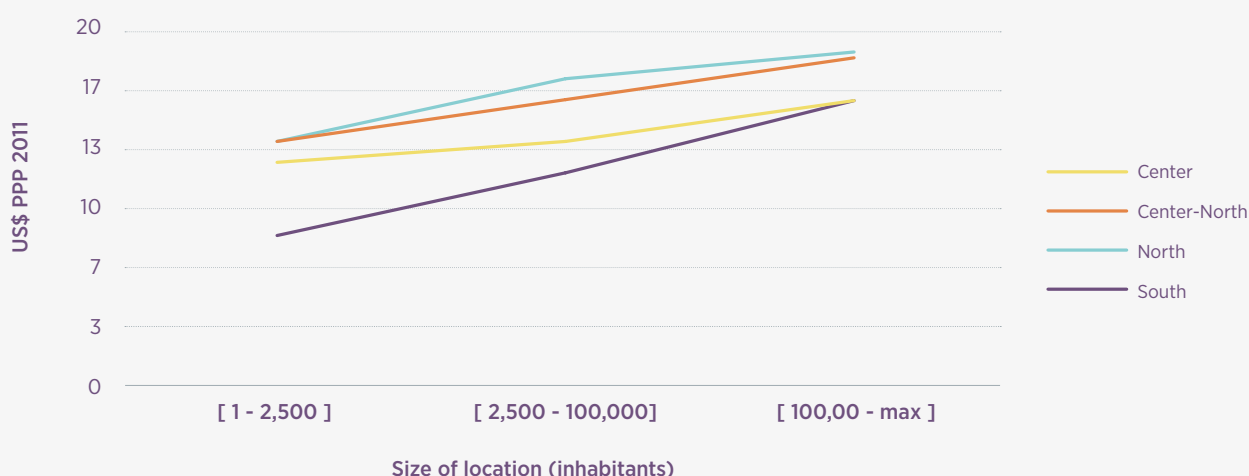
Mexico's income inequality and unequal living conditions are the result of multiple factors and have persisted over time. Firstly, it is important to highlight its slow economic growth: following the major crisis of 1995, the Mexican economy grew by an average of 2.6% a year, which is certainly less than what was required to raise the average standard of living of the population and reduce poverty. This situation can be partly explained by the weakness of the country's stock of human capital and its institutions which, in turn, determine productivity increases and make the matter of "inclusive growth" largely a pending one in Mexico.

Secondly, relevant factors include geography and, in particular, regional heterogeneity. Southern states, for example, have lower human development indexes, lower public service coverage, and lower per capita output. Moreover, there are also stark inequalities within any one region. In particular, the best paid jobs tend to be found in the major urban centers, in all the country's regions (see graph below).

In certain key areas of human development (e.g., health and education), Mexico invests very little, far less than most OECD countries. This means that the redistributive impact of public policies is relatively low. More specifically, fiscal policy in Mexico—direct taxes, contributory pensions, plus non-contributory cash transfers—reduces inequality as measured by the Gini coefficient by just 4 pp, whereas in other LAC countries (such as Uruguay) the reduction is 14 pp, and in OECD countries, 36 pp (Izquierdo *et al.*, 2018).

The COVID-19 pandemic will have a serious economic and social impact, and its effects are likely to be long lasting. The IMF currently forecasts a 9.0 percent drop in Mexico's GDP in 2020, followed by a 3.3 percent recovery in 2021 (IMF, 2020a). Due to the current crisis, someone in three out of every ten homes has lost their job and in 65% of them household income has decreased (INEGI, 2020). Furthermore, from

Figure 5.9. Daily (median) labor income per worker by size of location in 2020.



Note: Income includes daily wages, income from property, and transfers per person in US\$ 2011 PPP. Locations of between 1 and 2,500 inhabitants are defined as rural.

Source: Own elaboration with data from the National Survey of Occupation and Employment for the first semester of 2020. The regions are as defined by the Bank of Mexico (2012).

February to July 2020, more than 1.1 million formal jobs were lost. A substantial impoverishment of the middle class is expected, particularly of its most vulnerable segments. Estimates suggest that 10 million people will drop out of the middle class and join the poor. Despite the use of different methodologies and certain assumptions that are today relatively benign given the recent evolution of the economy, CONEVAL's (2020) estimates are relatively similar, indicating a rise in income poverty of up to 9.8 million people (7.9 percentage points).

Between February
and July 2020,
over

**1.1 million
formal jobs
were lost**

The current crisis will have an effect not only on incomes but also on education and, in general, on the capacity to accumulate human capital, which will have a negative impact on the potential growth rate of the economy and, therefore, mean a diminished capacity to combat inequality in the future.

As a result of the pandemic, the 2019–2020 school year was suspended. While there have been attempts to continue classes online, there is unequal access to computers and the Internet for children to do their homework at home, a fact that is inevitably related to household income and is something that further widens the educational divide between rich and poor students, and has a consequent impact on human capital. Furthermore, as a result of the decrease in household income, more people are likely to drop out of school, as some less well-off students will need to work—albeit at the expense of their studies—in order to help support their families. It is a similar story with access to healthcare. To begin with, the ability to get to a healthcare facility was not uniform, either due to geographical or economic factors. The crisis has exacerbated these differences, because while the effort to mitigate the pandemic has been nationwide, not all income groups have the same access to prevention and treatment.

Public policy proposals

Mexico's social policy affects approximately 22 million people. The coverage of its protection program was maintained during the pandemic and in an effort to mitigate its impact on vulnerable groups, old-age and disability pension payments were brought forward. Meanwhile, spending was reallocated for the purpose of bolstering the healthcare system. The IMF (2020) estimates that the entire set of fiscal measures announced in Mexico to contain the effects of the pandemic amount to 1.2% of GDP (the average in other emerging economies is 5.1%). As the crisis will have a major impact on tax revenues, a bigger fiscal deficit is expected in 2020: from an initially budgeted 2.6% of GDP to 5.4%.

A larger fiscal
deficit is
expected in
2020, rising from

**2.6%
of GDP
initially
budgeted for
to 5.4%
of GDP**

Meanwhile, monetary policy has been actively used to mitigate the impact of the crisis. The measures included the Bank of Mexico cutting interest rates and several programs to keep the credit system operating in an orderly manner, which together amount to around 3% of GDP with approximately one third of it used so far. The government has also introduced housing credit programs for state and private sector workers, personal loans to encourage consumption, loans to SMEs that kept on their formal workers despite the lockdown, and loans to informal businesses (the *Crédito a la Palabra* or "*Word of Honor Loans*"). This will provide companies with a certain amount of liquidity—although according to INEGI (2020), only 8% of companies in Mexico received any kind of support during the lockdown from March to May—and protect the income of their owners and employees somewhat.

In sum, the policy strategy focuses on fiscal and macroeconomic stability, which includes a robust external position, and also on ensuring the proper functioning of the financial system. It is hoped that this will provide companies with financing during the reactivation phase.



Analysis of Inequality

Nicaragua

André Martínez and Fadel Ugarte



Evolution and determinants of inequality and poverty

The Nicaraguan economy grew at an average rate of 4.8% a year from 2013 to 2017, higher than the LAC average for the same period of 1.1%. This economic growth was accompanied by a drop in the poverty rate⁶², which, according to data from the National Institute of Development Information (INIDE), fell from 42.5% in 2009 to 29.6% in 2014, while extreme poverty fell from 14.6% to 8.3%. Similarly, as a measure of inequality, the Gini coefficient remained virtually unchanged at between 0.37 and 0.38 during the same period; nevertheless, Nicaragua ranks among the countries with the lowest levels of inequality in Central America, second only to El Salvador.

According to estimates by the Nicaraguan Foundation for Economic and Social Development (FUNIDES)⁶³, the socio-political crisis that began in 2018 led to an increase in the poverty rate of up to 3.7 pp that year and 4.2 points in 2019; at the same time, according to figures from the Central Bank of Nicaragua, the country's economy shrank by 4% in 2018 and 3.9% in 2019. In light of the new shock caused by the COVID-19 pandemic, FUNIDES now estimates that the poverty rate could increase by 6.7 pp in 2020.

Despite the progress made in terms of poverty and inequality prior to the 2018–2019 crisis, differences between geographical regions and places of residence persist. According to INIDE (2014), poverty in

⁶² The value of the general poverty line was set at US\$655 a year per person in 2014, while extreme poverty was set at US\$406.

⁶³ No information from official sources is available from 2014 on. However, FUNIDES estimates that the poverty rate was 20.3% in 2017, 24% in 2018, and 28.2% in 2019 (taken from FUNIDES' Economic Situation Report for May 2020).

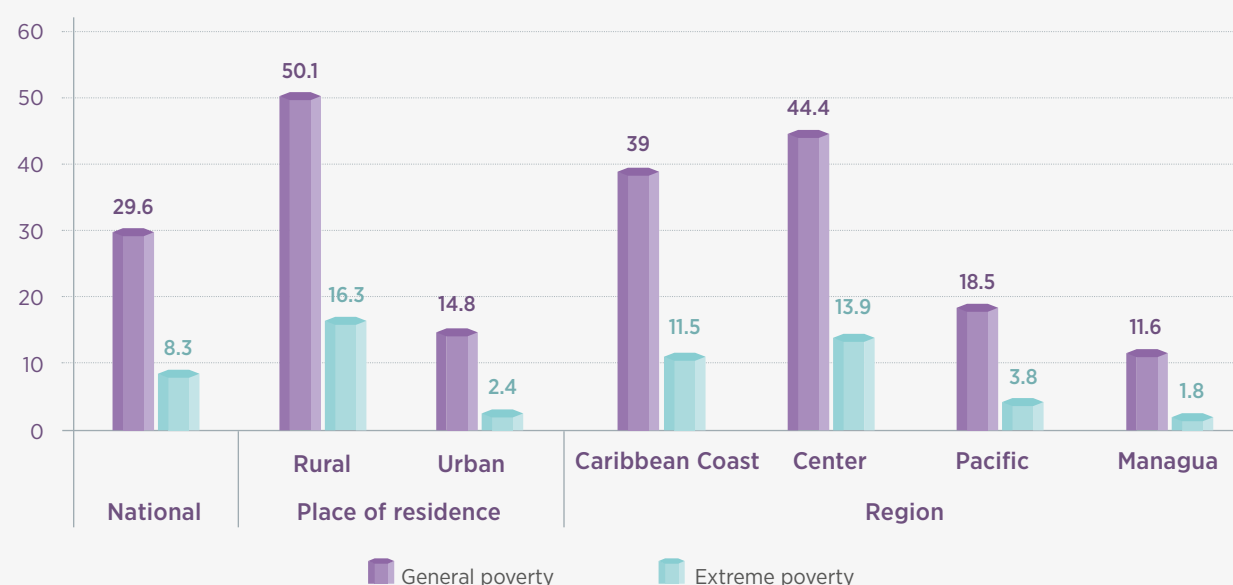
rural areas reaches as high as 50.1%, three times the rate in urban areas (14.8%). Meanwhile, in 2014 the poverty rate in the Pacific region was 18.5%, lower than in the Caribbean Coast and Central regions, where it was 39% and 44.4%, respectively. As indigenous people and people of African descent reside mainly on the Caribbean Coast, the poverty levels for those ethnic groups can be expected to be higher, a sign of the inequality that exists within the country's interior. Meanwhile, the extreme poverty rate is 2.4% in urban areas, while in rural areas it reaches as high as 16.3%.

A significant percentage of the country's population finds itself in a situation of vulnerability,⁶⁴ i.e., at greater risk of falling below the poverty line. According to 2017 World Bank Development Indicators data, the proportion of vulnerable people is 43.2%.⁶⁵ In this regard, the International Foundation for Global Economic Challenge (FIDEG) has estimated that a household that rose out of poverty between 2009 and 2010 has a 55.7% probability of being able to stay above the poverty line for the next year, and only 11.4% for the next seven years, which shows the fragile state of poor households that have seen their quality of life improve.

64 With a daily income of between US\$5.5 and US\$13 (2011 PPP).

65 In 2017, 34.8% of the population were below the poverty line (of US\$5.5 a day at PPP 2011), 43.2% were considered vulnerable, 21.1% middle class, and only 0.9% of the population had incomes above US\$70 a day (PPP 2011), i.e., were upper class, according to data from the World Bank's Equity Laboratory.

Figure 5.10. Poverty in Nicaragua by place of residence and region (%)



Source: *Encuesta de Medición de Nivel de Vida* ("Living Standards Measurement Study," INIDE, 2014).

The complex health situation caused by the COVID-19 pandemic will lead to increased levels of poverty and inequality. In this regard, ECLAC⁶⁶ forecasts an increase in the poverty rate in Nicaragua of between 3.5 and 5.6 pp in 2020 with respect to 2019, while extreme poverty is expected to rise by between 2.7 and 4.2 pp in the same period,⁶⁷ placing it among the LAC countries with the biggest increase in extreme poverty in 2020.⁶⁸ The Gini index will increase by between 1.5% and 2.9%, meaning that the increase in poverty will be accompanied by a more inequitable distribution of income.

Despite the achievements of recent years in terms of reducing poverty and inequality, efforts will need to continue if Nicaragua is to overcome the social disparities that set it apart from its regional counterparts in LAC. In fact, Nicaragua has the third lowest Human Development Index in the region, which shows that there are areas of social and economic opportunity.⁶⁹

In a number of social and infrastructure indicators, asymmetries between the country's rich and poor households persist. For example, according to data from the Center for Distributive, Labor and Social Studies (CEDLAS),⁷⁰ in 2014, four out of every 10 households in the bottom quintile had access to drinking water in their home (versus eight out of 10 in the top quintile); six percent had a drainage system (compared to 46.0%), and 66% had electricity in their home (versus 92.1%). At the same time, the employment conditions of the bottom quintiles are less favorable, as the ratio of income earners to household size is 3.6, twice that of the top quintile.

Meanwhile, educational gaps persist. The primary education completion rate among 15-24-year-olds is 70 percent for the bottom quintile and 92.4 percent for the top, which is reflected in the fact that only half of young people of secondary-school age in the bottom quintile actually attend school. Similarly, adults between 25 and 65 years of age in the average household in the bottom 20% have had 4.2 years of schooling, 40% of what a typical household in the wealthiest quintile would have had. There are also disparities with respect to health. The maternal mortality rate in the Caribbean region—the region with the highest poverty rate—is 161 maternal deaths per 100,000 live births, compared to the national average of 38. Therefore, the efforts that brought about improvements in these indicators need to continue in order to provide Nicaraguans with equal opportunities that will allow them to enjoy a better standard of living.

It should be noted that despite the improvement in traditional indicators of inequality, most Nicaraguans feel that the distribution of income is unequal. According to the 2018 Latinobarómetro,⁷¹ 69% of Nicaraguans believe that the distribution of income in the country is either unfair or very unfair, while only 23% consider it to be fair or very fair.⁷² When asked to define what social class they belong to,⁷³ 54% of Nicaraguans describe themselves as poor or very poor, 37% consider themselves middle class, and only 7% consider themselves rich.

66 Note that the ECLAC poverty data differ from the official INIDE data, due to the fact that the definition of poverty lines varies from institution to institution.
67 ECLAC (2020).

68 The increase will be the second highest in LAC after Mexico (6 pp).

69 For example, according to the statistical update to the 2018 Human Development Report, the proportion of children aged five or under in Nicaragua who are malnourished is 40% higher than the LAC average, while life expectancy at birth is one year less. Moreover, the report shows that a Nicaraguan child can be expected to complete 12.2 years of schooling, two years less than the regional average.

70 Socio-Economic Database for Latin America and the Caribbean (accessed August 17, 2020).

71 An organization that carries surveys of Latin American public opinion.

72 The remaining 8% either did not know or did not respond.

73 The question asked in the survey is: Imagine a ladder with ten steps on it, where the poorest people are on the bottom step and the richest people on the top step; from 1 to 10, which step would you be on?

Public policy proposals

In this regard, the social policies implemented by the State are intended to help the most disadvantaged groups. These programs have specific objectives that mainly focus on satisfying basic necessities such as food, housing, and access to productive resources. However, there is currently no comprehensive conditional cash transfer program in place, a fact that limits the ability to deliver subsistence support to help provide the most vulnerable with the means to survive. This is key to reversing the dynamics of inequality that the shock of the pandemic has produced, and at the same time to supporting the development of human capital by linking these transfers to outcomes in terms of education, health and/or child nutrition.⁷⁴

There are currently two food delivery programs that stand out: the *Paquete Alimentario Solidario* (“Humanitarian Food Package”), which provides poor families with a basket of basic products to help with their diet, and the *Programa Integral de Nutrición Escolar* (“Comprehensive School Nutrition Program”),⁷⁵ which provides meals to preschool and primary school students, as well as snacks to students in municipalities where nutritional levels are low. Meanwhile, the *Programa Productivo Alimentario* (“Productive Food Program”) focuses on helping rural heads of family who are smallholders in a state of poverty by enhancing their capacity to produce for self-consumption and the marketing of their surpluses. Similarly, the CRISSOL loan program provides technical assistance and financing facilities to small and medium-scale producers of basic grains. Vulnerable groups also benefit from a variety of programs that help them purchase or improve their homes, and to register their ownership of property (*Vivienda Digna*, *Plan Techo*, and *Programa de Titulación de la Propiedad*).

As well as financial aid measures, the State must push forward social protection measures to offset the regressive impact of the crisis, as well as to protect the income sources of the most vulnerable groups, with particular focus on protecting jobs. As a result of the health crisis, in the short term it will be necessary to prioritize the care of those infected and to guarantee the provision of the essential goods needed to do so. In the medium term, the State will need to pursue the aim of strengthening the country’s human capital by improving education, healthcare, and access to basic services, in order to boost the country’s productivity and at the same time improve the standard of living of Nicaraguans, thereby ensuring the sustainability of the progress made in terms of poverty and inequality.

As a result of the health crisis, priority will need to be given to attending to the infected and guaranteeing the supply of essential goods

⁷⁴ Programs similar to the existing ones could be developed, such as the Amor para los más chiquitos y chiquitas (“Love for the Tiniest Ones”) program, which provides conditional transfers to parents in households living in extreme poverty, on the condition they attend educational enhancement workshops.

⁷⁵ This program has taken on a special importance in the wake of COVID-19, which has highlighted the need to ensure the nutrition of students who are beneficiaries of this program, despite low school attendance.



Analysis of Inequality

Panama

Jhonatan Astudillo and Carlos Garcimartín



Evolution of inequality and poverty

In recent years, the country has recorded one of the highest growth rates in the world, averaging 6.8% a year since 2005. As a result, it has become, along with Chile, the country with the highest per capita income in LAC in terms of purchasing power parity and is now classified as a high-income country. However, this dynamism has not been accompanied by any kind of equally dynamic response in terms of social improvement. According to World Bank data, Panama's poverty rate is lower than the LAC average (i.e., 22.1% vs. 29.9%), though between 2005 and 2018, for each percentage point of GDP growth, poverty fell by 0.19 points, as opposed to the 0.25 points of LAC. In other words, the impact of economic growth on poverty reduction in Panama is 30% weaker. Furthermore, while the urban-rural divide has narrowed, the poverty rate of the rural population is twice as high (41.4%) as the national average (which according to the Ministry of the Economy and Finance is 20.7%) and especially high in indigenous regions (79.6%). The multidimensional poverty rate is 19% in the country as a whole, but 92% in indigenous regions.

There has been little progress in terms of inequality. Panama has one of the highest levels of inequality in the region: the third highest according to World Bank data. According to this source, the Gini index was 50 in 2017, compared to the LAC average of 46. Since 2005, it has dropped 5.5 points in LAC, compared to 3.9 in Panama; for every point of GDP growth, inequality has fallen by 0.12 points in LAC, compared to 0.03 in Panama; i.e., at a four times lower rate than that of the region. Furthermore, according to our own calculations based on the household survey, in 2018 the trend was reversed and inequality increased by 0.2 points, at a time when GDP growth had fallen from 5.3 percent in 2017 to 3.7 percent in 2018.

In sum, inequality in Panama is characterized by being high and persistent, a fact reflected in the Human Development Index, for which the country is ranked 67th in the world and fourth in LAC. However, when the indicator is corrected for inequality, its score drops by 21% (13 places). Moreover, the country ranks 108th on the gender inequality index, with the maternal mortality rate being particularly notable.

All of this will be further aggravated by the COVID-19 crisis, with estimates suggesting that poverty in Panama could increase by around 7 pp due to the crisis.

Determinants of inequality

Several factors underlie the high and persistent level of inequality in Panama. First, there are the marked regional disparities, among the largest in LAC (Astudillo *et al.*, 2019), which is striking given Panama's size and the fact that it has no major land features that might otherwise hamper economic ties between its regions. In El Salvador and Uruguay for example, the regional inequalities in terms of GDP per capita are a third of those of Panama; in Honduras and Guatemala, the figure is 40%. The marked concentration of economic activity (particularly in the province of Panama) that already existed before the period of economic expansion has intensified even more since then. This is partly due to the growth model of this period. On the one hand, private investment in construction, the sector largely responsible for the dynamism of the economy, has been mainly confined to the province of Panama. On the other, public investment has also contributed to regional imbalances. In general, the higher the per capita income of a province, the more public investment received. From 2013 to 2017, the richest province in the country, Panama, enjoyed an average of 28% more investment per capita than the median.

Economic activity is highly concentrated, in the province of Panama in particular

The second major factor behind the high level of inequality in Panama is linked to the marked change in the distribution of income among production factors that has occurred during these years of strong economic dynamism. From 2007 to 2018, the operating surplus increased its share of GDP from 44% to 56%, while that of workers' wages fell from 32% to 26%, and that of mixed income from 17% to 13%. Moreover, during the same period, inflation hit the poorest households hardest (Astudillo and Garcimartín, 2019).

Thirdly, it is worth noting the low level of social spending. According to ECLAC data (and with all due reservation, as they refer only to the central government), social spending in Panama amounted to 8.8% of GDP in 2017, compared to the LAC average of 11.5%, Chile's 16.4%, and Uruguay's 16.8% (the latter two countries being the most comparable in the region to Panama in terms of per capita income). Moreover, since 2005, social spending in Panama has increased by 1.9 GDP percentage points, well below the 2.9 points of LAC, 4 of Chile, and 8.1 of Uruguay. In all items of social spending, Panama's figures are below the region's average, except for housing and community services (1.8% of GDP versus 0.7% in LAC), and the difference is especially high in the case of social protection: 1.3% of GDP compared to 3.4% in LAC. Meanwhile healthcare spending has dropped 0.1 points of GDP since 2005. The case of public education is particularly noteworthy, as it accounts for 3.3% of GDP (4% in LAC, 5.1% in Chile, and 4.7% in Uruguay) and has dropped 0.2 points since 2005 (whereas in LAC, it has increased by 0.8 points and in Chile and Uruguay by 1.9 points).

The poor quality of the education system, which hinders the progress of the poorest members of the population and indeed social mobility in general, is another reason for the high level of inequality in Panama. There are considerable disparities in the access to and quality of early education, and the performance of the system falls below what would be expected of a country with its level of income. In the 2009 PISA test, 65.3% of 15-year-old students failed to achieve the minimum level of language proficiency, compared to the regional average of 46.8%. The most recent tests (PISA 2018) show that there has been no significant progress since then, as the figure in question has barely dropped, falling to just 64% (while the regional average fell to 45.8%). Similarly, the results are very uneven: students from a strong socio-economic background scored 20% higher on average than their peers from poorer backgrounds. In turn, these disparities have consequences for the labor market, as there is a significant gap between the skills possessed by workers and those required by the productive sector. According to the Talent Shortage Survey (ManpowerGroup, 2018), 35% of employers in Panama struggle to hire workers with the required skills. Furthermore, there is a gender gap in the labor market: the unemployment rate for women is three points higher than that for men and the employment rate 24 points lower. In activities where women are less represented, salaries are clearly higher than average.

65.3% of 15-year-old students failed to attain the minimum level of language proficiency

Only
21% of
Panamanians
have either
some or a
great deal of
confidence in
the judiciary

Another area in Panama where there is a perceived problem of inequality—understood in a broader sense of social cohesion—is in the relatively low quality of its institutions, which undermines equal access to public services such as justice and reduces people’s trust in those institutions. According to the average of the World Bank’s Governance Indicators, Panama ranked 88th in the world in this area in 2005 (the fourth highest-placing country in LAC). In 2018, it maintained the same position, despite strong economic growth, ranking far below Uruguay and Chile, which scored eight and ten times higher than Panama, respectively. During this time, this isthmus nation climbed 13 places up the world rankings of per capita income, but not at all as far as institutional quality is concerned. One important aspect is the perception of how corruption is being controlled, where in 2005 it ranked 111th in the world, but dropped to 138th in 2018. Another aspect of institutional quality concerns the judiciary. According to the *Latinobarómetro*, as of 2018 (the most recent available date), only 21% of Panamanians have either a lot or some confidence in the judiciary, which is lower than the regional average of 24%. It is a similar story with confidence in the government, where 16% of the population say they have either a lot or some confidence in the government, compared to 22% in LAC. It is striking just how much support for democracy as the preferred system of government has fallen since 2005: from 52% to 42%, though not due to any greater preference for authoritarian government, but rather greater indifference. A total of 34% of Panamanians currently claim to have no preference between a democratic regime and an authoritarian one, compared to 16% in 2005.

Public policy proposals

The main poverty
alleviation strategy
in Panama consists
of **conditional
cash transfer
programs**

In spite of everything, social programs have played a significant role in reducing both extreme poverty and overall poverty in rural areas. The main poverty alleviation strategy in Panama consists of conditional cash transfer programs (CCTPs). The most important of these are: i) the *Red de Oportunidades* (“Opportunities Network”), which includes the *Bono Alimentario Nutricional* (“Nutritional Food Allowance”) for the extreme poor; ii) the 120 a los 65 (“120 at 65”) program, a non-contributory pension program for seniors living in poverty and in a state of vulnerability; iii) the *Ángel Guardián* (“Guardian Angel”) program, for the extreme poor with severe disabilities and who are dependent on others; and iv) the *Beca Universal* (“Universal Grant” or UG), which consists of a monthly allowance paid to parents of school-age children and adolescents, 21.7% of whom live in extreme poverty and 39.2% in general poverty. Spending on CCTPs and the UG has increased in recent years from 0.57% of GDP in 2014 to 0.7% in 2018, most of this going to the 120 a los 65 and *Beca Universal* programs (0.29% and 0.34% of GDP, respectively). According to the Ministry of the Economy and Finance, CCTPs help reduce general poverty by 3.5 points and extreme poverty by 3.4 points.

Meanwhile, the new administration’s Strategic Government Plan 2020–2024 identifies the *Colmena* (“Beehive”) program as the core strategy for combating poverty and inequality. This program is designed to provide basic services (based on a multidimensional poverty analysis) to the poorest communities and will be implemented by various state agencies in collaboration with civil society. The Strategic Plan also emphasizes the need for a better regional distribution of public investment, something unprecedented until now.

In terms of support for social groups affected by the COVID-19 crisis, the authorities have implemented a plan known as *Panamá Solidario* (“Supporting Panama”), which consists of delivering food and subsidies to vulnerable people who have lost their jobs, and allowing them to use their ID cards as digital vouchers. Other relief measures have been introduced, such as a general reduction in electricity rates and a three-month suspension on service cuts; a freeze on lease payments and suspension of eviction proceedings, and a deferment of loan payments (i.e., mortgage loans, commercial loans, personal loans, credit card loans, consumer loans, and so on).

References

- Acevedo, C. and M. Cabrera (2014). "The Equalizing Role of Migration and Remittances in El Salvador." In G.A. Cornia (ed.), *Falling Inequality in Latin America: Policy Changes and Lessons*. OUP Oxford.
- Acevedo, I., F. Castellani, I. Flores, G. Lotti, and M. Székely (2020). "Implicaciones sociales del Covid-19: estimaciones y alternativas para América Latina y El Caribe." Technical Note. Inter-American Development Bank.
- Administradora de Subsidios Sociales [Social Subsidies Administration Unit] (ADESS) (2019). Institutional statistical report, October 2019. <http://transparencia.adess.gob.do/estadisticas-institucionales/2019>
- Agosin, M.R., R. Machado, and A.D. Barreix (eds.) (2005). *Recaudar para crecer: Bases para la reforma tributaria en Centroamérica*. Washington, D.C. Inter-American Development Bank.
- Alaimo, V., M. Bosch, D. Kaplan, C. Pagés, and L. Ripani (2015). *Jobs for Growth*. IDB-BK-156. Washington, D.C. Inter-American Development Bank.
- Alexander, K., D. Entwisle, L. and Olson (2001). "Schools, Achievement, and Inequality: A Seasonal Perspective." *Educational Evaluation and Policy Analysis* 23: 171-191.
- Antón, A., F. Hernández, and S. Levy (2012). The End of Informality in Mexico?: Fiscal Reform for Universal Social Insurance. Washington, D.C. Inter-American Development Bank
- Astudillo, J. and C. Garcimartín (2019). "Inflación y distribución del ingreso en Panamá." Technical Note 1631. Inter-American Development Bank.
- Astudillo, J., M. Fernández, and C. Garcimartín (2019). "La desigualdad de Panamá: Su carácter territorial y el papel de las inversiones públicas." Technical Note 1703. Washington, D.C. Inter-American Development Bank.
- Baharumshah, A.Z. and S.W. Almasaied (2009). Foreign Direct Investment and Economic Growth in Malaysia: Interactions with Human Capital and Financial Deepening. *Emerging Markets Finance & Trade*, 45(1): 90-102.
- Banerjee, A., P. Niehaus, and T. Suri (2019). "Universal Basic Income in the Developing World." *Annual Review of Economics*, 11(1): 959-983.
- Barinas, S. and M. Viollaz (2020). "Social and Economic Impacts of the COVID-19 and Policy Option in the Dominican Republic." #COVID19|Policy Documents Series. UNDP LAC C19 PDS No. 15. United Nations Development Programme. https://www.do.undp.org/content/dominican_republic/es/home/library/impacto-economico-y-social-del-covid-19-y-opciones-de-politica-e.html
- Behrman, J., N. Birdsall, and M. Székely (2001). "Pobreza, desigualdad y liberalización comercial y financiera en América Latina." Working Paper No. 449. Research Department. Washington, D.C. Inter-American Development Bank

REFERENCES

- Benabou, R. (2002). "Tax and education policy in a heterogeneous-agent economy: What levels of redistribution maximize growth and efficiency?" *Econometrica*, 70(2): 481-517.
- Beneke, M., N. Lustig, and J.A. Oliva (2017). "The Impact of Taxes and Social Spending on Inequality and Poverty in El Salvador." Working Paper No. 57. Washington, D.C. Center for Global Development (CGD).
- Berg, A., J.D. Ostry, C.G. Tsangarides, and Y. Yakhshilikov (2018). Redistribution, inequality, and growth: *New evidence. Journal of Economic Growth*, 23(3): 259-305.
- Bonilla, D. (August 11, 2020). Más de 300 mil empleados son cancelados por crisis Covid-19 ["Over 300 thousand jobs lost due to the Covid-19 crisis."]. El Día. <https://eldia.com.do/mas-de-300-mil-empleados-son-cancelados-por-tesis-covid-19/>
- Bonilla, D. (August 7, 2020). 7,000 empresas cierran; otras sin fondos para pagar ["7,000 businesses close, others unable to pay what they owe."]. El Día. <https://eldia.com.do/7000-empresas-cierran-otras-sin-fondos-para-pagar/>
- Brussevich, M., E. Dabla-Norris, and S. Khalid. (2020). "Who Will Bear the Brunt of Lockdown Policies? Evidence from Tele-workability Measures Across Countries." Working Paper WP/20/88. Washington, D.C. International Monetary Fund.
- Busso, M. and D. Hincapié (2017). "Skills Development: Breaking It Down." In: M. Busso, J. Cristia, D. Hincapié, J. Messina, and L. Ripani (eds.), *Learning Better: Public Policy for Skills Development*. Washington, D.C. Inter-American Development Bank
- Carrasco, H., E. García, S. Parodi, and M. Vásquez (2016). "¿Cómo se redistribuyen los recursos públicos en República Dominicana?" Inter-American Development Bank (IDB) Monograph No. 425. <https://publications.iadb.org/en/publication/15633/como-se-redistribuyen-los-recursos-publicos-en-republica-dominicana>
- Center for Effective Global Action (CEGA) (2019). Resumen de la evaluación de impactos del Programa PROSOLI. Report commissioned by the Social Policy Cabinet of the Dominican Republic
- Coady, D., R. de Mooij, and B. Shang (2015). "Inequality and Fiscal Redistribution in Advanced Economies." *Inequality and Fiscal Policy*, 37-56.
- CONEVAL (2019). Medición de la pobreza serie 2008-2018. Mexico City: Consejo Nacional de Evaluación de la Política de Desarrollo Social [National Council for the Evaluation of Social Development Policy].
- CONEVAL (2020). "La política social en el contexto de la pandemia por el virus SARSCoV-2 (COVID-19) en México." https://www.coneval.org.mx/Evaluacion/IEPSM/Documents/Efectos_COVID19.pdf
- Consejo Nacional de Seguridad Social [National Social Security Board or CNSS] (2020). General indicators of the Dominican Social Security System, June 2020. <https://cnss.gob.do/transparencia/index.php/estadisticas/indicadores-estadisticos-del-sdss/category/732-2020>
- Cooper, H., B. Nye, K. Charlton, J. Lindsay, and S. Greathouse (1996). "The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review." *Review of Educational Research*, 66: 227-268.
- Cox, N., P. Ganong, P. Noel, J. Vavra, D. Farrell, and F. Greig (2020). Initial impacts of the pandemic on consumer behavior: Evidence from linked income, spending, and savings data. BPEA Conference Drafts. Brookings Papers on Economic Activity.

REFERENCES

- Cruces, G., A. Ham, and M. Viollaz (2012). "Scarring Effects of Youth Unemployment and Informality Evidence from Argentina and Brazil." CEDLAS [(Center for Distributive, Labor, and Social Studies). Faculty of Economic Sciences, National University of La Plata.
- Daruich, D. (2018). "The Macroeconomic Consequences of Early Childhood Development Policies." New York University. http://humcap.uchicago.edu/RePEc/hka/wpaper/Daruich_2018_macro-consequences-ECD_r1.pdf
- Duclos, J., J. Esteban, and D. Ray (2004). "Polarization: Concepts, Measurement, Estimation." *Econometrica*, 72(6): 1737-72.
- Duryea, S., and M. Robles (2016). "Social Pulse in Latin America and the Caribbean 2016: Realities & Perspectives." Monograph No. 162. Washington, D.C. Inter-American Development Bank.
- Economic Commission for Latin America and the Caribbean (2020). *The social challenge in times of COVID-19*. Santiago, Chile CEPAL (ECLAC).
- Eggers, C., and A. López-Marmolejo (2020). Polarización, instituciones y conflicto: Una aplicación a México, el Istmo centroamericano y República Dominicana. Technical Note No. 1891. Washington, D.C. Inter-American Development Bank.
- El-Shagi, M. and L. Shao (2019). The Impact of Inequality and Redistribution on Growth. *Review of Income and Wealth*, 65(2): 239-263.
- Esteban, J. and D. Ray (1994). On the Measurement of Polarization. *Econometrica*, 62(4): 819-51.
- Esteban, J. and D. Ray. (2011). "Linking Conflict to Inequality and Polarization." *American Economic Review*, 101(4): 1345-74.
- Esteban, J., L. Mayoral, and D. Ray (2012). "Ethnicity and Conflict: An empirical study." *American Economic Review*, 102(4): 1310-42.
- Ferreira, F.H., S. Chen, A. Dabalén, Y. Dikhanov, N. Hamadeh, D. Jolliffe, A. Narayan, E.B. Prydz, A. Revenga, P. Sangraula, and U. Serajuddin (2016). "A Global Count of the Extreme Poor in 2012: Data Issues, Methodology and Initial Results." *The Journal of Economic Inequality*, 14(2): 141-172.
- Friedman, M. (1972). "Capitalism and Freedom." Chicago: University of Chicago Press.
- Ghayad, R., F. Lambert, M. Rousset, and M. Bellon. (2019). Haiti Selected Issues: IMF Country Report No. 20/122. <https://www.imf.org/en/Publications/CR/Issues/2020/04/20/Haiti-Selected-Issues-49352>
- González, A and M. Gabriel (2017). "Deconstructing Income Inequality in Costa Rica." OECD. Working Paper No. 1377. Paris: Organisation for Economic Cooperation and Development.
- Government of Belize (2004). Country Poverty Assessment 2002. Government of Belize.
- Government of Belize (2010). Country Poverty Assessment 2009. Government of Belize and Caribbean Development Bank.
- Government of Belize (2020). Update on COVID-19 Unemployment Relief Program. Government of Belize Press Office. <https://www.pressoffice.gov.bz/update-on-covid-19-unemployment-relief-program-2/>
- Government of Haiti (2014). Plan d'Action pour accélérer la réduction de l'extrême pauvreté.

REFERENCES

- Hernández Oré, M.A., L. Sousa, and J.H. López (2016). "Honduras: Unlocking Economic Potential for Greater Opportunities." *Systematic Country Diagnostics*. Washington, D.C. World Bank.
- Hersh, J., R. Ergstrom, M. Mann, A. Mejía, and L. Martín (2019). *Mapping Poverty in Belize Using Satellite Features and Machine Learning*. Washington, D.C. Inter-American Development Bank.
- Hillesund, S., K. Bahgat, G. Barrett, K. Dupuy, S. Gates, H.M. Nygård, and G. Østby (2018). "Horizontal Inequality and Armed Conflict: A Comprehensive Literature Review." *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 39(4): 463-480.
- IDB (2019). "In the footprints of migrants: Perspectives and experiences of migrants from El Salvador, Guatemala and Honduras in the United States." E. Abuelafia, G. del Carmen, and M. Ruiz-Arranz (eds.). Inter-American Development Bank. https://publications.iadb.org/publications/spanish/document/Tras_los_pasos_del_migrante_Perspectivas_y_experiencias_de_la_migración_de_El_Salvador_Guatemala_y_Honduras_en_Estados_Unidos.pdf
- IDB (2020). "Desigualdad en América Latina y el Caribe: Tomando capital de lo que sabemos." M. Busso, and J. Messina (eds.). Washington, D.C. Inter-American Development Bank
- IDB (2020). "Estimating and Forecasting Income Poverty and Inequality in Haiti Using Satellite Imagery and Mobile Phone Data." Inter-American Development Bank. <https://publications.iadb.org/en/estimating-and-forecasting-income-poverty-and-inequality-in-haiti-using-satellite-imagery-and-mobile-phone-data>
- INEGI (2020). Encuesta sobre el impacto económico generado por COVID-19 (Survey on the Economic Impact of COVID-19 or ECOVID-IE) and Encuesta Telefónica sobre COVID-19 y mercado laboral (Telephone Survey on COVID-19 and the Labor Market or ECOVID-ML).
- Institut Haïtien de Statistiques et d'Informatique. (2012). "L'évolution des conditions de vie en Haïti entre 2007 et 2012. La réplique sociale du séisme." http://www.ihsi.ht/pdf/ecvmass/analyse/IHSI_DIAL_Rapport%20complet_11072014.pdf
- Instituto Mixto de Ayuda Social (2018). Plan Estratégico Red Nacional de Cuido y Desarrollo Infantil [Strategic Plan - National Child Care and Development Network] (REDCUDI) 2018-2022, IMAS. San José, Costa Rica IMAS.
- International Monetary Fund (2020). *World Economic Outlook: A Long and Difficult Ascent*. Washington, D.C. International Monetary Fund.
- Izquierdo, A., C. Pessino, and G. Vuletin (eds.) (2018). *Better Spending for Better Lives: How Latin America and the Caribbean Can Do More with Less*. Washington, D.C. Inter-American Development Bank.
- Joffe, M. (2017). "Why does capital flow from poor to rich countries?: The real puzzle." *Real World Economics Review*, 81: 42-62.
- Latin American Public Opinion Project (2017). "LAPOP Latin American Public Opinion Project - Haiti." https://www.vanderbilt.edu/lapop/haiti/AB2016-17_Haiti_Country_Report_English_V6_W_01.20.20.pdf
- Levy, S. (2008). *Good Intentions, Bad Outcomes: Social Policy, Informality and Economic Growth in Mexico*. Brookings Institution Press.

REFERENCES

Levy, S. (2020). "COVID-19: una oportunidad para repensar los sistemas de Seguridad Social para el siglo XXI." Video taken on June 15, 2020 from: <https://www.youtube.com/watch?v=6rZsbaf2voc>

Lustig, N., V. Martínez, P. Sanz, and S. Younger (2020). "The Impact of Covid-19 Lockdowns and Expanded Social Assistance on Inequality, Poverty and Mobility in Argentina, Brazil, Colombia and Mexico." Working Paper 92. The CEQ Working Paper Series. ECINEQ, Society for the Study of Economic Inequality.

Manpower (2018). Resolviendo la escasez de talento. Manpower Group. https://www.manpowergroup.com.mx/wps/wcm/connect/manpowergroup/4430dc7b-8606-450c-a352-eea4662609b6/MG_EscasezdeTalentopanama2018.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_2802IK01OORA70QUFIPQ192H31-4430dc7b-8606-450c-a352-eea4662609b6-msOaiWJ

Manzano, O., M. Solera, and E. Ochoa (2018). "Inclusive Growth: Challenges and Opportunities for Central America and the Dominican Republic" (Vol. 585). Washington, D.C. Inter-American Development Bank.

Marrero, G.A., J.G. Rodríguez, and R. van der Weide (2016). "Unequal opportunity, unequal growth." Policy Research Working Papers. Washington, D.C. World Bank.

MINEC (Ministry of Economy) (2001). "Encuesta de Hogares de Propósitos Múltiples 2000" [Multipurpose Household Survey 2000]. Dirección General de Estadística y Censo [General Directorate of Statistics and Censuses]. San Salvador: MINEC.

MINEC (Ministry of Economy) (2011). "Encuesta de Hogares de Propósitos Múltiples 2010" [Multipurpose Household Survey 2010]. Dirección General de Estadística y Censo [General Directorate of Statistics and Censuses]. San Salvador: MINEC.

MINEC (Ministry of Economy) (2019). "Encuesta de Hogares de Propósitos Múltiples 2018" [Multipurpose Household Survey 2018]. Dirección General de Estadística y Censo [General Directorate of Statistics and Censuses]. San Salvador: MINEC.

Ministerio de Economía, Planificación y Desarrollo [Ministry of Economy, Planning and Development] (MEPYD) (2019). Boletín de Estadísticas Oficiales de Pobreza Monetaria. Year 4, No. 6. May 2019. Santo Domingo, Dominican Republic

Ministerio de Planificación Nacional y Política Económica [Ministry of National Planning and Economic Policy] (2018). Social Development Index 2017. San José, Costa Rica MIDEPLAN.

NFIS (National Financial Inclusion Strategy) (2019). Central Bank of Belize <https://www.centralbank.org.bz/publications-research/nfis>

OECD, IDB, and CIAT (2016). [Taxing Wages in Latin America and the Caribbean.](#)

Oficina Nacional de Estadística (ONE) [National Bureau of Statistics] (2019). Encuesta Nacional de Hogares de Propósitos Múltiples [National Multipurpose Household Survey] (ENHOGAR-2018): General Report Santo Domingo, Dominican Republic.

Ostry, J.D., A. Berg, and C.G. Tsangarides (2014). "Redistribution, Inequality, and Growth." Working paper. Washington, D.C. International Monetary Fund.

Programa Estado de la Nación en Desarrollo Humano Sostenible [*State of the Nation in Sustainable Human Development Program*] (2019). Informe Estado de la Nación en Desarrollo Humano Sostenible [*Report on the State of the Nation in Sustainable Human Development*] 2019. San José, Costa Rica. <http://hdl.handle.net/20.500.12337/7808>

Programa Estado de la Nación en Desarrollo Humano Sostenible [*State of the Nation in Sustainable Human Development Program*] (2015). Informe Estado de la Nación en Desarrollo Humano Sostenible [*Report on the State of the Nation in Sustainable Human Development*] 2015. San José, Costa Rica.

Protzer, E. (2019). “Social Mobility Explains Populism, not Inequality or Culture.” Working Paper No. 118. Center for International Development at Harvard University.

Quah, D. (2020). “Mobility and Political Upheaval in an Age of Inequality.” Lee Kuan Yew School of Public Policy.

Ravallion, M. (2009). “Do Poorer Countries Have Less Capacity for Redistribution?” Policy Research Working Papers. Washington, D.C. World Bank.

Resolución 498-03 del Consejo Nacional de Seguridad Social [Resolution 498-03 of the National Social Security Council]. Santo Domingo, Dominican Republic.

Reynal-Querol, M. (2002a). “Political Systems, Stability and Civil Wars.” *Defense and Peace Economics*, 13(6): 465-83.

Reynal-Querol, M. (2005). “Does Democracy Preempt Civil Wars?” *European Journal of Political Economy*, 21: 445-65.

Reynal-Querol, M. “Ethnicity, Political Systems, and Civil Wars.” *Journal of Conflict Resolution*, 46(1): 29-54.

Ridgeway, C. (2013). “Why Status Matters for Inequality.” *American Sociological Review*, 79 (1): 1-16.

Secretaría de Hacienda y Crédito Público [Secretariat of Finance and Public Credit] (2018). “Distribución del pago de impuestos y recepción del gasto público por deciles de hogares y personas [Distribution of tax payments and receipt of public spending by deciles of households and individuals]. Results for 2018.” Secretaría de Hacienda y Crédito Público [Secretariat of Finance and Public Credit], Mexico.

Social Progress Index (2020). Social Progress Index. Social Progress Imperative, Washington, D.C. www.socialprogress.org

Solon, G. (2004). “A Model of Intergenerational Mobility Variation Over Time and Place.” *Generational Income Mobility in North America and Europe*, 2, 38-47.

Solt, F. (2019). “Measuring Income Inequality Across Countries and Over Time: The Standardized World Income Inequality Database.” SWIID Version 8.2, November 2019.

Székely, M. (2016). *Diagnóstico social integrado para Nicaragua: ¿Es sostenible el progreso social reciente?* Managua: Inter-American Development Bank

Székely, M., I. Acevedo, and I. Flores (2020). “Clase media en Haití, 2012.” Paper, Inter-American Development Bank.

REFERENCES

- Temple, J. (2002). "Growth Effects of Education and Social Capital in the OECD Countries." *Historical Social Research/Historische Sozialforschung*, 5-46.
- Torche, F. (2014). "Intergenerational Mobility and Inequality: The Latin American Case." *The Annual Review of Sociology*. Department of Sociology, New York University.
- Tornarolli, L. and E. Vázquez (2012). "Incidencia distributiva de los subsidios en El Salvador." Center of Distribution, Labor and Social Affairs (CEDLAS) (2012). National University of La Plata, Argentina.
- United Nations (2016). *Impact Evaluation of Belize's Conditional Cash Transfer Programme (BOOST)*. The Consultancy Group. United Nations. https://www.unicef.org/evaldatabase/index_95041.html
- United Nations Development Programme (2010). *The Representation of Minorities and Indigenous Peoples in Parliament*. United Nations Development Programme and Inter-Parliamentary Union.
- United Nations Development Programme (2019). *Human Development Report 2019. "Beyond Income, Beyond Averages, Beyond Today: Inequalities in Human Development in the 21st Century."* New York. <http://hdr.undp.org/en/content/human-development-report-2019>
- Van der Weide, R., and B. Milanovic (2018). "Inequality is Bad for Growth of the Poor (But Not for That of the Rich)." *The World Bank Economic Review*, 32(3): 507-530.
- Varieties of Democracy Project (2019). V-Dem Version 9. V-Dem Institute. Gothenburg, Sweden. <https://www.v-dem.net/es/>
- Villa Mar, K., V. Vélez-Grajales, B. Cedillo, A. Restrepo, and P. Munguía (2020). "Líderes para la gestión en seguridad ciudadana y justicia." Inter-American Development Bank <https://publications.iadb.org/publications/spanish/document/Lideres-para-la-gestion-en-seguridad-ciudadana-y-justicia.pdf>
- Wang, J., K. Caminada, and C. Wang (2017). "Measuring Income Polarization for Twenty European Countries, 2004-13: A Shapley Growth-Redistribution Decomposition." *Eastern European Economics*, 55(6): 477-499.
- Wang, J., K. Caminada, K. Goudswaard, and C. Wang (2018). "Income Polarization in European Countries and Europe Wide, 2004-2012." *Cambridge Journal of Economics*, 42(3): 797-816.
- Wilson, R.A., and G. Briscoe (2004). "The Impact of Human Capital on Economic Growth: A Review." In: Descy, P. and M. Tessaring (eds.), *Impact of Education and Training. Third Report on Vocational Training Research in Europe: Background Report*. Luxembourg: EUR-OP.
- World Bank (2014). "Poverty and Inclusion in Haiti: Social Gains at Timid Pace." World Bank. <http://documents.worldbank.org/curated/en/643771468257721618/pdf/895220BRI00pau00Box385284B00PUBLIC0.pdf>
- World Bank (2018). *The Human Capital Project*. World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/30498/33252.pdf?sequence=5&isAllowed=y>
- World Bank (2020). *Women, Business and the Law 2020*. World Bank. <https://openknowledge.worldbank.org/handle/10986/32639>
- World Food Programme (2020). *2020 Global Report on Food Crises*. United Nations World Food Programme. <https://www.wfp.org/publications/2020-global-report-food-crises>

Databases

Central Bank of Belize. (Various years) Labour Force Survey Report.

Central Bank of the Dominican Republic (2020). Estadísticas del mercado de trabajo [Labor market statistics].

CEPAL (2020). Base de datos de gasto público social [Public Social Spending Database]. Economic Commission for Latin America and the Caribbean. Santiago de Chile. <https://cepalstat-prod.cepal.org/cepalstat/tabulador/ConsultaIntegrada.asp?idIndicador=3127&idioma=e>.

CID Gallup (September 2020), Public Opinion Survey, Costa Rica #159, Dominican Republic #100, El Salvador #111, Guatemala #90, Honduras #103, Nicaragua #97, Panama #100. <http://www.cidgallup.com/>

CivicLytics. Inter-American Development Bank. <https://bidcivicytics.citibeats.com/>

Corruption Perceptions Index (2019). Transparency International. <https://www.transparency.org/en/cpi/2019/results>

Fundación Nicaragüense para el Desarrollo Económico y Social [Nicaraguan Foundation for Economic and Social Development] (2017). Incidencia del gasto público en la reducción de la pobreza y la desigualdad. Managua: FUNIDES.

Fundación Nicaragüense para el Desarrollo Económico y Social [Nicaraguan Foundation for Economic and Social Development] (2020). Informe de Coyuntura, Nicaragua. Managua: FUNIDES.

Gender Equality Observatory for Latin America and the Caribbean (CEPAL). <https://oig.cepal.org/>

Global Corruption Barometer (2019). Transparency International <https://www.transparency.org/en/gcb>

Global Impunity Index (2020). Escalas de impunidad en el mundo. <https://www.udlap.mx/cesij/files/indices-globales/0-IGI-2020-UDLAP.pdf>

Global Multidimensional Poverty Index. (UNDP). <http://hdr.undp.org/en/2019-MPI>

Human Development Index. (UNDP). <http://hdr.undp.org/en/content/human-development-index-hdi>

INE (2019a). XII Censo Nacional de Población y VII Censo Nacional de Vivienda [XII National Population Census and VII National Housing Census]. Instituto Nacional de Estadística de Guatemala [Guatemalan National Institute of Statistics]. Accessed 19/08/2020. <https://www.censopoblacion.gt/>.

INE (2019b). Encuesta Nacional de Empleo e Ingresos [National Employment and Income Survey]. Guatemala. Accessed 08/19/2020. <https://www.ine.gob.gt/sistema/uploads/2020/08/13/2020081354355Y1KZ2HK3GnWnOvCP6lkZunmf8PiHYFSH.pdf>.

INE 2014 Encuesta Nacional de Condiciones de Vida [National Survey of Living Conditions]. Instituto Nacional de Estadística de Guatemala [Guatemalan National Institute of Statistics]. Accessed 08/19/2020. <https://www.ine.gob.gt/sistema/uploads/2016/02/03/bWC7f6t7aSbEI4wmuExoNR0oScpSHKyB.pdf>.

INE 2016 Republic of Guatemala: Compendio de Educación 2015. Instituto Nacional de Estadística de Guatemala [Guatemalan National Institute of Statistics]. Accessed 08/19/2020. <https://www.ine.gob.gt/sistema/uploads/2017/01/16/13EpHY9jEEyYORgJJAUwB758EoJL36aV.pdf>.

REFERENCES

Instituto Nacional de Información de Desarrollo [National Institute of Information Development]. (2014). Resultados de la Encuesta Nacional de Hogares sobre Medición de Nivel de Vida [Results of the National Household Survey on the Measurement of Living Standards]. Managua: INIDE.

Inter-American Development Bank (2020). COVID-19 Labor Market Observatory. Available at: <https://observatoriolaboral.iadb.org/>

International Monetary Fund (2020). World Economic Outlook: Washington, D.C. International Monetary Fund. October. <https://www.imf.org/en/Publications/WEQ>

International Monetary Fund. Policy Responses to COVID-19. <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#M>

Latinobarómetro. Opinión Pública Latinoamericana [Latin American Public Opinion]. <https://www.latinobarometro.org/lat.jsp>

MEPYD 2018. Análisis del desempeño económico y social de República Dominicana. Ministerio de Economía, Planificación y Desarrollo [Ministry of Economy, Planning and Development].

OECD (2009, 2018). PISA Database 2009, 2018. <https://www.oecd.org/pisa/data>

Quality of Government Institute (2019). QoG Data. University of Gothenburg. Gothenburg, Sweden. <https://www.gu.se/en/quality-government/qog-data>

Sistema de Indicadores Sociales de República Dominicana [Social Indicators System of the Dominican Republic] (SISDOM) 2017.

Socio-Economic Database for Latin America and the Caribbean. Center of Distribution, Labor and Social Affairs (CEDLAS) (2012). National University of La Plata. <https://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/>

World Bank. Worldwide Governance Indicators. Washington, D.C. World Bank. www.govindicators.org

World Development Indicators. Washington, D.C. World Bank. <https://datos.bancomundial.org/indicador>

**INEQUALITY
AND SOCIAL DISCONTENT:
How to address them
through public policy**

Economic Report on Central America, the
Dominican Republic, Haiti, Mexico, and Panama

