PART II.

THE THREE-LANE ROAD: PRODUCTIVITY, INCLUSION, AND RESILIENCE

How can we build cohesive middle-class societies? This is not an easy question to answer. However, efforts that work toward advancing countries' progress along the "three lane road" of productivity, inclusion and resilience can bring us closer to this goal.

Long-term prosperity can only be sustained by productivity growth. As Nobel Laurate Paul Krugman remarked a few decades ago, "Productivity isn't everything, but in the long run it is almost everything."[1] One way to think about the infamous "middle income trap" is that countries struggle to transition from a growth model based on factor accumulation and reallocation to one led by productivity and innovation. In the context of LAC, we see that countries in the region are failing to increase their productivity, thereby widening the gap with respect to high-income economies (Vignette 2). However, productivity led growth alone is not enough to build middle class societies—how that growth is translated at the household level is of critical importance. We see that while LAC remains one of the most unequal regions in the world, income inequality has been on the decline in recent years. Labor markets have played a very important role in reducing this inequality, but, not necessarily for the right reasons—as those with higher skills have been losing in terms of the returns to their schooling and their experience, as well in terms of the level of their wages (Vignette 3). It is also not clear that the progress toward inequality reduction will continue without sufficient redistributive support—as we see that while growth in LAC has been generally pro-poor over the past few decades, changes in its incidence suggests that its progressive nature has been steadily flattening out (Vignette 4). Moreover, as rapid technological change continues to shift the nature of work, we need to ensure that the race between skills and technology does not end up further concentrating the benefits of growth and deepening existing inequalities (Vignette 5).

Inclusion is fundamentally about ensuring that no one is left behind. Factors such as a person's gender, race, sexual orientation, disability status, age, or geographic location should not determine what opportunities they have (or do not have) to pursue the life that they have reason to value. Unfortunately, many groups of people continue to face systematic exclusion based on circumstances beyond their control. For example, whether you live in a poor or a rich area of a city in LAC could lead to a gap of as much as 18 years in life expectancy (Vignette 6). Discrimination in LAC is widespread—with almost one fifth of all Latin Americans reporting that they perceive themselves as part of a group that is discriminated against, with indigenous people reporting much higher rates of discrimination than non-indigenous people of all genders and ages (Vignette 7). The consequences of this discrimination are multiple, ranging from lower prospects for economic mobility to suffering violence. While formal laws are an important step toward combatting discrimination and exclusion, they are insufficient on their own. Changing informal rules such as social norms are also of fundamental importance. We see this divergence, for example, in regard to gender-based violence in the region. Despite widespread legislation criminalizing femicide, perceptions that domestic violence is acceptable remain prevalent in many LAC countries (Vignette 8).

Resilience is the ability to return to a predetermined path of development in the shortest time possible after suffering from an adverse shock. We experience many different types of shocks at both the individual level (i.e. an illness) and group level (i.e. a pandemic); and resilience matters at both the micro level (for households) and the macro level (for economies). At the micro level, households adopt strategies (such as savings) to smooth their levels of consumption—so that in periods when they have less, they are still able to meet their basic needs. The extent to which these strategies protect household assets, particularly human capital, is critical for households' well-being and resilience in the future. However, households in LAC are less likely to use savings in an emergency than households in other regions (Vignette 9). At the macro level,

1 Krugman (1997).

countries also need to adopt policy measures to smooth consumption during times of shocks that could impact GDP. For example, the 2008 financial crisis halted the steady growth path that many LAC countries had experienced in previous years due to the “commodities boom” and its extremely favorable terms of trade—resulting in the fact that on average LAC countries spent 21 out of 47 quarters in “negative growth” following the crisis (Vignette 10). When shocks are recurrent, such as the in case of extreme weather-related events in the Caribbean, the challenge of strengthening resilience is particularly acute as countries are continuously struggling to rebuild in the wake of extensive social, economic, and environmental damages (Vignette 11).

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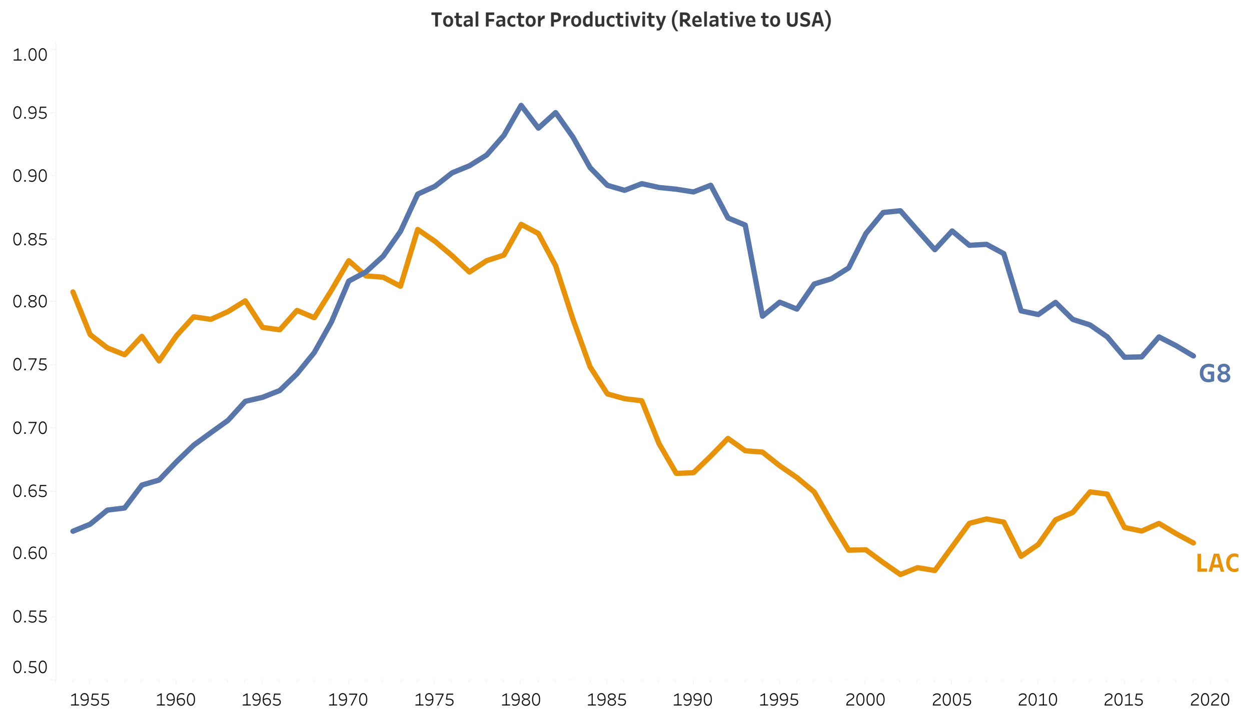
Vignette 2
WHERE DID THE PRODUCTIVE CAPACITY GO?

Productivity has failed to increase in LAC in the past decades, widening the gap with respect to G8 countries.



Source: Penn World Table

In recent decades, Latin American and Caribbean countries have invested heavily in both human and physical capital. One example: secondary and tertiary education completion rates have increased, radically changing the schooling composition of the labor force. Yet, growth in the region has been disappointing. As an underlying determinant of such poor performance, productivity has failed to increase, widening the gap with respect to high-income economies. Consider the graph in this vignette featuring the evolution of total factor productivity (TFP) in LAC, which broadly measures the efficiency with which factors of production are combined to produce goods and services.

Since the 1980s, in most LAC countries TFP has been a decreasing fraction of that of the United States. This is explained mainly because the *level* of TFP has increased in the United States, while it has remained stagnant in LAC. Weak TFP growth is a symptom of countries not taking full advantage of their capacities. In other words, LAC countries do not grow despite their investments because they are not able to capitalize their returns. The question is, why?

There is no definite answer, but a compelling argument is that human and physical capital are "misallocated." That is, they are not allocated to their most productive use. There are a number of ways in which misallocation happens. One is when individuals are employed in occupations that do not use their talents and abilities. Imagine if Cristiano Ronaldo is sent to play tennis and Serena Williams to play soccer. Another example is when productive companies face restrictions to grow and either remain small or are forced out of the market. Finally, workers and firms can also be sub-optimally matched.

There are many stories in Latin American and Caribbean cities about college graduates, say engineers, driving taxis. Consider this example presented by Santiago Levy in his recent book Under-Rewarded Efforts.[2] Think about a number of taxi drivers, working independently; each taxi is a one-worker enterprise which requires only driving skills. Now think of the same number taxis coming together in a transportation company. Now, the company would need an engineer for logistics, a lawyer, an accountant, in addition to drivers. Not only that, but the company could improve the individual productivity of each taxi driver, potentially introducing new technologies that allow for a better utilization of assets, and thus, the productivity not only of the transport sector, but other sectors for which transport is an input. If there are constraints for firm growth –related to the financial sector, fiscal systems, contract enforcement, or others- the companies will remain small and the people with skills will be penalized in their earnings.

In his book, Levy goes on to explain that misallocation is a consequence of policies and institutions that impact the behavior of workers and entrepreneurs to the detriment of productivity. Misallocation can result from policies, such as fiscal policy, trade policy, labor regulations, and social insurance policies. It can also be a result of the institutional environment: the extent to which institutions are able to enforce rules and regulations and provide basic services.

In formal terms, an efficient allocation would be one in which the value that can be obtained with one unit of capital and labor is the same regardless of the firm to which that unit is allocated.[3] Thus, according to one line of thinking, one way of measuring the inefficiency in an environment is to observe the dispersion of TFP of firms within a specific sector: the greater this dispersion, the greater the degree of misallocation. What we observe in LAC is that within narrowly defined industries, some firms are able to produce significantly more output than others, using the same amount of inputs. Consider the case of Ecuador: in 2005 a firm in the top 90th percentile of productivity was 286 percent more productive than a comparable firm in the 10th percentile.

On the labor market side, we find a similar kind of distortion, in particular, of how investment in education is remunerated. In a perfectly functioning market, we would expect that more educated individuals would be more productive, and thus, earn more than less educated, less productive, individuals. We call this "extra" wage for additional years of education a wage premium. We observe that for most countries there is steady drop in the education premium (see Vignette 3). One explanation for this distortion is that educated workers are not able to find jobs where they can deploy the skills acquired. In an environment where firms have incentives to remain small and informal, they are less likely to invest, grow, become more productive, and thus, hire more educated workers.

Other causes typically cited to be behind the misallocation of resources and the dispersion of TFP among firms are (i) cost of entry (and exit), (ii) learning (initial conditions and after changing products/processes), (iii) adjustment costs for factors of production and (iv) access to credit constraints. To improve productivity and reignite growth, LAC countries will need to address the bottlenecks to the optimal allocation of resources. While this discussion has just pointed to the usual suspects, bottlenecks and how to address them are always country-specific; there is no unique prescription to address the productivity puzzle. In each country context, development efforts will need to focus on removing the existing "artificial" barriers to productivity

2 Levy (2018).
3 Hsieh and Klenow (2009).

growth and working to smooth the “natural” ones. There is no need to reinvent the wheel but only to fix it.

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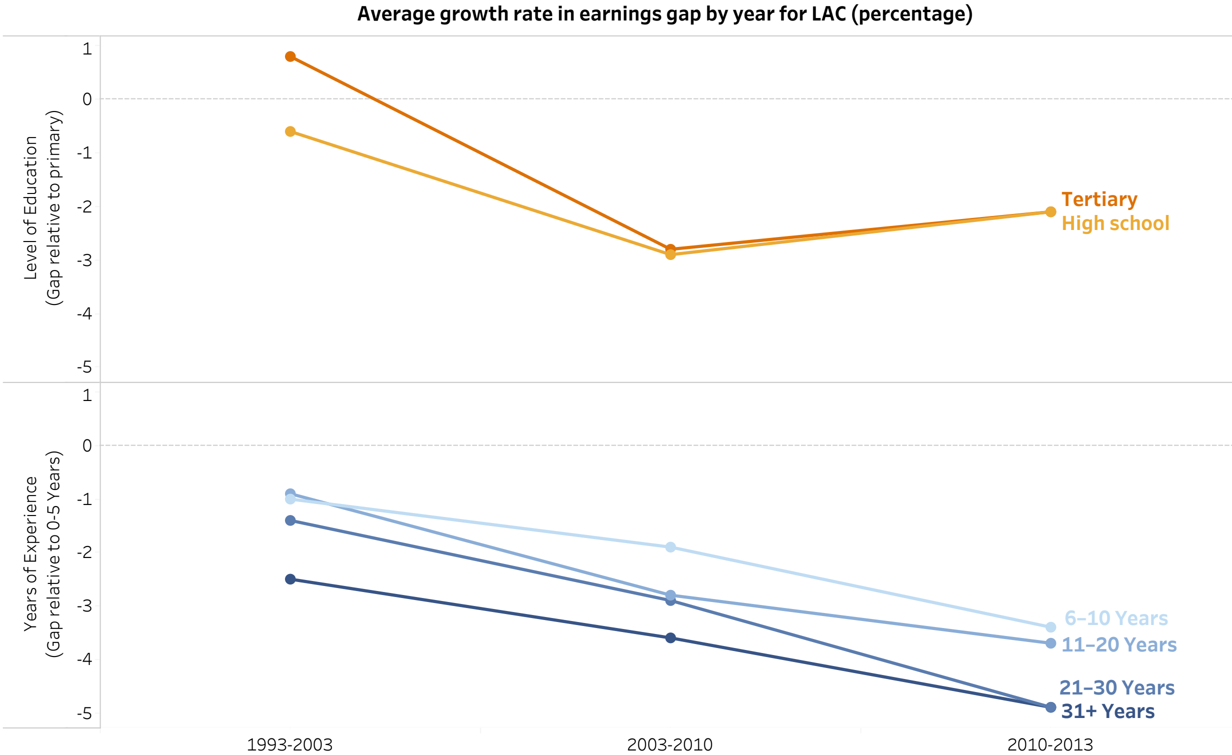
Vignette 3

LEARNING MORE, EARNING LESS: THE ROLE OF FALLING RETURNS TO EDUCATION AND EXPERIENCE IN “REDUCING” INEQUALITY

The decline in labor income inequality in LAC in 2003-2010 can in part be explained by the decline in education and experience premiums during this period.

Average growth rate in earnings gap by year for LAC (percentage)



Source: Table 1 in Rodriguez Castelan, Carlos; Lopez-Calva, Luis F.; Lustig, Nora; Valderrama, Daniel. 2016. “Understanding the Dynamics of Labor Income Inequality in Latin America.” Policy Research Working Paper;N°. 7795. World Bank, Washington, DC.
Note: Calculations based on the SEDLAC database using data for 17 LAC countries.

While Latin America and the Caribbean remains one of the most unequal regions in the world,[4] income inequality has been on the decline. In recent decades, LAC has undergone three different “phases” of income inequality–with the Gini coefficient rising moderately during the 1990s, dropping significantly during the 2000s, and beginning to stagnate during the early 2010s.[5]

4 UNDP (2021).
5 Cord et al. (2014).

What is behind this decline in inequality? One important driver is related to the labor market–or, in other words, how much people are earning for the work that they do. Labor earnings are a very important part of understanding changes in income inequality, as they represent about 80 percent of the total household income distribution[6] in any Latin American country.

The changing dynamic of labor income inequality in LAC is precisely what we explore in López-Calva, Rodríguez-Castelán, Lustig, and Valderrama (2016)[7]. What we found is that labor markets have indeed played a very important role in reducing income inequality in LAC. However, it was not necessarily for the right reasons. In the case of LAC, our results suggest that there has been a compression of the wage premium—meaning that those with higher skills have been losing in terms of the returns to their schooling and their experience, as well in terms of the level of their wages.

If we just look at who makes up the workforce, we see important compositional changes in recent decades: workers across the region are generally becoming more educated, more highly experienced, more urbanized, and more women are participating in the workforce. However, because this compositional change has been fairly constant during the past few decades, it does not alone explain the drivers behind the decline in labor income inequality. We thus need to look further–to see how the amount that these different groups of people have been able to earn, given their skill level, has been changing during this period.

This graph uses the analysis from our 2016 paper to discuss the changing nature of the earnings gap in LAC–specifically showing how the period of declining income inequality corresponds to a period of falling returns to education and falling returns to experience. The underlying data used in the analysis comes from the SEDLAC database of 17 countries in the region and looks at changes in labor income (after taxes) of full-time workers between 15-64 years old.

If we split the past few decades into three time periods, corresponding to the three "phases" of income inequality described above (roughly 1993-2003, 2003-2010, and 2010-2013)–we see some rather clear trends emerge. The top panel of the figure shows the average change in returns to education (relative to primary education) and the bottom panel of the figure shows the average change in returns to experience (relative to 0-5 years of experience) for these time periods. What we see in both cases is a clear drop taking place over the period 2003-2010–corresponding to the period of significant decline in income inequality in the region.

This suggests a steady decline in the education premium in Latin America and the Caribbean since the early 2000s that has been driven by larger growth in labor earnings among less well-educated workers in comparison to workers with high school or tertiary educational attainment. Starting in 2002, the labor incomes associated with relatively low-paying jobs (those in the bottom decile of the earnings distribution) increased by more than 50 percent, compared to an increase of 15 percent for well-paid workers (those in the top decile of the earnings distribution), and 32 percent for the median of the distribution.

Moreover, we see that this drop in the education premium has been coupled with a steady fall in the experience premium, which has been accelerating since the early 2000s. The most experienced workers have seen a reduction by almost half in their experience premium with respect to younger workers. This was the first paper to highlight the decline in the experience premium across the region, while previous literature had focused primarily on education and gender gaps.

One plausible factor to explain why these dynamics are taking place is skills obsolescence among older

6 World Bank (2011).
7 This paper was prepared as a background paper for the World Bank publication Wage Inequality in Latin America: Understanding the Past to Prepare for the Future (Messina and Silva, 2018). These original results have been replicated recently in an IADB working paper Twenty Years of Wage Inequality in Latin America. (Messina and Silva, 2019).

age-groups. As Vignette 5 explores, the increasing mechanization and automation of sectors that have traditionally been intensive in the use of labor (manufacturing and services) has been changing the nature of the labor market in the region—with heterogenous effects across countries. Another explanation[8] could have to do with distortions that allocate resources towards less productive firms that require less well-educated workers. However, there are many other potential factors that could be behind these trends, and more research is needed to test the demand, supply, and institutional factors that may help explain the reversal in earnings inequality in LAC.

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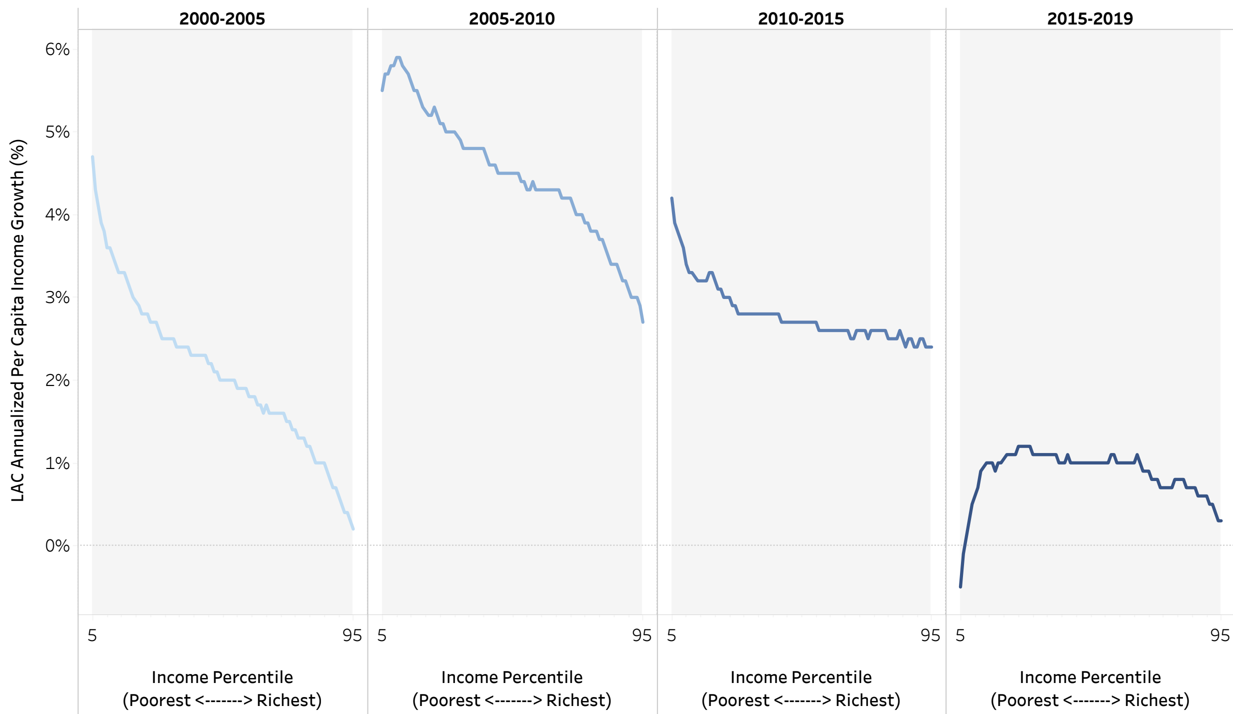
8 Levy and López-Calva (2019).

Vignette 4
WHO BENEFITS FROM GROWTH?: A LOOK AT THE CHANGING INCIDENCE OF ECONOMIC GROWTH

While growth in LAC has been generally pro-poor over the past few decades, its progressive nature has been flattening out.



Source: Data from World Bank LAC Equity Lab "Economic Growth – Growth Incidence Curve (GIC)" Dashboard (www.worldbank.org/en/topic/poverty/lac-equity-lab1/economic-growth/growth-incidence-curve). (September 2021 update)
Note: For the periods 2000-2005, 2005-2010, and 2010-2015 the regional aggregate shown is based on the series "Latin America & the Caribbean (Old)." For the period 2015-2019 the regional aggregate shown is based on the series "Latin America & the Caribbean (New)."

Income inequality has been on the decline in LAC in recent decades. Indeed, in most countries in the region inequality was lower in circa 2018 than it was in circa 1990. However, people in LAC consistently report that the gap between the rich and the poor is widening. We observe this in perception surveys, but also in the mounting social conflicts and recent, very polarized, electoral processes that have taken place in the region. Over the past two years this concern has been reflected in widespread protests across the region, in which citizens cite concerns over inequality as a key motivating factor (see Vignette 18).

What explains this dissonance between what inequality measures tell us and what people perceive in LAC? One reason for this apparent "mismatch" between observed patterns and perceived patterns may be due to the way that we are measuring inequality–and the limitations of these measures to capture the aspects of inequality that actually matter to citizens. For example, traditional measures of inequality (such as the Gini coefficient) are troublesome because they are not sensitive to changes in the shape of the distribution or to what happens in different parts of the distribution (particularly the tails).

This vignette explores this "inequality puzzle" by looking at how people across the income distribution have differently benefitted from the gains of economic growth in recent decades. To do this, the graph uses data from the World Bank's "LAC Equity Lab"[9] dashboard on the incidence of economic growth in the region. Using their constructed aggregate of 18 countries in the region, this graph plots LAC's "Growth Incidence Curves" over the period 2000-2019 broken into 4 time periods each spanning roughly 5 years (note that the final time period covers 4 years and ends in 2019, given data availability). For each of these 5-year periods, the figure shows the average annualized growth of each income percentile between the 5th and 95th percentiles (ranging from the poorest income percentiles on left to the richest income percentile on the rights). Thus, if the graph is downward sloping (higher on the left than on the right), we can interpret that growth in the period was pro-poor (meaning that the income of the poor was growing at a faster rate than that of the rich). If the graph is upward sloping (higher on the right than on the left), we can interpret the opposite.

Watching the graph's evolution over time, we see that while growth in LAC has been generally pro-poor over the past few decades, its progressive nature has been flattening out. This shift might be partially explained by the commodity boom that characterized the region's economies at the beginning of this period, which shifted relative prices in favor of non-tradable sectors intensive in low skill labor, and which came to an end around 2013. This movement of the growth incidence curve implies that the economy's growth pattern has been such that the poor are no longer the group that is most benefitting. This supports the notion that the story of declining inequality in the region may not be so simple as it first appears. Indeed, a dynamic look across the whole distribution complicates the story.

Moreover, it is important to note that this graph is missing two very important pieces of information: what is happening at the tails of the distribution (the poorest 5% and the richest 5%) and what is happening in the other countries in LAC (only 18 countries are included here). This information is unfortunately missing due to data constraints. Indeed, it is very difficult to accurately capture what is happening at the very bottom and at the very top of the income distribution, and to know what is happening at any point in the distribution in countries with limited household survey data. However, new measures have emerged that try to capture the income at the top, and report much higher inequality levels. For example, if we look at a similar graph produced by the New York Times[10] on the changing growth incidence in United States (the graph which inspired this one), we see that most of the action happens at the very top of the income distribution (in the Top 1%). Recent studies suggest that a similar pattern is likely to be true in LAC as well. For example, a recent study on Brazil found that between 2001-2015 the income share of the Top 1% increased from 26.2% to 28.3% (and the income share of the 10% increased from 54.3% to 55.6%).[11] Indeed, concentration of income at the top, when it is possible to measure it, seems to have increased.

While it can be argued that increasing inequality is not bad per se (for example, in some cases it can serve as an incentive to advance or can be productivity-enhancing), it is typically associated with patterns of economic, social, and political exclusion, and leads to significant costs for society. These costs manifest in different ways, ranging from power asymmetries, to policy distortions, weak social cohesion, and persistent underinvestment. Thus, if countries in LAC are to make progress in consolidating themselves as strong cohesive middle-class societies, they will need to continue tackling the challenge of inequality. Moreover, they will need to do by going "beyond averages, beyond income and beyond today," as the UNDP Human Development Report 2019[12] contends.

9 World Bank (2021).
10 Leonhardt (2017).
11 Morgan (2017).
12 UNDP (2019).

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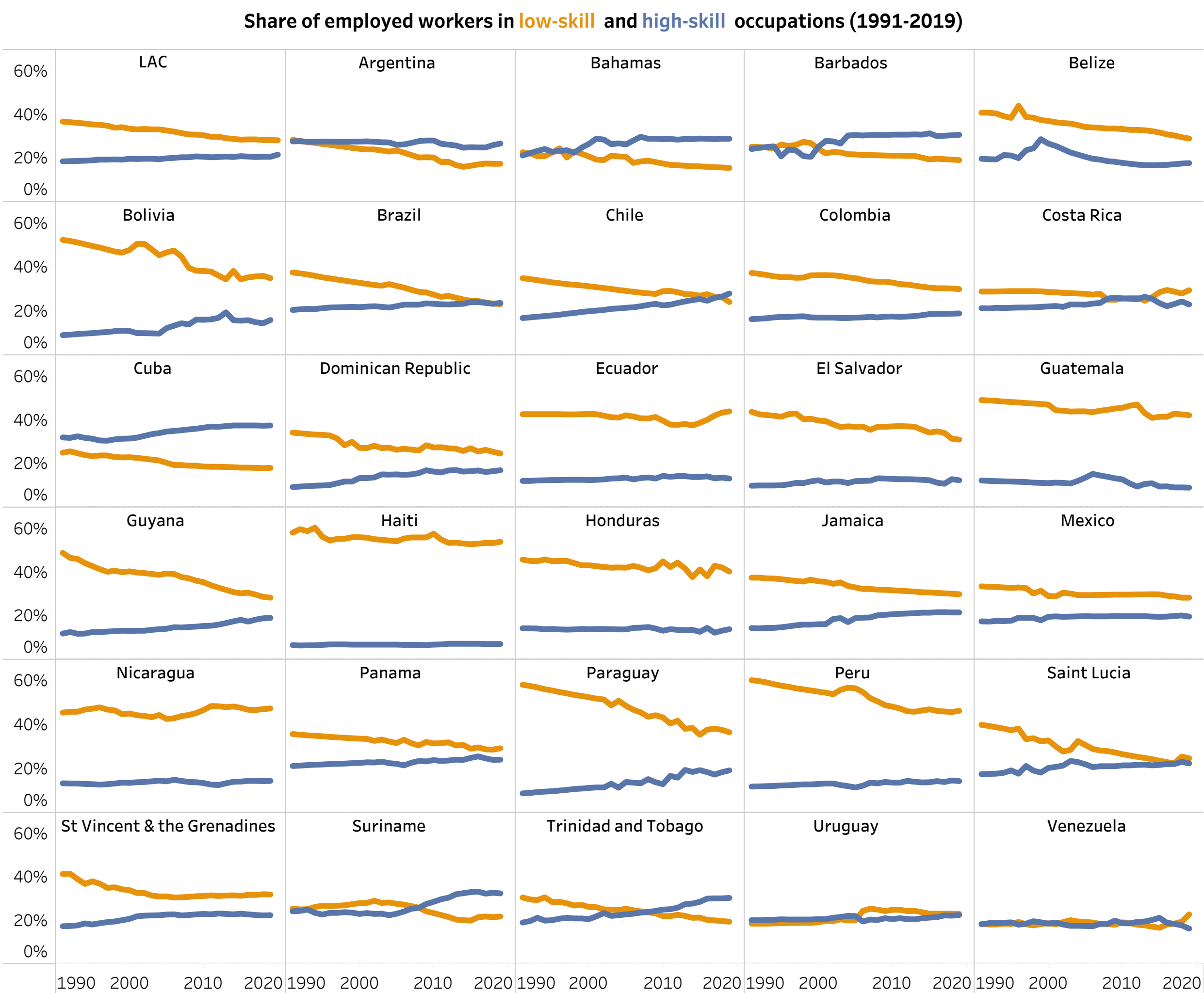
Vignette 5
"I'LL BE BACK"... (TO TAKE YOUR JOB AWAY): AUTOMATION AND JOB POLARIZATION

Technology is expected to have a polarizing effect on jobs in developed economies, boosting the share of both low and high skill jobs. In LAC, however, the evidence is mixed so far.



Source: ILOStat (Employment by sex and occupation – ILO modelled estimates, Nov. 2020).
Note: Following ISCO-08, occupations are classified into low, medium (not shown), and high skill. High-skill occupations include ISCO-08 categories 1 (Managers), 2 (Professionals), and 3 (Technicians and associate professionals). Low-skill occupations include the reported combined ISCO-08 category 96 (Elementary occupations and skilled agricultural, forestry and fishery workers). While ISCO-08 only classifies category 9 (elementary occupations) as low-skill, due to underlying data misclassifications, the ILO modelled estimates merge and jointly estimate categories 6 and 9 to ensure consistent and internationally comparable classification.

The evolution of technology has always shaped economic and social outcomes by determining how people organize to produce goods and services. This process is punctuated occasionally by technological discontinuities, where changes are abrupt. These periods are called *industrial revolutions*.

The so-called *Fourth Industrial Revolution* is exactly this: a period of technological discontinuity. But why is it different from previous periods? Technology is changing much faster than ever before. Cycles are shorter, and obsolescence realizes itself much faster. The pace and rate of change are exceeding, so far, our capacity to adapt. Additionally, technology has allowed the outsourcing of parts of the production process and thus, transformed employment relationships, in many cases transferring risks from the employer to the employee. Finally, the current wave of technological improvements is, increasingly, able to develop machines that perform the kind of tasks that we did not think were susceptible to automatization. While we were used to machines that replace routine/predictable work, we are now facing the reality that non-routine tasks could also be performed by robots.

To understand the problem, it is important to consider that any occupation is composed of a set of tasks. Some of these tasks are routine, some non-routine, some manual, and some cognitive. For instance, a lawyer might spend time doing a lot of paperwork (i.e. a routine task), but the occupation requires a significant amount of reasoning (i.e. a cognitive task). This is important because machines replace tasks, not jobs. For example, employment in cleaning services did not disappear because of the emergence of the vacuum cleaner. Instead, those employed in the cleaning sector were able to spend less time sweeping and reallocate their time to other (perhaps more productive) cleaning tasks. This is the case because the set of tasks that compose that occupation are diverse and contain a number of non-routine tasks that are not easily replaceable. Now, consider the paradigmatic case of cashiers. Since the job is highly intense in routine tasks (put simply, taking money in or out of accounts) it was easily replaced by ATMs.

In fact, it has been largely documented that in developed countries the share of jobs intensive in routine tasks (usually associated with "medium skilled" jobs) has decreased while those intensive in non-routine tasks, both manual and cognitive (usually associated with "low skilled" and "high skilled" jobs, respectively), have increased in a phenomenon known as job polarization. In LAC countries, however, we do not observe this pattern of job polarization clearly. As a whole, the share of low skilled employment has been slowly decreasing while the share of high skilled employment has been (very) slowly increasing. The regional average for LAC, however, hides a lot of heterogeneity. In Belize, for example, medium skilled employment has increased a lot at the expense of high skilled employment. Uruguay, on the other hand, seems to show a pattern more aligned with job polarization theory.

A few words of caution at this point. First, the region is known for having highly informal labor arrangements, which could be associated with slow technology adoption and therefore a slow process of job polarization (if any). Second, it cannot be inferred from this argument that high skilled wages are increasing in LAC countries. In fact, the evidence suggests the contrary (see Vignette 3). Finally, it is important to keep in mind the distinction between technical and economic feasibility. Even if technology could replace some tasks, firms might still choose not to do so because of high costs of adoption or low gains in profitability.

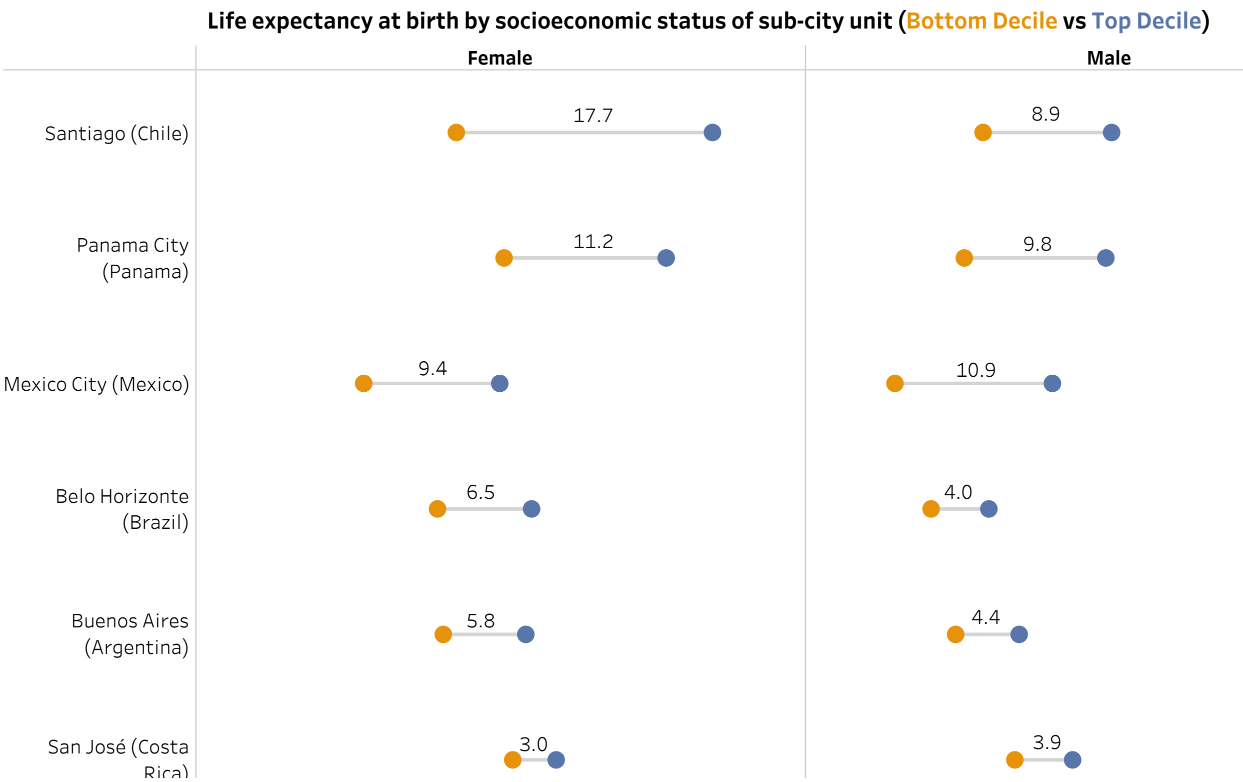
In fact, the adoption of new technologies and its ultimate impact on LAC countries will depend on the occupational structures of countries and how governments and private sector actors react to the new environment. Since technology substitutes routine and manual tasks and complements non-routine and cognitive ones, the policy challenge is to ensure workers have the right kind of skills–such as critical thinking, reasoning, analytical and interpersonal abilities that machines do not have for the time being. Countries may need to adapt education policies, ranging from formal schooling to on-the-job-training. Fiscal policy is also critical as a means of redistributing the productivity gains derived from technological improvements. However, it should be taken into account that taxing robots could discourage their adoption and result in a missed opportunity for productivity gains.

There is a difficult equilibrium to be reached against a complex backdrop of uncertain circumstances and fears that a large share of employment is under threat. However, it is important to note that we do not observe a persistent increase in unemployment around the world. This signals that human labor is reallocating towards new occupations and even brand-new sectors. This requires policies that prepare workers, so they can accommodate technical progress and be able to quickly adapt to change. Otherwise, we run the risk of machines telling us "*Hasta la vista, baby*."

Vignette 6

TELL ME WHERE YOU LIVE, AND I'LL TELL YOU FOR HOW LONG: INEQUALITY AND WITHIN-CITY GAPS IN LIFE EXPECTANCY

In some Latin American cities, where you live matters for how long you live. People living in richer areas have systematically higher life expectancies than people living in poorer areas – by as much as 18 years for women in Santiago.



Source: Data from Table 2 in Usama Bilal, P., Marcio Alazraqui, Waleska T Caiaffa, Nancy Lopez-Olmedo, Kevin Martinez-Folgar, J Jaime Miranda, Daniel A Rodriguez, Alejandra Vives, and Ana V Diez-Roux. "Inequalities in Life Expectancy in Six Large Latin American Cities from the SALURBAL Study: An Ecological Analysis." The Lancet Planetary Health 3.12 (2019): E503-510. Web.

As inequalities manifest across territories, location becomes a critically important lens for thinking about how opportunities are unequally available to people. While many traditional measures of territorial inequalities look at disparities in GDP, it is important think about how spatial disparities are manifested beyond income. Perhaps more relevant than inequalities in GDP per capita are inequalities in the provision of public goods and services–which have important implications for key dimensions of well-being such as education and health.

Inequalities in health are often broadly captured by comparing measures of life expectancy at birth across groups. As the global UNDP Human Development Report 2019[13] notes, gaps in life expectancy at birth are narrowing between countries with low levels of human development and countries with very high levels of human development (as measured by the HDI). While we are seeing convergence in the basic capability of living a long and healthy life–primarily driven by the fact that gains made in life expectancy among low HDI countries were three times the size of the gains made in very high HDI countries–the gap still remains unacceptably high. People in low HDI countries are expected to live 19 years less than those in very high HDI countries.

While gaps in life expectancy at birth across countries are narrowing, the available evidence shows that gaps in life expectancy within countries are increasing (for example, in Canada, Denmark, Finland, Japan, the UK, the US, and several Western European countries).[14] There is much less evidence available on this issue in the context of developing countries – and where it is available, it often explores inequalities between rural/ urban areas or is analyzed at the municipal level. Very few studies zoom in further to explore inequalities within cities.

In LAC, cities are an important unit of analysis for understanding spatial disparities–as they are both home to the majority of the population (81% of the population in LAC lives in cities[15] – the highest share among developing regions) and are notorious for their high levels of inequality. A recent study by Bilal et al helps us to shed light on within-city spatial disparities in life expectancy.[16] Using data from Panama City, Santiago, Mexico City, Buenos Aires, Belo Horizonte, and San José, the researchers measure gaps in life expectancy at birth between areas with different socioeconomic statuses.

This graph shows the results from that study, which reveal a systematic gap in life expectancy between people living in the richest areas (top decile) and people living in the poorest areas (bottom decile) of these cities. For women, this gap reaches as high as 18 years (in Santiago), and for men this gap reaches as high as 11 years (in Mexico City). The smallest gaps for both women and men were in San José. Further research is needed to understand the primary drivers behind these gaps in different contexts–including the role of environmental disparities (such as exposure to air pollution or disaster risk), disparities in public services (such as access to quality health care or availability of clean water and sanitation services), or disparities in other living conditions (such as high incidence of crime and violence).

When spatial disparities arise in dimensions related to the provision of public services, such as education or health, this can be seen as an important sign of governance deficits. Following O'Donnell[17], the state should act as focal point of collective identity and should be equally responsive to the needs of all citizens, regardless of where they live within the territory. Unfortunately, State presence tends to be discontinuous across space.[18] The State and its effectiveness in providing public services is often unevenly distributed—leaving many regions systematically neglected, and their populations excluded. So, if we are to truly "leave no one behind" as we make progress toward achieving the SDGs in LAC, addressing territorial inequalities must be a priority.

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Vignette 7
NO COUNTRY FOR OLD, INDIGENOUS WOMEN: THE CHALLENGE OF DISCRIMINATION

Indigenous people in Latin America report much higher rates of discrimination than non-indigenous people of all genders and ages.

Source: Data from Latinobarómetro. Authors' calculations.
Note: Reported shares represent predictions of a probit estimation where the interactions of dummy variables for indigenous, old (>50 years) and gender are plotted. Year and country dummies are also included. Data from Latinobarómetro waves of 2010, 2011 and 2015.

"Would you describe yourself as part of a group that is discriminated against in your country?" At the beginning of this decade a peak of more than 40% of Bolivians, 30% of Brazilians and almost 35% of Guatemalans answered "Yes" to this question. The perception of discrimination, in whatever form people feel it, is an issue in many LAC countries. On average, 17% of all Latin Americans reported that they perceived themselves as part of a group that was discriminated against in 2015. However, these average numbers hide the vast heterogeneity among different groups in the population. As we know, when it comes to discrimination–certain groups are much more adversely affected that others. Discrimination can take place along many axes–though some of the most common are race, gender, age, sexual orientation, and disability.

Using data from the Latinobarómetro perception survey, this graph summarizes the pooled responses of all Latin-Americans interviewed between 2010-2015, disaggregated by the respondent's gender, age, and whether or not they are indigenous. The data shows a 21 percentage point gap in the share responding "Yes" to the question between the group facing the least amount discrimination (non-indigenous younger men) and the group facing the most discrimination (indigenous older women). As this figure shows, the answers of men and women do not differ very much, nor do the answers of older and younger people. What we do see, however, is that the answers of indigenous and non-indigenous people differ systematically. In Latin America, indigenous people report much higher rates of discrimination than non-indigenous people of all genders and ages.

Discrimination is not only intrinsically unfair and harmful, but it can also have instrumental consequences for development. When discrimination takes place in the labor market, it can limit efficiency as it constrains certain individuals from generating income and actively contributing to growth. One way to think about the generation of household income is the assets-based approach.[19] In brief, this approach argues that households generate income by accumulating assets (for example, by gaining human capital through higher education), using those assets intensively (for example, by putting education to work in the labor market), and obtaining returns to those assets (for example, by receiving a fair wage for work). However, if there are structural barriers (such as discrimination), which hold households back from effectively accumulating, using, and/or obtaining returns to assets, both individuals and countries will lose out on this untapped economic potential. The figure suggests that in Latin America, this may be the case for many indigenous people.

Discrimination is closely linked to the notion of equality of opportunity–commonly described as the need to ensure a "level playing field." This would suggest that circumstances beyond one's control (such as race, gender, age, sexual orientation, disability status) should not determine one's chances for advancement. This is associated with the Rawlsian idea of "justice as fairness." Where discrimination takes place, the playing field is systemically uneven–creating a dynamic in which inequalities are likely to be persistent over time, getting passed on from one generation to the next. In this way, discrimination interacts with equality of opportunity to the influence equality of outcomes (an ex-post notion which refers to the way resources are distributed among society).

A 2019 paper by Campos-Vazquez and Medina-Cortina[20] sheds light on the longer-term effects of discrimination in LAC. Taking advantage of a unique survey in Mexico, they show how skin color affects inter-generational mobility. The paper shows how much an individual's parents' wealth matters for determining their current wealth status–differentiating between three skin color groups: "white," "light and medium brown," and "brown and dark brown."[21] The authors' results indicate that those in the group classified as "white" are not only more likely to stay in the highest income quintiles, but they are also more likely to move upwardly regardless of which quintile they were born into. Almost 90 percent of people classified as "white" that started in the richest quintiles (Q4 and Q5) stayed there. In comparison, only 67 percent of people classified as "light and medium brown" and 57 per cent of people classified as "brown and dark brown" that were born into the richest quintiles stayed there. Moreover, among those born into the poorest quintile (Q1), those in the "white" skin color group were much more likely to be able to move upwardly into the richest quintiles. While 51 percent of people classified as "white" that were born in the poorest quintile moved up to the richest quintiles, only 23 percent of people classified as "light and medium brown" and 15 percent of people classified as "brown and dark brown" were able to do so. Overall, the findings suggest that among the poorest, upward mobility is strongly constrained by skin color.

If countries are to successfully "leave no one behind" in the implementation of the 2030 Agenda for

19 López-Calva and Rodríguez-Castelán (2016).
20 Campos-Vazquez and Medina-Cortina (2019).
21 Data on skin color was collected in the survey by trained interviewers using the palette of 11 skin tones developed by Princeton University's Project on Ethnicity and Race in Latin America (PERLA) and then aggregated into the categories used in the analysis as follows: white (PERLA 1-3), light and medium brown (PERLA 4-5), and brown and dark brown (PERLA 6-11).

Sustainable Development, they must take action to reduce discrimination. While policies to ensure that all individuals have equal opportunities to accumulate, use, and receive fair returns to their assets are critical in promoting a more "level playing field"—we also need to think about how to change the harmful social norms that these processes are embedded more broadly within. If we do not also change the informal institutions that prop up discrimination, simply changing formal laws will be insufficient to promote behavioral change. In its role as a "focal point" for coordinating behavior, formal law can help to jumpstart this norm shift.

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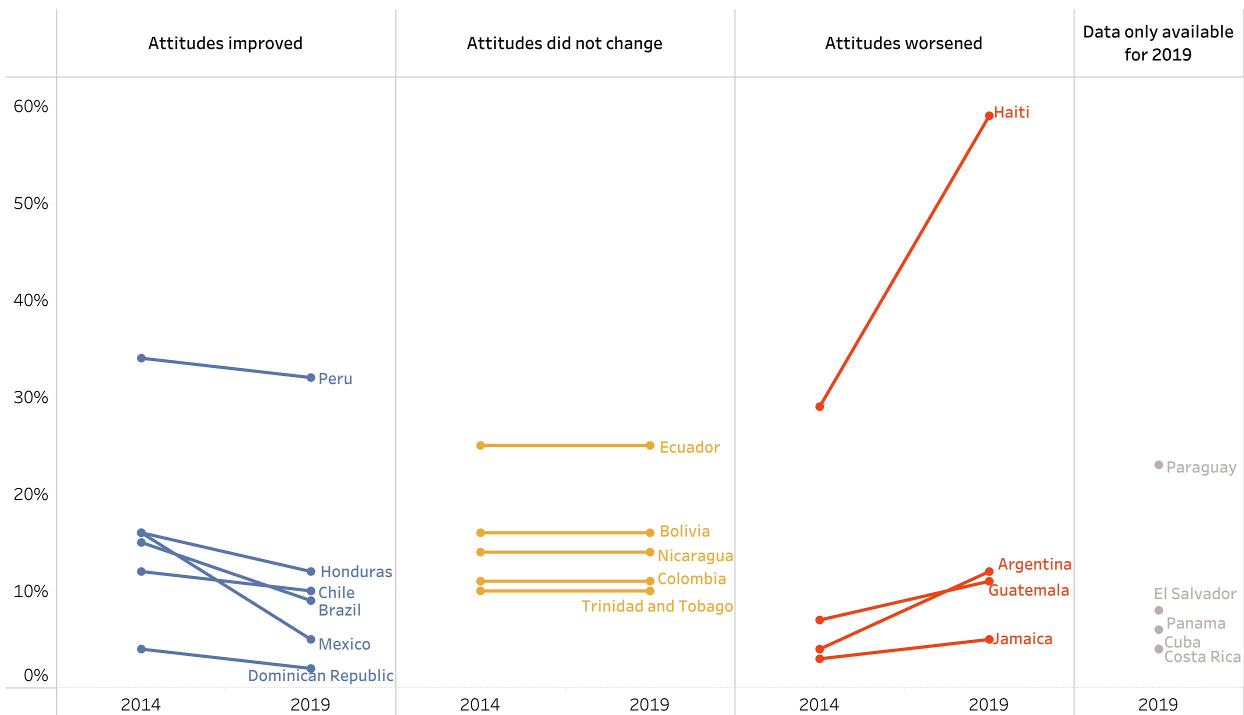
Vignette 8
"AND IT WASN'T MY FAULT": DANGEROUS SOCIAL NORMS AND THE URGENT NEED TO REIMAGINE OUR WORLD

Social norms against intimate partner violence have been slow to change in LAC. In the past 5 years, they have only improved in 40% of LAC countries with available data.

Share of women who agree that "a husband/partner is justified in beating his wife/partner under certain circumstances"



Source: OECD International Development Statistics Gender, Institutions and Development Database (Edition 2014 and 2019).

Gender-related violence manifests in a range of physical, sexual, and psychological forms and is a leading cause of women's deaths around the world. According to a 2018 UNODC report,[22] almost 60 percent of all female homicides in 2017 were committed by an intimate partner or family member—meaning that the home is the most likely place for women to be killed. This notion of gender-related killing is broadly referred to as "femicide" or "feminicide"—and it is a key challenge facing LAC countries. Indeed, out of the 25 countries in the world with the highest number of femicides in 2004-2009 – 14 of them were in LAC.[23]

22 UNODC (2018).
23 Nowak (2012).

Living free of violence is not only a human right, but a fundamental functioning that allows women to pursue the lives that they have reason to value. From the perspective of the capabilities approach, where human freedom and access to opportunities are the tenets of human development, women who are vulnerable to violence within the household experience a lack of bodily integrity as a fundamental capability deprivation. As Martha Nussbaum's work on women and human development[24] argues, bodily integrity is the capability of freely circulating from place to place, being safe from assault and sexual violence, and enjoying reproductive rights. In other words, it is imperative for human development to enable the social conditions (laws, policies, and interventions) that ensure the bodily integrity of women and lift this capability deprivation.

Countries across the region have been working to respond to this critical challenge by revising or expanding their legislation to criminalize femicide as an offense. Eighteen countries in the region have adopted laws in recent years–outlining national definitions of the concept and creating frameworks for prosecuting it. Costa Rica and Venezuela were among the first countries to adopt laws in 2006. This was followed by a cascade of other countries–with Uruguay most recently adopting legislation in 2017.[25]

However, it is important to note that while formal laws are an important step toward eliminating violence against women, they are insufficient on their own. There is a call for state action that goes beyond criminalizing femicide and strengthening sentences–to actually enacting laws focused on prevention and protection, investigation and reparation.[26] Moreover, as Jeni Klugman[27] notes, "dealing with only the consequences of violence has obvious weaknesses, not least that the *causes of violence* can go unaddressed. This points to the importance of changing the norms that cause or at least sanction or tolerate violence, and how understanding laws and legal reforms can serve to change norms." Indeed, social norms are a key part of this addressing this challenge.

Social norms about the acceptability of violence against women in the home can be extremely dangerous–and, as this graph shows using to data from the OECD,[28] these norms remain very prevalent in many LAC countries. For example, in countries such as Haiti and Peru, the share of women who agree with the statement that "a husband/partner is justified in beating his wife/partner under certain circumstances" reached as high as 59% and 32% respectively in 2019. While social norms can be slow to change, it is important to note that in many LAC countries these norms are either remaining stagnant or "worsening" (meaning that the share of women who agree with that statement is increasing) over the past five years. Indeed, out of the 15 countries that had data available for 2014 and for 2019, these norms "improved" in 6 countries, did not change in 5 countries, and "worsened" in 4 countries. This means that in the past 5 years, social norms against intimate partner violence have only improved in 40% of the LAC countries with available data.

While these facts are not encouraging, we are living in a moment in which the tides are hopefully turning. Millions of women around the world are daring to speak out and taking to the streets to demand an end to gender-related violence and harassment. In LAC in 2018 alone, marches against gender violence took place in Chile, Uruguay, Colombia, Venezuela, Guatemala, Peru and Argentina. The call to action to ensure *#NiUnaMenos* ("Not One Woman Less") spread rapidly across the region. International actors are also working to promote change. For example, the EU and the UN have joined together to launch the Spotlight Initiative[29] to eliminate all forms of violence against women and girls. In LAC, Spotlight will be implemented in Argentina, Salvador, Guatemala, Honduras and Mexico and will support laws that promote gender-equality, strengthen institutions, change cultural norms and support the research on this topic.

24 Nussbaum (2000).
25 UNODC (2018).
26 Deus and Gonzalez (2018).
27 Klugman (2017).
28 OECD (2019).
29 Spotlight Initiative (2022).

We need to work across all of the different fronts in order to enact meaningful change. In the words of Cecilia Suarez, a Mexican actress who delivered a beautiful and thoughtful speech ("Harta") at the launch of the Spotlight Initiative, *"Al patriarcado hay que oponerle el corazón de cada ser humano, la inteligencia y la capacidad de imaginar las cosas de otra manera* / In order to fight the patriarchy, we need the power of each person's heart, intellect, and capacity to imagine things in a different way." Our imaginations are fundamental in seeing the world from the point of view of others–and thus laying the foundation upon which we can construct a more equitable world. As Cecilia explained (citing the words of Grace Paley),[30] "*Necesitamos la imaginación para comprender lo que les ocurre a las personas que nos rodean, para intentar comprender las vidas de los demás…es seguramente el acto más importante de la imaginación, y además puede ser de provecho para el mundo* / We need our imaginations to understand what is happening to other people around us, to try to understand the lives of others… This is probably one of the most important acts of the imagination that you can try and that can be useful to the world."

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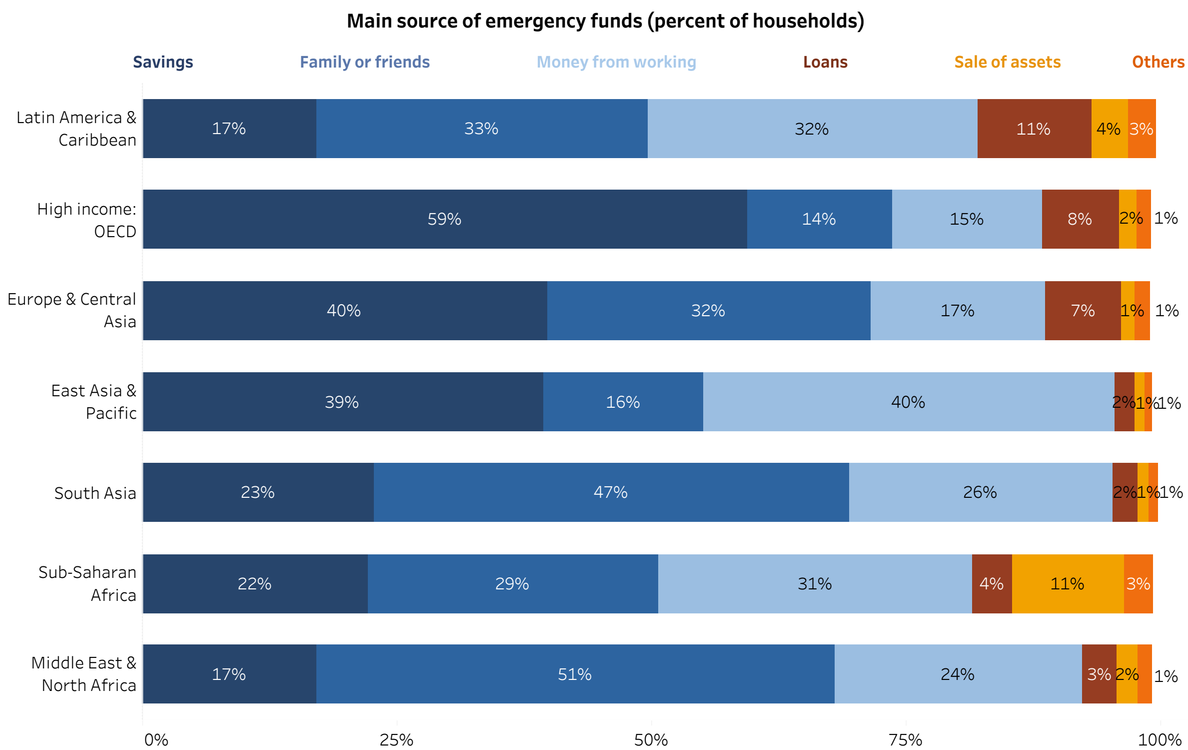
30 Paley (1999).

Vignette 9
UNDER THE MATTRESS: SAVING TO BE SAFE

Only 17% of households in LAC rely on savings in case of an emergency.



Source: Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018. The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. World Bank: Washington, DC.
Note: Among respondents age 15+ reporting that in case of an emergency it is possible for them to come up with 1/20 of gross national income (GNI) per capita in local currency.

Households experience many different types of shocks—ranging from illnesses to droughts to severe storms. The ability to recover quickly from shocks is more difficult for poor or vulnerable families, given that they have fewer assets on which they can draw during difficult times and thus have less capacity to cope with risk. Recovering quickly does not only mean returning to previous consumption levels. Resilience also requires being able to protect and rebuild levels of assets that impact the productivity of the household in the long-term. For example, in case of an emergency, a family might forgo preventative healthy behaviors (such as check-ups or the consumption of healthy food) in order to smooth consumption. However, this may come at the cost of deteriorating health—in which case, the household's vulnerability is in fact increased.

Indeed, millions of families around the world are just one illness away[31] from poverty. Think, for example, of a poor family which relies on agricultural income for survival. If one member suffers an accident and

31 Krishna (2011).

is unable to work on the farm during the planting or harvesting season–this family may lose the primary income source upon which they depend so heavily.

When facing shocks, households adopt strategies to smooth their levels of consumption–so that in periods when they have less, they are still able to meet their basic needs. The extent to which these strategies protect household assets, particularly human capital, is critical for the household's well-being and resilience in the future. An important way in which households smooth consumption is through savings. However, as this graph shows, based on data from the Global Findex Database[32] for 2017, households in LAC are less likely to use savings in an emergency than households in other regions.

While in Europe and Central Asia, 4 in 10 households rely on their savings in the case of an emergency–in LAC, less than 2 in 10 households do the same. In LAC, rather, the majority of households turn to their family or friends for support. However, in the case of a shock that affects many people all at once–such as an earthquake or a tropical storm–this mechanism evaporates. One of the primary reasons why so few people in LAC rely on savings in the case of emergency is likely that few people in LAC have any savings to begin with. In 2017 in LAC, only 38% of individuals were able to save *any* money in the previous year–roughly half the share in OECD countries. Moreover, for the poorest 40% of the population in LAC, this number is just 28%, compared to 44% for the richest 60%.

What is driving this low level of savings in LAC? While an easy explanation may be that people do not save because they earn too little, the data does not necessarily suggest that this is the case. For example, LAC has a far lower rate of savings than poorer regions such as Sub-Saharan Africa–where the share of households that saved any money in the past year reaches 54%.

Interestingly, while 38% of individuals save in LAC, only 13% of individuals do so in a financial institution. This is striking considering that in LAC 54% of individuals have a bank account. While this is low compared to OECD countries (where 95% of households have bank accounts), the question remains why the majority of those who do save are choosing to do so outside of formal financial institutions.

This discrepancy perhaps reflects big a push from governments in the region for financial inclusion by banking the poor. However, as a recent IADB publication[33] explores, while those efforts might have addressed the issue of access by creating bank accounts for those without them, they might not have addressed some issues which determine whether households use them for savings or not. The publication identifies among the main reasons why these financial inclusion strategies have not resulted in increased savings as: (i) lack of trust and regulation (for example, in Chile–despite being a country with a very developed financial market–Findex data show that almost half of those who do not hold a bank account cite lack of trust as a reason), (ii) high transaction costs (for example, high monetary or labor costs involved in managing a savings account), (iii) information and knowledge gaps (for example, the majority of the population in Chile, Colombia, Guatemala, Mexico and Peru do not understand the term "interest rate"), (iv) social pressure (for example, when extended networks of family and friends impose demands on households' accumulated stock of savings); and (v) behavioral biases (for example, a lack of self-control or present-biased decision-making).

Additionally, access to formal bank accounts is uneven in LAC. Indeed, the gap in access to banking between the poorest 40% and the richest 60% in LAC is four times higher than in developed economies. While in OECD countries there is a narrow gap of around 5 percentage points between the share of poor and rich households with bank accounts, in LAC countries there is a 20 percentage point difference between the access of those of at the bottom of the income distribution and those at the top.

32 Demirgüç-Kunt (2018).
33 Frisancho (2016).

Policies to promote banking for the poor have succeeded in many countries around the world, such as in India and Chile (Pradhan Mantri's Jan-Dhan Yojana and Cuenta-RUT, respectively). The remaining, and perhaps more difficult, challenge is to actually change savings behavior. Indeed, there is considerable room to improve formal savings by incentivizing households to move their money from informal mechanisms (or from under their mattress) to bank accounts. Although this would not solve the savings problem in the region, which has multiple causes, it could be a first step towards the ultimate goal of building resilience.

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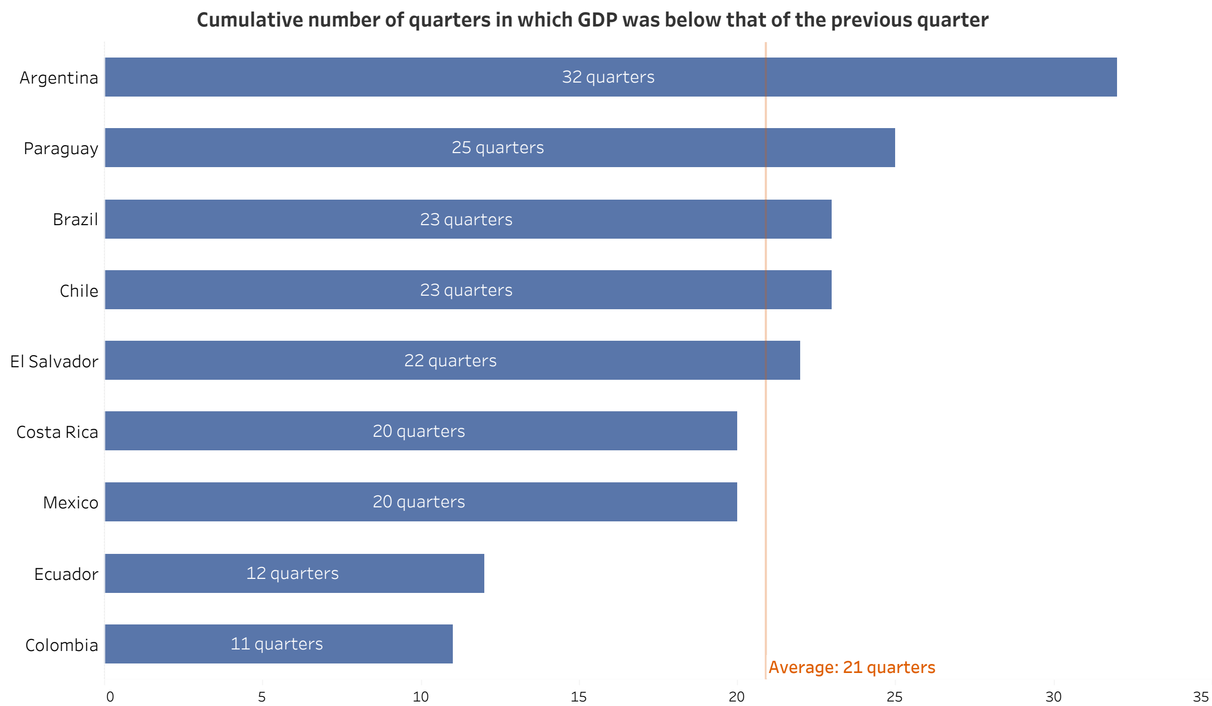
Vignette 10
EPIC FALLS? ECONOMIC CRISIS AND HOUSEHOLD WELFARE

Countries across LAC showed diverse levels of macro-resilience following the 2008 financial crisis. On average, in 21 of 47 quarters there was a lower GDP than the previous quarter.



Source: International Monetary Fund.

At the macro level, a country's resilience depends on its ability and willingness to adopt policy measures to smooth consumption during times of shocks that impact GDP and, ultimately, individual wellbeing. Consider the world economic crisis which was set off by the collapse of Lehman Brothers in September 2008. As a result of this crisis that trickled down from Wall Street to the rest of the world, the GDP flow (the total value of the products and services traded in one year or, equivalently, the sum of everyone's income) of most countries fell. In LAC, this halted the steady growth path that many countries had experienced in previous years due to the "commodities boom" and its extremely favorable terms of trade (the price of a country's exports relative to its imports).

In this context, one way we can think about measuring a country's macro resilience is by counting the number of quarters in which GDP level was below that of the previous quarter (i.e. negative growth) after the 2008 crisis. This graph shows how this number evolves for a sample of LAC countries from the beginning of the crisis in 2008 through the third quarter of 2019 (a total of 47 quarters). The results show that on average in LAC, countries spent 21 out of the 47 quarters in negative growth. This means that on average they experienced negative growth for close to half of the period. However, the results are very diverse across the region. On one extreme, Argentina spent 32 quarters in negative growth (around two-thirds of the period). On the other extreme, Colombia and Ecuador spent only 11 and 12 quarters in negative growth, respectively (less than one third of the period).

Why is macro resilience relevant for outcomes at the household level? Because when an economic crisis takes place, households and governments may react by reducing investments in key areas such as health or schooling. This may be the case if households are unable to smooth their consumption (for example, by drawing on their stock of savings during periods of economic hardship) or if governments do not have the necessary counter-cyclical fiscal policies in place (for example, which allow them to draw on savings or debt to spend more during times of recession). Consequently, welfare-related aspects of people's lives may worsen. Even when levels of health or education return to their pre-crisis paths, it is important to remember there may be more permanent effects for certain groups (or cohorts) within the population that were uniquely affected by the shock.[34] For example, a study on health impacts of the 1980 economic crisis in Peru estimates that there was a 2.5 percentage point increase in infant mortality rates for children born during the crisis (meaning that 17,000 more children died than would have in the absence of the crisis).[35] Similarly, a study on unemployment shocks in Brazil estimates that an unemployment shock to the male head of a household significantly increases the chances that a child will have to enter the labor force and will have poorer schooling outcomes (dropping out or failing to advance).[36]

While it might be too soon to draw conclusions on the effects of the 2008 crisis on households' well-being, the lessons from past crises still apply: policies which support governments in minimizing the impact of macro shocks on micro variables, such as health or education, are critical to strengthening resilience. In particular on a macro-level, counter-cyclical policies can play an important role in helping countries to recover quickly. Two examples from the region's experience during the crisis of 2008 are worth mentioning. In the case of Colombia, the central bank had enough room to lower interest rates (that were high because of the country's high inflation at the time) which allowed them to apply a strong monetary policy (similar to what the United States did). In the case of Chile, the country had a fiscal rule that allowed the government to spend strongly in periods of crisis (and forced it to save during booms) which allowed the country to quickly recover through fiscal policy.

However, it is important to remember that policies, such as the fiscal balance rules mentioned here, are not enough on their own to build resilience. Effective governance is a necessary precondition to ensure that countries can commit to these types of long-term goals in practice. Consider, for example, the difference between Chile and Mongolia.[37] While both countries introduced similar fiscal rules in order to manage fluctuations in the price of their natural resources (which account roughly for 8 and 30 percent of their fiscal revenues, respectively), in practice only Chile's expenditure patterns were countercyclical. Therefore, the sole adoption of policies that have proven effective elsewhere does not guarantee anything: they have to be implemented by actors willing to accept and follow the rules in order to be credible and successful.

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34 Fernández and López-Calva (2010).
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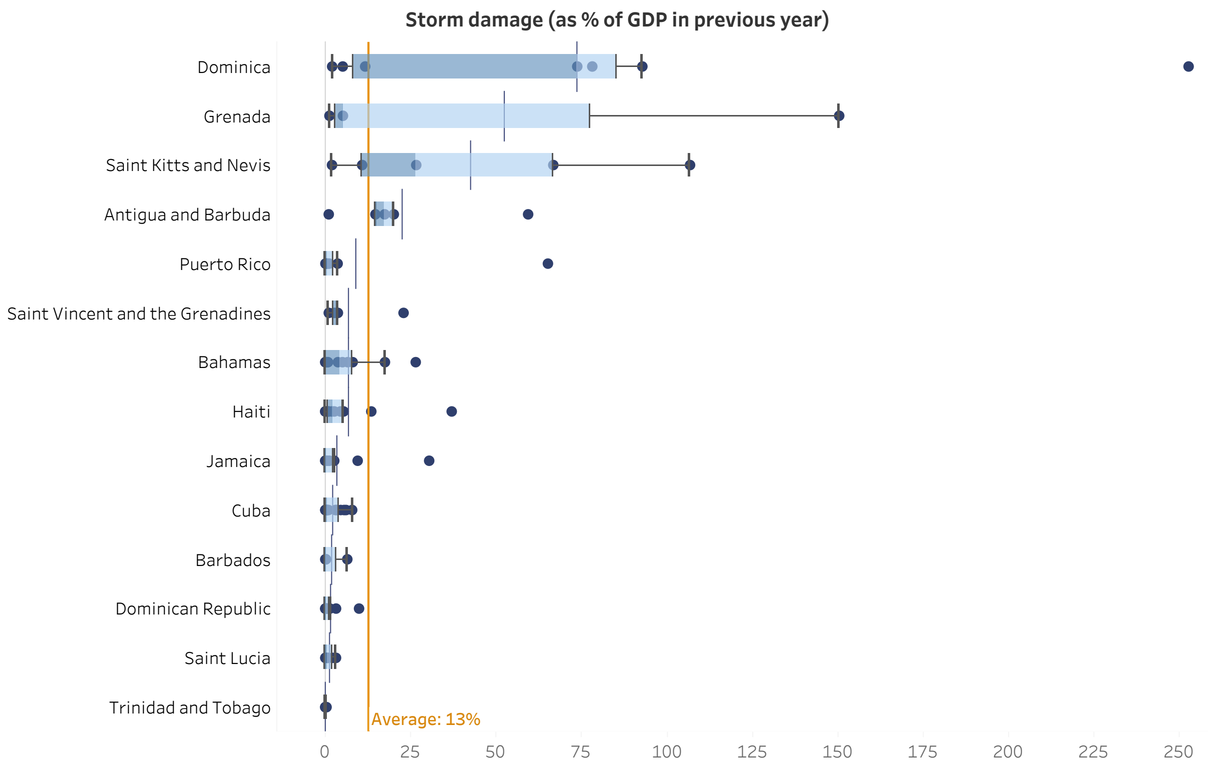
Vignette 11
AFTER THE RAIN: THE LASTING EFFECTS OF STORMS IN THE CARIBBEAN

On average, countries in the Caribbean suffer yearly losses from storm damages equivalent to 13% of their GDP (for years that they were hit by storms during 1973-2020).



Source: Storm data from EM-DAT: The Emergency Events Database - Université Catholique de Louvain (UCL) – CRED. GDP data from World Bank World Development Indicators.
Note: GDP data refers to GDP in the year previous to the storm (in current US$). The sample in restricted to countries and years for which both storm data and GDP data are available.

Sustainability is constitutive of the concept of development. Just as economist Amartya Sen has argued that there is no point in discussing the relationship between development and freedom because freedom is constitutive of the concept of development, there is no point in trying to disentangle sustainability from the notion of development itself. A key foundation of promoting sustainable development is strengthening resilience. We know that countries' development trajectories are not linear. Shocks of many different types disturb this path, and vulnerability to these shocks can slow down (or even reverse) progress.

For countries in the Caribbean, the challenge of strengthening resilience is particularly acute as nations suffer recurrent extreme weather-related events. Countries are continuously struggling to rebuild in the wake of the economic, social, and environmental damages inflicted by frequent exogenous shocks, such as tropical storms–storms which climate scientists have warned us are only getting wilder and more dangerous due to global warming. This makes the probability of distribution over intensity of shocks one with "thicker tails" which in turn makes insurance more complex and expensive. As a 2018 IMF report[38] found, "natural disasters occur more frequently and cost more on average in the Caribbean than elsewhere–even in comparison to other small states." Since 1950, 324 disasters have taken place in the Caribbean, inflicting a loss of over 250,000 lives and affecting over 24 million people.

This graph uses data from the International Disaster Database EM-DAT[39] to look at the damages caused by storms in the Caribbean during the period 1973-2020. As the graph shows, we see that most countries experienced several storms during this period. Each blue dot represents a country's loss in property, crops, and livestock due to total storm damages in a given year – expressed as a percentage of its national GDP (using GDP from the year before the storm)[40]. On average over time, we can see that countries in the Caribbean suffer yearly losses due to storm damages equivalent to 13% of their GDP (for years that they were hit by storms). Of course, this varies greatly across nations both due to the severity of storms as well as the size of countries' GDP–ranging from an average loss of less than 1% in Trinidad and Tobago to an average loss of 74% in Dominica. In 2017 alone, Dominica lost the equivalent of 253% of its GDP (during Hurricane Maria). This was just two years after it lost the equivalent of 92% of its GDP (during Hurricane Erika). These losses are compounded by losses resulting from other extreme natural events, such as earthquakes, floods and droughts.

The repercussions from these damages have long-term consequences at the national level. A cross-country study on the impact of cyclones on long run economic growth found that impacts on GDP persist as much as twenty years later.[41] Moreover, the authors find that "for countries that are frequently or persistently exposed to cyclones, these permanent losses accumulate, causing annual average growth rates to be 1-7.5 percentage points lower than simulations of 'cyclone-free' counterfactuals." Thus, developing resilience to the repeated shocks faced by countries in the Caribbean is critical for ensuring their ability to pursue long-term growth. As the World Bank World Development Report 2017[42] argues "long-term growth is less about how fast one grows than about how often you trip along the way."

The damage caused by extreme weather events can also lead to long-term consequences at the household-level. Using data on typhoons in the Philippines, one study found that in addition to the loss of durable assets, household income was reduced which is passed on through decisions to spend less on items such medicine, education, and high nutrient foods–decisions which may have long term consequences for the development of human capital.[43]

In order to mitigate the serious consequences of shocks on development, we need to focus on strengthening resilience. The capacity of countries in the region to strengthen the resilience of households will depend on the processes that allow households to make decisions that help them build their adaptation mechanisms. Efficient, effective and flexible social protection systems to incorporate victims; early warning systems for disasters; investment in mitigation of environmental risks; and impact-resilient social services and infrastructure, are some of the ways through which governments in the region could build and strengthen resilience.

Moreover, in order to effectively strengthen resilience, we need to rethink how we evaluate it. Traditionally, economists have approached this notion from a perspective of "flows" – such as GDP, consumption or income.

38 Ötker and Srinivasan (2018).
39 Guha-Sapir et al. (2022).
40 Note: The sample is restricted to countries and years for which both storm data and GDP data are available
41 Hsiang and Jina (2014).
42 World Bank (2017).
43 Anttila-Hughes and Hsiang (2013).

However, if we rely solely on this type of approach, efforts to strengthen resilience could take place at the expense of the depletion of the "stock" of assets. For example, the recovery of GDP at the expense of natural capital. Thus, if we truly believe the notion that sustainability is a constitutive element of development, we need to move from an evaluation space defined by flows to one that also includes a measure of stocks. We need to think more broadly about the so-called "wealth of nations"[44] by valuing not only their GDP but also their stock of natural, physical, human and social capital.

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44 Lange et al. (2018).